CRITICAL ISSUES IN POLICING SERIES:

Police Planning for an Influenza Pandemic: Case Studies and Recommendations from the Field









Andrea M. Luna and Corina Solé Brito Elizabeth A. Sanberg



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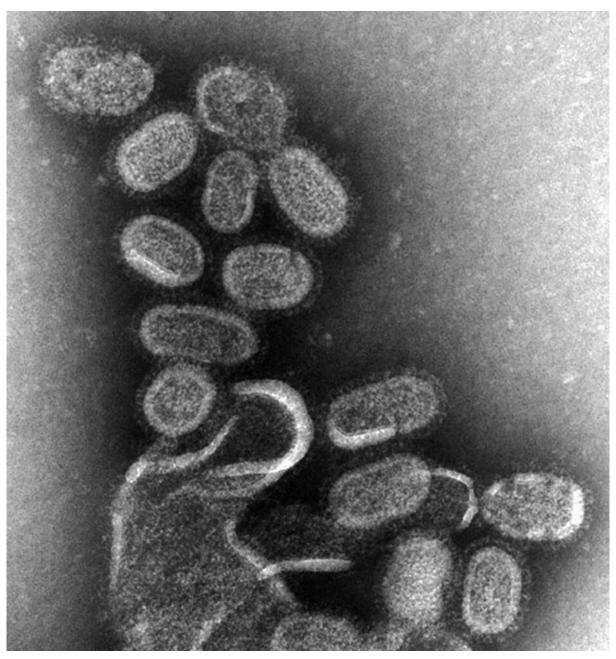
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Transmission electron micrograph of recreated 1918 influenza virions courtesy of cynthia goldsmith/centers for disease control

Foreword

olice officials regularly plan for a variety of man-made and naturally-occurring hazards, especially since the September 11th attacks. But most law enforcement agencies have not yet thought about the implications of a type of disaster that could cause tens of thousands of deaths and could devastate police operations—an influenza pandemic.

Many people may not realize that flu pandemics are not a merely theoretical threat. As recently as 1968–69, the "Hong Kong flu" caused 34,000 deaths in the United States. The worst flu pandemic in recent history was the "Spanish flu" of 1918–19, which killed as many as 50 *million* people worldwide, and 675,000 in the United States.

Why would a flu pandemic be a police problem, as opposed to a public health problem? There are several reasons: Police may be called upon to enforce quarantines, to provide security in hospitals swamped with patients, and to ensure that vaccines—when they became available in limited quantities—could be delivered to those with the greatest need for them.

But perhaps the biggest reason why a flu pandemic would be a police problem lies in the answer to this question: Whenever anything bad happens, whom do people call? The local public health agency? How many people even know the name of their public health agency, much less its phone number?

When bad things happen, people call the police. Public health agencies would take the leading role in dealing with a flu pandemic, but police would be involved from start to finish, if only because the public always looks to the police to answer their questions and solve their problems.

And even as a flu pandemic would cause jamming of 911 telephone lines by frantic callers, police

departments would be responding with a diminished workforce—because many of their own employees would be coming down with the potentially fatal flu. Other police employees would have to stay home to care for sick family members, or to look after their children because the schools would be closed.

PERF has produced this report to help state and local police and sheriffs' departments begin the process of analyzing how a flu pandemic would affect their operations, and how they can begin planning for such an event. Planning for a pandemic is particularly complicated in that it requires coordination with a wide variety of other public and private agencies.

But advance planning is critically important, because it would almost certainly save countless lives. When a pandemic hits—and experts agree that it *will* happen, we just don't know when—the overall goal of the entire nation will be to minimize its impact and *delay* its spread for as long as possible. That is because the medical establishment will be working to produce a vaccine and other drugs, but it will take some time, perhaps 20 weeks or more. The more we can slow the spread of a pandemic, the fewer people will die in the early phases, while scientists are still scrambling to develop the vaccine.

Thus, we can't afford to "wait and see," and start thinking about a pandemic after it happens. Lives will depend on our getting our plans organized now.

The origins of this report lie in a March 30, 2006 symposium in Washington, D.C. hosted by PERF, with support from Motorola, entitled "The Law Enforcement Response to Pandemics." Attendees

included federal government representatives, local law enforcement officials, and public health experts. Speakers at the event included Assistant Commissioner Stephen House (London Metropolitan Police Service), Tom Imrie (former manager of the Toronto Police Service's Occupational Health and Safety Unit), Jane Speakman (public health attorney for the city of Toronto), and Dr. Bill Smock (police surgeon to the Louisville, Ky. Metropolitan Police Department and a nationally-recognized expert). Participants were encouraged to ask the speakers questions and engage each other in dialogue after each presentation. Their open and honest discussion highlighted the need for a document that would help departments of all sizes to plan and prepare for a flu pandemic (or other public health emergency).

PERF followed up on the symposium by conducting in-depth case studies of four police departments that already were involved in preparing for a pandemic: the Toronto (Ontario) Police Service, the London Metropolitan Police Service, the Fairfax

County (VA) Police Department, and the Overland Park (KS) Police Department.

This document captures the information gathered during these four case studies and summarizes the various approaches taken by the departments and the lessons learned.

Motorola, Inc. and PERF are pleased to present the case studies, promising practices and recommendations that came to light as a result of the 2006 symposium and subsequent case study work. It is our hope that this publication will assist local law enforcement in identifying resources and forging stronger relationships within the community—and with other first responder agencies—to create their own pandemic response plans.

A final word: I would like to thank Sir Ian Blair, commissioner of the Metropolitan Police Service in London, who suggested that his Assistant Commissioner Steve House work with PERF on this important project. The PERF/Met relationship continues to be a strong driving force behind our research, and I am grateful for Ian Blair's leadership.

Executive Director

Police Executive Research Forum

Washington, D.C.

Acknowledgments

e would like to thank the many individuals who contributed to this publication. Its value is due largely to our contributors' commitment to improving the law enforcement pandemic planning process.

First, we must thank those who served as our on-site contacts. They received our many e-mails and phone calls, assisted us in conducting site visits, and answered countless questions. They engaged in thoughtful discussions about how local law enforcement and other agencies must work together to plan for and respond to public health critical incidents. Just as impressive was their willingness to discuss sensitive issues and concerns on the current status of their collaborations and preparation. Their openness demonstrates a sincere commitment to developing effective solutions and strengthening partnerships within the community.

They were:

■ Fairfax County:

- Chief David M. Rohrer, Fairfax County Police Department
- Major Larry Moser, Fairfax County Police Department
- Craig DeAtley, Director, Institute for Public Health Emergency Readiness, Washington Hospital Center, Washington, D.C. and Assistant Medical Director, Fairfax County Police Department
- Master Police Officer Kenneth Brennan, Fairfax County Police Department
- Carol Lamborn, Strategic Initiative Manager, Fairfax County Department of Public Works

- Amanda McGill, Fairfax Office of the County Executive
- Lieutenant Brian Johnston, Fairfax County Sheriff's Office

■ London

- Sir Ian Blair, Commissioner, London Metropolitan Police Service
- Deputy Assistant Commissioner Richard Bryan, Metropolitan Police Service
- Commander Simon Foy, Central Communications Command, Metropolitan Police Service
- Chief Superintendent Simon Lewis, Head of Emergency Preparedness, Metropolitan Police Service
- Chief Inspector Graham Stokes, Metropolitan Police Service
- David Hill, Technical and Logistical Adviser, Metropolitan Police Service
- Diana Venn, Head of Branch for Capabilities, London Resilience Team, Government Office for London
- Sarah Wulff-Cochrane, London Resilience Team, Government Office for London
- Caroline Newman, Personal Assistant to OCU Commander, Metropolitan Police Service

■ Toronto

- William Blair, Chief of Police
- Inspector Bill Neadles, Toronto Police Service
- Overland Park—Chief John Douglass, Overland Park Police Department

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- Clifford Karchmer, Member, BJA Pandemic Consortium, Silver Spring, Md.
- Josephine Peters, R.N., M.A., Arlington, Va.

Their expertise in law enforcement, public health, influenza pandemics, and general planning strategies was extremely helpful in developing the "Summary of Findings" and "Recommendations from the Field" chapters.

We would also like to thank Assistant Commissioner Steve House of the Metropolitan Police Service of London for approaching PERF with his concerns regarding pandemic planning. His attention to the issue led PERF to investigate the matter, which resulted in a conference to lay out the issues and the research efforts of this project. We also thank Helen Cryer, Staff Officer to AC House, for assisting with numerous aspects of this project.

Special thanks are due to our partners at Motorola, Inc., for their support of the *Critical Issues in Policing* series. Motorola has supported PERF for many years in our effort to stimulate progress in policing. We are especially grateful to Greg Brown, President and Chief Operating Officer;

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We are also grateful to BJA for granting us permission to reprint a sidebar from the document The Role of Law Enforcement in Public Health Emergencies: Special Considerations for an All-Hazards Approach.

This report could not have been produced without the assistance of several talented and dedicated PERF staffers. Executive Director Chuck Wexler guided the project from start to finish with insight, thoughtfulness, and determination to provide a meaningful product for the field. Eric Albertsen created a comprehensive resource list. We are also grateful to Craig Fischer for his patience in editing this document and to Jerry Murphy for his thoughtful review. A PERF Fellow, Chief Superintendent David Bilson of the London Metropolitan Police Service, was also instrumental in the completion of this project.

Finally, we dedicate this document to those of you in law enforcement who work to make our communities safe. We hope that these case studies provide you with resources and information to assist you in your pandemic planning efforts.

The Authors

Introduction, Background, and Summary of Findings

"States should plan for mild, medium and worst-case flu pandemic" 1

"Bird flu remains a global threat"2

"As outbreak worsens, expediency replaces basic services" 3

oday law enforcement officials⁴ are challenged with balancing the daily responsibilities of maintaining public order and safety with the need for emergency preparedness—often with fewer resources than they have had in the past. As law enforcement executives spend more time thinking about increases in violent crime, the threat of terrorism, and other issues, the threat of an influenza pandemic may not be high on the list of planning priorities. However, a pandemic flu has the potential to cause more death, illness, and social and economic disruption than most other threats faced by law enforcement.

The threat of an influenza (flu) pandemic is not new, but has recently been recognized as a real possibility for which law enforcement agencies must prepare. The task of planning for a pandemic influenza can be daunting, especially when one considers the potential impact of a flu pandemic on a police department's personnel as well as the resources that will be needed to prepare for and implement an effective response. While many departments have created emergency plans to respond to a loss of *physical* structures, communications, and information technologies, most departments have yet to consider the loss of *human*

^{1.} http://www.nctimes.com/articles/2007/02/01/health/16_40_481_31_07.txt

^{2.} http://www.forbes.com/leadership/careers/2007/02/06/avian-bird-influenza-biz-cx_02070xford.html

 $[\]textbf{3.} \ \, \text{http://www.springfieldnewssun.com/n/content/oh/story/news/local/2007/02/04/snso20507champaignflu.html}$

^{4.} For the purposes of this document, the term "law enforcement" and "police" are used interchangeably to refer generally to sworn personnel servicing state, city, county and tribal jurisdictions (e.g., police officers, sheriffs' deputies, and state troopers). Specific references to other types of law enforcement officials, such as federal agents, park rangers, animal control officers, and others will be noted.

resources and the effect that such a loss would have on the department and community. Planning for such losses and how to maintain critical functions should not only be part of every department's pandemic flu-specific plan, but also part of its all-hazards approach to emergency planning.⁵

Planning for a pandemic flu is imperative for a number of reasons, including the following:

- Hundreds of thousands of U.S. citizens (and tens of *millions* worldwide) died during three previous influenza pandemics in the last century.
- Policing agencies inevitably play an enormous role responding to any large-scale emergency.
- Planning in advance could save valuable time if a pandemic flu occurs, helping police act quickly to mitigate the damage of a fast-moving catastrophe.
- Quick and coordinated responses were demonstrated to greatly mitigate the impact of previous flu pandemics.

For these reasons, the Police Executive Research Forum (PERF) and Motorola, Inc. have focused on pandemic flu planning as the latest in the *Critical Issues in Policing* series.

BACKGROUND ON THE PERF STUDY

To engage law enforcement agencies that were interested in the issue of pandemic flu planning, PERF held a "Pandemic Influenza Symposium" in March 2006 in Washington, D.C. The goal of the symposium was to introduce law enforcement officials to the importance of planning for such an event and to meet and share ideas, lessons learned, and resources. Speakers and other participants at the event included officials from the U.S. Departments of Justice (DOJ) and Homeland Security (DHS), the Centers for Disease Control and

Prevention (CDC), and other local, state, and federal police and public health experts from the United States and around the world. During this meeting, initial background information on the flu pandemic threat, Toronto's 2003 experience with severe acute respiratory syndrome (SARS), and the current flu pandemic planning efforts of some law enforcement agencies were discussed.

As a result of this meeting and subsequent study, PERF researchers identified four police agencies on which to conduct in-depth case studies. These departments were chosen for two main reasons. First, all of these departments were in varying stages of developing plans, which provided the opportunity to observe many phases of the planning process firsthand. Some departments had also incorporated lessons learned from recent, relevant incidents. Second, PERF selected departments that served different types and sizes of jurisdictions (both within the United States and abroad) to ensure that officials of any law enforcement agency, regardless of size or resources, could compare their agency's planning experiences to those presented in the document and draw relevant parallels.

For these reasons, case studies were conducted on:

- Fairfax County (VA) Police Department: A county department that serves a large population within a metropolitan area (Washington, D.C.), and has incorporated lessons learned from several multiagency investigations (including the investigation of the anthrax bio-attacks in 2001) into its pandemic flu and other public health hazard planning.
- Toronto (Ontario) Police Service: A department that serves a large city, that experienced the SARS public health crisis in 2003, and that created a pandemic flu-specific plan to reflect lessons learned from the SARS experience.

^{5.} This document deals specifically with planning for a flu pandemic. However, much of the document is applicable to other types of public health and other emergency preparedness planning.

- Overland Park (KS) Police Department: A department that serves a medium-size jurisdiction, with a plan that focuses on protecting public safety even if its own staff has been reduced by the flu pandemic.
- London (UK) Metropolitan Police Service: A large department that dealt with terrorist attacks and a public health emergency. London's plan is a result of a large-scale, multi-agency effort and focuses on addressing staffing and other human resources challenges for extended periods of time.

BACKGROUND ON PANDEMIC FLU

An influenza (flu) pandemic is defined as a global outbreak that occurs when a new flu virus surfaces for which humans have little or no immunity, and for which there is no vaccine.⁶ Officials estimate a pandemic flu may circle the globe in several waves, each of which could last for six to eight weeks. Such an incident could affect millions of people worldwide, have a significant impact on social and economic structures, disrupt basic services, and greatly strain law enforcement resources.⁷ Many researchers believe it is only a matter of time until the next flu pandemic occurs, yet no one can predict the timing or severity of the next pandemic flu.

Influenza pandemics have occurred three times in the past century: in 1918–19 (the "Spanish flu"), 1957–58 (the "Asian flu"), and 1968–69 (the "Hong Kong flu").⁸ The Hong Kong flu caused approximately 34,000 deaths in the United States, and the Asian flu resulted in 70,000 U.S. deaths. By far, the worst flu pandemic in recent history was the

Spanish flu, which killed an estimated 50 million people worldwide, including 675,000 people in the United States. (Other sources have placed the worldwide Spanish flu death toll at 20 million; estimates are imprecise because of the sheer enormity of the disasters, the lightning-fast speed with which flu pandemics overwhelmed cities, and the lack of comprehensive record-keeping nearly a century ago.)

In a series of presentations, U.S. Secretary of Health and Human Services Mike Leavitt has described the impact of the Spanish flu on various states. For example, in Georgia, he stated that the pandemic flu "probably arrived during the first week of October 1918, and then spread like a wild-fire throughout the state....In just three weeks, from October 19th to November 9th, there were more than 20,000 cases and more than 500 deaths."¹⁰

Accounts from the 1918–19 pandemic flu indicate that the public looked to law enforcement officials to maintain the peace and to enforce public health orders when the social structures began to break down. For example, Chicago police officers were ordered to arrest anyone coughing or sneezing in public. However, police departments faced internal challenges; in Philadelphia, nearly 500 officers failed to report for duty. In Arizona, a citizens' committee resorted to deputizing a special police force of volunteers to enforce public health ordinances, such as requiring all persons to wear masks in public. Those who violated this order, or who were caught coughing or spitting without covering their mouths, were arrested. 13

Navy nurse Josie Brown, who served at Great Lakes Naval Hospital in Illinois during the 1918–19 Spanish flu pandemic, recalled: "The morgues were packed almost to the ceiling with bodies stacked

^{6.} http://www.pandemicflu.gov/general/

^{7.} Ibid.

^{8.} http://www3.niaid.nih.gov/news/focuson/flu/illustrations/timeline/timeline.htm

 $[\]textbf{9.}\ http://www.pandemicflu.gov/general/historical overview.html$

^{10.} http://www.pandemicflu.gov/general/greatpandemic.html#georgia

^{11.} http://www.paho.org/English/DD/PIN/Number18_article5.htm

^{12.} http://www.pandemicflu.gov/general/greatpandemic3.html

^{13.} http://www.pandemicflu.gov/general/greatpandemic.html#1

one on top of another. The morticians worked day and night. You could never turn around without seeing a big red truck loaded with caskets for the train station so bodies could be sent home."¹⁴

While there are only a handful of accounts of the police role during flu pandemics, hundreds of personal accounts of the mass death and devastation make it clear that a 21st-Century pandemic flu could push law enforcement agencies to their limits and beyond.

THE CURRENT "BIRD FLU" THREAT

In 1996, a new strain of influenza virus, known as H5N1 (avian or bird flu), was isolated and identified in China. ¹⁵ This virus is particularly worrisome to health officials because it is unusually virulent, can be spread by migratory birds, and can be transmitted in certain circumstances from birds to humans. The World Health Organization (WHO) has been tracking outbreaks of bird flu since 1996, and the *bird-to-human* transmission of

the virus has led to several outbreaks and deaths. WHO listed a total of 291 laboratory-confirmed human cases with 172 fatalities (a 59-percent fatality rate) caused by the bird flu between 2003 and April 2007.¹⁶

Although there have been relatively few isolated cases of *human-to-human* transmission of the bird flu to date (and no cases of bird flu in humans in North America), the high mortality rate and the possibility of the virus mutating and becoming more infectious have caused concern among public health officials. Experts fear that if this virus continues to undergo further change in a manner that would allow it to be transmitted easily between humans, it very well could cause a 21st-Century bird flu pandemic.

WHO categorizes the threat of a pandemic flu into six phases. As shown in Figure 1, at the time this PERF document went to press, WHO rated the worldwide risk of a pandemic flu at level 3.

The symptoms of the H5N1 flu virus range from normal influenza symptoms (including fever, coughing, sore throat, and muscle aches) to

Figure 1	. World Health	Organization:	Phases of	f a Pandemic ¹⁷
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Inter-pandemic phase New virus in animals, no human cases	Low risk of human cases	1
	Higher risk of human cases	2
Pandemic alert New virus causes human cases	No or very limited human-to-human transmission	3
	Evidence of increased human-to-human transmission	4
	Evidence of significant human-to-human transmission	5
Pandemic	Evidence of sustained human-to-human transmission	6

^{14.} http://www.pandemicflu.gov/general/greatpandemic.html#il

^{15.} http://www.who.int/csr/disease/avian_influenza/Timeline_15.02.pdf

^{16.} http://www.who.int/csr/disease/avian_influenza/country/cases_table_2007_01_22/en/index.html

^{17.} http://www.who.int/csr/disease/avian_influenza/phase/en/index.html

pneumonia and other life-threatening complications. 18 There is little or no immune protection against H5N1 and similar viruses in the human population, and currently there is no commercially available vaccine to protect humans against H5N1. Researchers are developing and testing possible H5N1 vaccines, but large amounts of a vaccine cannot be stockpiled until researchers know the exact nature of a virus that is causing an epidemic or pandemic.¹⁹ Even after the specific form of a virus has been identified, it can take up to six months to make a vaccine available, and only limited quantities will be available at first.²⁰ Research is being conducted on methods of quickly making larger quantities of vaccines; but currently, if a flu pandemic were to occur, the need for a vaccine would be likely to outstrip supply.²¹

FEDERAL PLANNING FOR A FLU PANDEMIC

Because of this growing concern, countries around the world have taken a renewed interest in planning for a response to a flu pandemic. In November 2005, the White House released National Strategy for Pandemic Influenza, and in May 2006, it released the Implementation Plan for the National Strategy for Pandemic Influenza.²² In February 2007, the U.S. Department of Health and Human Services and Centers for Disease Control released an Interim Pre-pandemic Planning Guidance document that discusses measures other than vaccination and drug treatment that might be useful for communities to implement during an influenza pandemic (e.g., voluntary quarantines and child and adult "social distancing"—banning public gatherings and taking other steps to reduce contacts between people, in

order to reduce the spread of disease). This document also presents a "Pandemic Severity Index" and suggests that local decision-makers consider various interventions during a pandemic flu based on the index rating of the situation.²³

Through these documents, federal officials outlined their role in planning for and responding to a pandemic flu. They also tasked state and local government officials—including law enforcement—with developing their own plans that will prepare them to respond effectively in the event of a pandemic flu. Chapter Eight of the White House *Implementation Plan* focuses solely on the role of law enforcement and provides some guidance on how agencies should prepare and plan for a pandemic flu. It states.

"If a pandemic influenza outbreak occurs in the United States, it is essential that governmental entities at all levels continue to provide essential public safety services and maintain public order. It is critical that all stakeholders in state and local law enforcement and public safety agencies, whose primary responsibility this is, be fully prepared to support public health efforts and to address the additional challenges they may face during such an outbreak" (p. 153).²⁴

SUMMARY OF FINDINGS: PANDEMIC FLU PLANNING EFFORTS IN FOUR LAW ENFORCEMENT AGENCIES

In September 2006, the Bureau of Justice Assistance (BJA) and the Police Executive Research Forum released *The Role of Law Enforcement in Public Health Emergencies: An All-Hazards Approach.* The

^{18.} http://www.pandemicflu.gov/general/index.html#h5n1

^{19.} http://www.pandemicflu.gov/general/index.html#h5n1

^{20.} http://www.boston.com/news/nation/articles/2007/02/28/us_panel_urges_ok_on_bird_flu_vaccine/

^{21.} http://www.pandemicflu.gov/general/whatis.html

^{22.} Available at http://www.whitehouse.gov/infocus/pandemicflu/

^{23.} Available at http://www.pandemicflu.gov/plan/community/mitigation.html

^{24.} http://www.whitehouse.gov/homeland/nspi.pdf

following excerpt from this publication describes the role of police, and the challenges faced by police, in responding to a pandemic:

Public health emergencies pose special challenges for law enforcement, whether the threat is manmade (e.g., the anthrax terrorist attacks) or naturally occurring (e.g., flu pandemics). Policing strategies will vary depending on the cause and level of the threat, as will the potential risk to the responding officers. In a public health emergency, law enforcement will need to quickly coordinate its response with public health and medical officials, many of whom they may not have worked with previously.

Depending on the threat, law enforcement's role may include enforcing public health orders (e.g., quarantines or travel restrictions), securing the perimeter of contaminated areas, securing health care facilities, controlling crowds, investigating scenes of suspected biological terrorism, and protecting national stockpiles of vaccines or other medicines.

In a large-scale incident, such as a pandemic, law enforcement resources will quickly become overwhelmed, and law enforcement officials will have to balance their resources and efforts between these new responsibilities and everyday service demands. All of this may have to be accomplished with a greatly diminished workforce, as officers and their families may become infected and ill and some personnel may determine that the risk of continuing to report to work is just too great to themselves or their families. A department's ability to respond effectively to any emergency—public health or otherwise—greatly depends on its preparedness, and this is directly linked to the law enforcement agency's planning and its partnerships (p.1-2).²⁵

The need for advance planning is critical because a pandemic flu can sweep through a population in a matter of days and weeks. By contrast, it can take months to develop plans for a pandemic flu. A pandemic flu raises very difficult questions that require significant research to answer—such as, "Do current laws give police the authority to enforce quarantine orders? And, even if adequate legal authority exists, how do we instruct officers to enforce such orders when they may be fearful of exposure to the flu? Is enforcing quarantine orders an effective use of law enforcement resources when possibly facing the potential of significant reductions in staffing? Do we have adequate protective equipment to prevent infection? What department functions are critical during this type of emergency and how will we ensure that these functions continue?"

While a pandemic flu can move quickly, there have been great advances in public health research, surveillance of disease patterns and trends, and other technological capabilities since the time of prior flu pandemics. These scientific advances provide advance warning of this type of emergency. Because of this advance notice, community members will expect better response from the agencies that serve them. It is important, then, for police leaders to begin preparations now to ensure that plans are in place to guide their response to a situation that could cause great harm in the community. Law enforcement executives have responsibility for participating in multi-agency local emergency preparedness efforts, as well as for ensuring their own department's internal preparedness.

The Police Executive Research Forum studied the pandemic flu planning efforts of four law enforcement agencies: 1) Fairfax (VA) Police Department; 2) Toronto (Ontario) Police Service; 3) Overland Park (KS) Police Department and

⁴⁾ London (UK) Metropolitan Police Service.

^{25.} Richards, E. P., Rathbun, K.C., Solé Brito, C., Luna, A. (2006, September). The Role of Law Enforcement in Public Health Emergencies: Special Considerations for an All-Hazards Approach. Washington, D.C.: Bureau of Justice Assistance.

PERF looked specifically at issues such as local multi-agency coordination, continuity of critical department operations, the special role of law enforcement during a pandemic flu, officer education and safety, and communications planning.

PERF posed the following questions to each police department:

- How is the local government approaching pandemic flu planning? How is law enforcement involved in this effort?
- What is the role of the police department in the local government's pandemic flu emergency response?
- How is the department coordinating its pandemic flu planning efforts with other local entities, such as the local public health agency and area hospitals?
- How is law enforcement approaching planning within the department?
- What is critical to the department-specific planning process? Who is involved?
- What issues must be addressed to ensure continuity of critical operations and an effective law enforcement response? How is the department addressing these issues?
- How is the department planning to train its officers on their role in the department's plan?
- What are the challenges to this type of planning and how are these challenges being addressed?

While the four law enforcement agencies were in different phases of the planning process, there were a number of similar critical issues raised and decisions made in the sites. Because law enforcement planning for a flu pandemic is still in its infancy, the case studies are anecdotal and reflect only the experience of these agencies' efforts. Because this is an emerging issue and departments are still in the process of formulating plans, there is limited information available, including data on "best practices." The guidelines we propose are offered with some measure of caution. But the

experiences of these four agencies to date will give other law enforcement leaders insight into some of the issues that need to be addressed in a pandemic flu plan.

External and Internal Planning

The first area of planning efforts described below—"external efforts"—consists of the planning strategies requiring coordination with other local entities outside the law enforcement agency, such as public health and other community agencies. The second area—"internal efforts"—is specific to the internal workings of the law enforcement agency. The findings of the case study sites' external and internal planning efforts are summarized below.

"External" Efforts Involving Local Multi-Agency Planning

Effective planning for a flu pandemic requires law enforcement agencies to consult with public health agencies, hospitals, schools, and many other public and private entities. Law enforcement participation in local multi-agency planning efforts is important to:

- clarify roles and responsibilities,
- identify critical services and available resources, and
- discuss possible scenarios and responses, and develop alternative operating plans based on the possibility of reduced staffing levels and other changes that impact law enforcement operations.

While public health agencies at the federal level and many at the state and local levels already have formulated plans for a flu pandemic, the description of law enforcement's role in those plans is often very general. Some plans include a few specific functions, such as controlling traffic to ensure that vaccines and/or antiviral drugs can be transported to distribution sites. These same plans may also include "catch-all" language, such as a provision that local law enforcement will "assist and support other state and local agencies where possible," as one state expressed it in its statewide *Pandemic*

Influenza Preparedness and Response Plan.²⁶ While this language allows for flexibility in the response stage, it is not difficult to imagine how those few words could in fact translate to expectations of huge responsibilities and an overextension of police resources that may already be strained.

The PERF case studies found that the external planning process and the resulting plans serve to clarify law enforcement's roles and responsibilities, as well as to develop a coordinated planning approach for the local jurisdiction. A summary of the case study sites' external planning efforts is provided below.

- Participating in multiagency emergency planning efforts. In all four sites, the local emergency management authority coordinates the local pandemic flu planning. These authorities also coordinate the planning for the local all-hazards approach to emergency preparedness. Many police departments are following the all-hazards approach to plan for all types of emergencies.
- Supporting public health agencies. In each site studied, the planning approach recognized pandemic influenza foremost as a public health issue, with public health officials playing the most central role in monitoring the situation, and providing updates and subject matter expertise. Law enforcement, other first responders, and those who provide critical support services (e.g., transportation, sanitation, electric) have very important secondary and/or supporting roles and are engaged in the planning process. In all jurisdictions, public health also takes the lead on risk communications and public education efforts, with the support of other local agencies.
- Using a coordinated incident management approach. All jurisdictions and law enforcement departments studied approached planning for a pandemic flu in the same manner they approached planning for other hazards: using a

- coordinated incident management approach. Using this approach, and speaking the same "incident management" language, makes it easier for agencies that may not have worked together much in the past to conduct operations during a critical incident.
- Local multi-agency planning. All four of the departments have participated in a series of planning meetings with other first-responding agencies (e.g., public health, fire, EMS) and with other critical infrastructure providers (e.g., power, water, and telecommunications). In Fairfax County and London, these meetings served to develop and coordinate planning guidance for other local government agencies. They also provided a forum for developing and disseminating public health-specific messages and planning guidance.
- Role of law enforcement. In every site, plans call for police to maintain public order *and*:
 - Provide security for vaccine/treatment transport and vaccine distribution sites,
 - Be prepared to assist in executing public health orders,
 - Provide initial site security as needed at medical facilities and similar venues, and
 - Assist with handling mass fatalities.

In some sites, law enforcement will assist with other efforts, including public education and risk communication.

■ Representing the department at the jurisdiction's emergency operations center(s). Police at all sites have plans to send a representative to the jurisdiction's emergency operations center(s). This representative is expected to have a strong understanding of the plan and to serve as a liaison between the department and city emergency operation centers. Based on lessons learned from the SARS outbreak (e.g., the police department needed information about the disease and what

it meant for the department, especially in the early stages of the outbreak), the Toronto Police Service plan assigns one senior officer to serve as a liaison officer to the command centers, including the public health emergency operations center. The liaison officer provides daily updates of health-related issues between public health and the police department.

- Communicating with the news media. In all four sites, the plans designate the public health department as the agency responsible for communicating with the news media. Each law enforcement agency serves in a supporting role to public health in this effort. For example, in Toronto, the public health department plans to provide medical advice and train "pandemic period key spokespersons" in risk communications. In London, because the Metropolitan Police Service has a very large media department and is proficient at coordinating media communications during large-scale events, the MPS press bureau will help get information to the media and provide support to the public health agencies in coordinating and carrying out the media strategy.
- Testing and updating the plan. Each department has acknowledged the evolving nature of the planning process and the need to regularly exercise their plans. These exercises provide the opportunity to incorporate the lessons learned from their experiences into the plans. Most of the sites have engaged in some form of multi-agency exercises of parts of the plan, such as distribution of Personal Protective Equipment (PPE). The Fairfax County Police Department participated in a PPE stockpile distribution exercise with the health department, schools, and emergency management department. London (including the Metropolitan Police Service) participated in a national test of its plan at the local, regional, and national levels. One important finding from London's exercise was that agencies were not as

well prepared to respond to a situation that builds up over time (like a pandemic flu), compared to the well-practiced responses to immediate threats (like a terrorist bombing).

"Internal" (Police Department-Specific) Planning

Effective planning for a flu pandemic requires law enforcement agencies to consider how their response fits into existing emergency operations plans as well as how the police response would affect officers and the community. Many internal factors were taken into consideration by the case study sites during their pandemic flu planning process. Following the format of the PERF/BJA document *The Role of Law Enforcement in Public Health Emergencies*, these factors are categorized as: Preparing the Department; Protecting the Officers; and Protecting the Community. A brief overview of the factors and examples of how certain departments incorporated them into their plans follows.

PREPARING THE DEPARTMENT

Activating the Plan

Once the jurisdiction activates the public health function of its emergency operations plan (and its pandemic flu-specific plan, if applicable), the police department will activate its internal plans as well. In Toronto, the Police Service's pandemic flu plan calls for activation when the World Health Organization (WHO) declares that the phase of alert has reached level 5 (evidence of significant human-to-human transmission) or when Toronto police have been notified, by either city or provincial health representatives, that a flu pandemic is pending in the area. The Fairfax County Office of Emergency Management also modeled its planning stages after the WHO phases of a flu pandemic. The police department shifts into emergency operations when alerted that WHO or the Centers for Disease Control and Prevention (CDC) have moved into Pandemic Flu Phase 5.27

^{27.} http://www.who.int/csr/disease/avian_influenza/phase/en/index.html

Continuity of Operations

Identifying core department functions that must be maintained during an emergency. Identifying core functions within each unit of a police department and determining how those activities may be impacted during a pandemic flu were the first and most important activities that each site undertook. The Overland Park Police top commanders met to determine the critical functions the department would maintain in a pandemic situation. Fairfax County and London police officials also engaged in an extensive process of identifying their core functions. Fairfax police prioritized their functions in three categories: those that must continue during an incident, those that could be suspended but would need to be resumed as quickly as possible following an incident, and those that could be suspended until conditions returned to normal. London identified a list of core functions and had each bureau identify the point at which personnel losses would mean it would no longer be able to effectively carry out these functions.

The sites' plans are flexible enough to allow for changes in the list of essential functions. For example, depending on how severely a pandemic flu affected a particular jurisdiction, curtailed police activities might begin with crime prevention programs, parking enforcement, and enforcement of certain misdemeanor laws. If schools were closed, all Drug Abuse Resistance Education (DARE) officers and school resource officers could be reassigned. Some law enforcement agencies have worked to define stages of a crisis that would gradually expand the list of curtailed activities. This process, and the list of critical functions that emerged from it, were noted by all sites as beneficial for pandemic flu planning and for general planning for other emergencies during which agency workforces may be decreased.

Planning for sharp reductions in the police work force. All four of the departments studied understood that a pandemic flu could lead to sharp reductions in their workforces and have planned accordingly. They all adjusted plans based on the loss of increasing proportions of their workforce. The plans prepare for the possibility of losing anywhere from 10 to 80 percent of the department's workforce. In jurisdictions affected by past flu pandemics, between 25 and 35 percent of the population was infected.

To account for additional absences and the possibility that police officers may be more likely to become sick than other people because of the nature of their work, law enforcement agencies projected higher rates of infection. The Fairfax County Police Department estimated that 40 percent of its staff could be absent from work during a pandemic flu. The Overland Park Police Department based its continuity-of-operations plans on 10-percent increment changes in both demands for service and reductions in staff.

Furthermore, police officials consider it likely that personnel losses would not be spread uniformly throughout a department; losses within certain units or bureaus, especially those in which there are a small number of employees working in close quarters, could be higher. This could disproportionately damage the ability of the police to respond in cases where the small units perform highly specialized, critical tasks. Several of the departments have prepared for reductions in the workforce that are not uniform from one bureau or unit to the next. For example, London Metropolitan Police Service developed a register of the special skills of all operational staffers, administrative personnel, and volunteers (some of whom are retired officers). The skills register includes language skills, typing, and truck/heavy vehicle driving experience. In the event of a pandemic flu, department leaders would be able to search the database and identify personnel who could be reassigned to help carry out core functions.

■ Addressing employee fatigue. Some of the departments are also considering the issue of fatigue among officers who remain healthy and who try to compensate for the loss of other personnel by working long hours over an extended period of time. A pandemic flu can last weeks or months,

and the plan must consider the sustainability of extreme work schedules among a sharply reduced staff, working in an unusually stressful environment. While some employees might be willing to work very long hours, that may exacerbate the problem. The London Metropolitan Police Service learned that employee fatigue was an important issue in dealing with the suicide bombing incidents of July 7, 2005, and that lesson is reflected in the planning for a pandemic. The SARS outbreak taught the Toronto Police Service a similar lesson. The Overland Park Police Department will resist activating 12-hour shifts for as long as possible in order to ensure that employees get adequate rest.

PROTECTING THE OFFICERS

- Law enforcement facilities. The goal during a pandemic flu is to keep the law enforcement workplace as disease-free as possible by increasing the cleaning of police facilities and reducing the possibility of having sick or exposed persons contaminating the work area and thus exposing other personnel to the disease. To address this issue, employees and visitors to police facilities in Toronto will not be allowed access to police buildings until they have answered a health questionnaire and have complied with a hand washing/disinfectant protocol. In Fairfax, the police department's facility management officials have decided to modify the tasks for cleaning and maintenance personnel based on the threat. For instance, perhaps instead of vacuuming the floor, cleaning personnel would increase the frequency of washing doorknobs and other shared surfaces.
- Supplementing occupational health and safety programs. All four sites have some form of occupational health and safety programs that have provided support and education in the pandemic flu planning process. Toronto's occupational health and safety program gives all officers and selected civilian staffers (based on assignment) training in communicable-disease risk management, including issues specific to pandemic flu. In Fairfax County, the Police Department has

participated in an occupational health program for some time. However, following National Incident Management System (NIMS) training, the department recognized the value of having a field liaison specializing in responding to various hazards including respiratory and biological threats. Following the fire and rescue department's lead, Fairfax County police designated a safety coordinator to meet this need and to assist in planning efforts. To ensure that all personnel have some basic information on the threat, Fairfax County police requires that all personnel view a public education video (available on the Virginia Department of Health website) on pandemic flu planning and communicable disease prevention methods. Many police executives understand the wisdom in the words of Overland Park Police Chief John M. Douglass: "Preventative dollars are more effective than response dollars."

■ Providing Personal Protective Equipment (PPE) and **Training.** All four sites provide some form of PPE to their staffs; however, the amount and kinds of PPE stockpiled vary by department. Through the Toronto Police Service's Occupational Health and Safety Program, PPE has been provided to every patrol officer and to some civilians deemed at risk as a result of their duties, such as court security officers and employees who clean the inside of police vehicles. Toronto Police Service members have been instructed to wear PPE in circumstances where the health state of an individual is not known. Overland Park maintains a 90-day supply of PPE for all officers. Fairfax County Police Department is purchasing and stockpiling PPE in cycles to prevent all of the PPE from expiring/deteriorating at the same time.

London Metropolitan Police Service's (MPS) approach is quite different, as they are stockpiling only a minimum amount of PPE for a pandemic flu to prevent panic and to avoid misuse of the equipment. The police service's "business resilience" group has set up priority contracts with vendors for short-notice orders of specific types of PPE. To ensure vendors will be able to fulfill these orders, MPS requires that all critical service providers and suppliers have

- continuity of operations plans and demonstrate an ability to meet contractual demands during an emergency.
- Addressing vaccination and prophylaxis requirements. Each site has different pre-hire vaccination requirements, but none of them mandates flu vaccination on an annual basis (although it is offered and encouraged in each site). None of the departments studied has established a policy that would mandate vaccination in the event of a pandemic flu (should a vaccine become available). Some of the departments are stockpiling prophylaxes, such as general anti-viral treatments that may be of some use in slowing the advance of a pandemic flu. Toronto Police Service officers are in the third priority group for receiving vaccine and antiviral treatment (frontline and essential health-care providers and key health decision-makers are in the first two groups). This is similar to the vaccination priorities set in other jurisdictions. Currently, London Metropolitan Police Service personnel and other first responders have an allocation of anti-viral medication reserved in the local stockpile.
- Considering sick leave policies. Encouraging those who are sick or who may have been exposed to a disease to stay home rather than to report to work is an important component of protecting the health and safety of others in the workplace. The Fairfax County Police Department is educating employees about the risks of a flu pandemic, and about the risk of spreading the disease if they report to work during a flu pandemic when they are sick or have come into contact with an infected person while not wearing personal protective equipment. "With proper education, officers will recognize that they are doing more harm than good by coming into work sick," one official said. To encourage compliance, Toronto Police Service members who are directed to be quarantined as the result of a work-related contact will be compensated as if they were on duty during their regularly scheduled shifts. In contrast, London Metropolitan Police Service (MPS) officials have discussed the issue and have identified

- possible challenges in getting employees to remain home if they think they are infected, but have decided not to make any formal changes to their usual sick leave policies until it is likely a pandemic flu is imminent. "Flexibility is good in your policies, but you don't want to set them up whereas they encourage extensive absences," said one of the MPS emergency preparedness officials.
- Protecting officers' families. All sites noted the importance of helping officers and their loved ones plan for the effects of a pandemic flu. In particular, Fairfax County is advising families to prepare "HomePacks" which would contain a small amount of PPE and cleaning supplies that might be helpful during a flu pandemic.
- Using technology. Some of the sites have identified ways in which technology will assist them during a flu pandemic. This varies site to site, but includes allowing employees to "telework," using tele- and video-conferencing within the law enforcement agency and between local agencies, which can reduce the need for employees to gather in a room and possibly spread the flu among themselves. Another technique involves expanding the opportunity for citizens to report crimes on the Internet, rather than through inperson meetings with police.

Some administrative functions of a law enforcement agency may be suitable for teleworking. To a limited extent, teleworking may serve to maintain the productivity of officers who are not sick but cannot report to work because they believe they may be infected. All of the Overland Park Police Department's information technology employees are currently able to work off-site, and this process has been tested successfully. To ensure the integrity of critical databases as more personnel may begin to telework, Fairfax County police have also devised innovative ways to decrease the demands placed on their IT systems. They have developed the capability to efficiently "turn off" non-critical databases that would otherwise strain the system.

A key advantage of video-conferencing and similar technologies is that they allow police

officials to communicate among themselves and with other agencies while minimizing the unnecessary gathering of officials. Fairfax County is currently completing the installation of video conferencing units in different agencies across the county, including the police department. This was also one of the recommendations from the Toronto public health department in the aftermath of the SARS incident.

PROTECTING THE COMMUNITY

■ Enforcing public health orders. During a flu pandemic, officers may be called on to assist with enforcing quarantines and other public health orders. While the importance of gaining voluntary compliance with these orders cannot be overstated, every site acknowledges the need for police to be prepared to assist public health authorities in enforcing critical orders, such as the closure of public facilities. This is especially the case in the early stages of a flu pandemic, when enforcement of these orders may greatly slow the spread of the flu and reduce the harm to the community.

Because serving public health orders is not a function law enforcement is called on to do very often, law enforcement officials are reviewing the requirements to fulfill this responsibility. One question is whether any personnel should receive specialized training, and if so, who should receive the training. In Fairfax County, Police Department personnel may become involved by assisting Fairfax County Sheriff's Office deputies in delivering mandatory quarantine orders and enforcing the orders if they are violated. (Fairfax County has a sheriff's department that shares jurisdiction and some overlapping responsibility with the police department.) One idea under consideration to assist in this effort is the use of electronic surveillance bracelets. It is thought that this measure would deter violations, assist in monitoring those under public health orders, and reduce the need for law enforcement intervention.

While most Fairfax County police officers have not previously enforced these types of orders, comprehensively training the entire force was considered too cumbersome at this point. Instead, the FCPD identified a core team of the department's volunteer officers in the Civil Disturbance Unit to be specially trained on these issues. This group would be involved in an initial flu pandemic response as other officers were brought up to speed on their role and the relevant legal authorities. In Toronto, the Community Oriented Response Unit and the Public Safety Unit have been trained to work with public health to identify and apprehend those who refuse to comply with quarantine orders.

■ Protecting hospitals and other critical institutions.

Agencies in every site have plans to protect hospitals and other critical institutions at the onset of a flu pandemic, and on an as-needed basis. Because police resources will be strained, however, some police agencies hope that private security could take over this function to some extent as the security threats diminish. Fairfax County police will provide security at vaccination sites, medical distribution sites, and quarantine sites as they are requested and able to do so. In Fairfax, although the Police Department may handle any initial need for security at hospitals, the Fairfax County Sheriff's Office will take over the security efforts as soon as possible. During later phases of a pandemic flu, courts likely will be closed, allowing Sheriff's Office personnel assigned to court security to redeploy to assist with field priorities such as hospital security.

Although the agencies varied in size and jurisdiction served, the departments' approaches to planning and the issues identified as critical to maintaining public order and providing an effective response were remarkably similar.

ROADMAP FOR UNDERSTANDING THE INDIVIDUAL CASE STUDIES

In the following four chapters, the case studies and details of each agency's planning efforts are presented. The goal of the individual case studies is to assist law enforcement officials in their planning process by detailing the approaches taken by four very different law enforcement agencies. Sidebars

that present specific topics and the perspectives of those involved in the planning process are also included.

Each case study consists of six main sections:

- 1. Overview of the Department. This section provides a brief introduction to the agency: the number of people employed, the number of bureaus or commands the force is broken into, and some basic demographic information about the jurisdiction.
- 2. Description of the Area. A detailed, community-specific view is provided to help readers compare their own jurisdiction to those in the case studies. By reading about the community's demographics and infrastructure, the reader can better understand both the scope of the law enforcement role and potential methods or routes of disease transmission within that community. The demographic information presented in this section includes information on the following types of infrastructure, for the following reasons:
 - Hospitals. Many in the medical community have agreements with local law enforcement agencies or simply expect police to provide some sort of security in the event of a pandemic flu. In addition to their traditional treatment roles, hospitals may serve as public distribution sites for vaccines or medication during a pandemic flu, presenting a potential need for security.
 - Schools. Schools are considered "socially dense" environments (i.e., the average space between students is relatively small), and children without pre-existing immunity to circulating influenza viruses are more susceptible than adults to infection.²⁸ Strategies such as temporarily closing schools and/or child care facilities will have an impact on local law enforcement. If closed to students, some school facilities might serve as distribution

- sites for vaccines or medication, presenting a potential need for security.
- Transportation. Information on public transit is provided to illustrate the sheer volume of local travel (i.e., daily commuting) as well as state, national, and international travel. Local law enforcement may be affected, for example, if airline flights need to be quarantined because of a symptomatic passenger, or if roads need to be closed to facilitate the transport of medication.
- Major employers. Information on the major employers in each site is provided to show the economic impact that certain social-distancing strategies could have on a jurisdiction. In some cases, the law enforcement agencies themselves are also major employers in the community.
- 3. City/County-Wide Approach to Emergency Operations details the area-specific risks and "typical" hazards the community and the law enforcement agency could be faced with any day—and possibly simultaneously to the challenges posed by a pandemic flu. An overview of the jurisdiction's emergency operations plan (including its current interpretation of incident command) and a brief discussion of the police agency's roles in the plan are also provided.
- 4. City/County-Wide Approach to Pandemic Flu-Specific Planning further explains local emergency operations, but focuses on pandemic fluspecific planning. This section describes what roles the law enforcement agency will play within each community's plan.
- 5. The Police Department's Approach to Pandemic Flu-Specific Planning presents an overview of each department's pandemic flu-specific plans, including law enforcement-specific policies on personal protective equipment (PPE), communications regarding risks to the public and the

 $[\]textbf{28.} \ \text{http://www.pandemicflu.gov/plan/community/commitigation.html} \\ \textbf{\#III}$

police force, and other issues specific to law enforcement. The continuity of operations plan for each department is also addressed if available. Because the four jurisdictions are at different stages of their planning processes, the content of this section varies by case study.

6. Conclusion. The final section of each case study summarizes key plan components and gives a snapshot of where each department was in the planning process when the document went to press.

WHAT THIS DOCUMENT IS NOT

Law enforcement officials have not faced a flu pandemic in many years. Thus, this document is not intended to present "best practices" for pandemic flu planning, because there is not enough experience or research on which to base judgments about which practices are best. Nor is the document intended to be a critique of the four sites' pandemic flu planning processes. Rather, it presents a "snapshot" of where each department is in its process and the components they have included in their plans thus far.

DATA COLLECTION METHOD

The case studies describe each agency's experiences with pandemic flu planning, from a law enforcement perspective. Although representatives from other agencies (e.g., public health and fire departments) typically provided input into the police agencies' planning, it was beyond the scope of this document to describe the plans of the other agencies, except to the extent that law enforcement agencies are involved in these efforts.

Once case study sites were chosen and primary contact persons were established, an interview protocol was created and was administered to each site. Variables included in the protocol were based on the suggested pandemic flu plan considerations presented in the Police Executive Research Forum/Bureau of Justice Assistance document *The Role of Law Enforcement in Public Health Emergencies: Special Considerations for an All-Hazards Approach*.²⁹ Case studies were written as closely to the protocol as possible, but because of the significant differences in both the agencies and the communities they serve, not all factors had been implemented in all plans.

^{29.} http://www.ojp.usdoj.gov/BJA/pdf/role_law_enforce.pdf

The Fairfax County Police Department Case Study

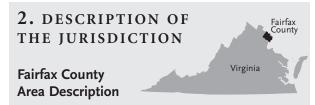
"We are striving for outcomes similar to Toronto during SARS. If we can't control the first handful of cases, it is unlikely and unrealistic to think that large-scale quarantine orders will be a realistic option. FCPD has invested substantial time and resources into building community partnerships and supporting county cross-discipline initiatives, and we believe that our ability to work closely with the community at all levels is one of our strongest assets and highest priorities."

MAJOR JOSIAH LARRY MOSER, 2006

1. OVERVIEW OF THE POLICE DEPARTMENT

The Fairfax County Police Department (FCPD) serves the largest jurisdiction in Virginia and in the Washington, D.C., metropolitan area. The department has 1,424 sworn officers and more than 500 civilian employees. There are eight patrol stations, and the department serves more than 400 square miles. FCPD is no stranger to emergency response; it has coordinated and/or participated in successful county-wide operations and multijurisdictional response operations during the aftermath of 9/11; the 2001 anthrax attacks in Washington, D.C., Virginia, New York City, and Florida; the 2002

"Beltway Sniper" case in Washington, D.C., Virginia, and Maryland; and a 2006 shooting at a FCPD precinct in which two officers and the suspect were killed.



Fairfax County is located in northern Virginia, just west of Washington, D.C. It has a population of approximately 1,040,000.² Fairfax County is home to seven main hospitals and more than

^{1.} FCPD 2004 Annual Report http://www.fairfaxcounty.gov/police/pdf/AnnualReport2004.pdf

^{2.} Fairfax County Website http://www.fairfaxcounty.gov/demogrph/gendemo.htm

200 elementary, middle, and high schools.³ Five colleges and universities are located within the county. Fort Belvoir, an 8,600-acre military installation in southern Fairfax, is the county's largest employer.⁴ The top five largest private employers in the county are the Inova Health System, Booz Allen Hamilton, Northrop Grumman, Science Applications International Corporation, and Sprint Nextel.⁵ Fairfax County is also home to the Central Intelligence Agency and the National Reconnaissance Office and to thousands of federal government employees and officials.⁶

Because of its close proximity to Washington, D.C., the transportation network is expansive. Three lines of the Washington Metropolitan Area Transit System (or "Metro") serve Fairfax County, as does the Virginia Railway Express. There are a number of major highways and roads running through Fairfax County, including I-495 (the "Capital Beltway"), I-95, I-66, I-395, the George Washington Memorial Parkway, the Dulles Toll Road, and U.S. Routes 1, 29, and 50. The American Legion Bridge connects Montgomery County, Maryland to Fairfax County. Dulles International Airport, the largest airport serving the Washington, D.C. metropolitan area, is located in Fairfax County, and Ronald Reagan National Airport is just east of the county.⁷

3. THE COUNTY-WIDE APPROACH TO EMERGENCY OPERATIONS

Fairfax County uses an all-hazards approach to emergency management, based on the National Incident Management System (NIMS). The county also participates in National Capital Region emergency response and planning and other regional planning and mutual aid efforts. In Fairfax County, the Office of Emergency Management is responsible for coordinating preparedness, response, and recovery efforts for significant emergency events that may occur in Fairfax. This office is also responsible for managing the county's emergency operations center, conducting training and exercise programs, managing the county's citizen volunteer program, and activating emergency alert systems.⁸

4. THE COUNTY-WIDE APPROACH TO PANDEMIC-SPECIFIC PLANNING

In the fall of 2005, closely coinciding with the release of the federal government's report on pandemic preparedness, National Strategy for Pandemic Influenza: Implementation Plan, Fairfax County began to focus intensively on the efforts needed to prepare for and respond to a pandemic influenza. County Executive Tony Griffin requested that Deputy County Executives Robert Stalzer and Verdia Haywood co-chair the county's Pandemic Flu Planning Initiative. To ensure county-wide coordination among key stakeholders, a Leadership Team and two key coordinating committees-Public Health, and Critical Infrastructure and Resource Management—were established. Almost 40 local agencies participated in the planning efforts led by these committees. The Critical Infrastructure and Resource Management Committee took the lead on the county's first-responder planning for a pandemic. This core team included representatives from the Fairfax County Fire Department, the Department of Public Works, the Office of Emergency Management, and the Fairfax County Police Department.

^{3.} Fairfax County Public Schools http://www.fcps.edu/

^{4.} Fairfax County Economic Development Authority 2006 http://www.fairfaxcountyeda.org/brac.htm

^{5.} Fairfax County Economic Development Authority 2006 http://www.fairfaxcountyeda.org/publications/top50.pdf

^{6.} Interview with Commander Larry Moser, 2006 and http://ludb.clui.org/ex/i/VA3142/

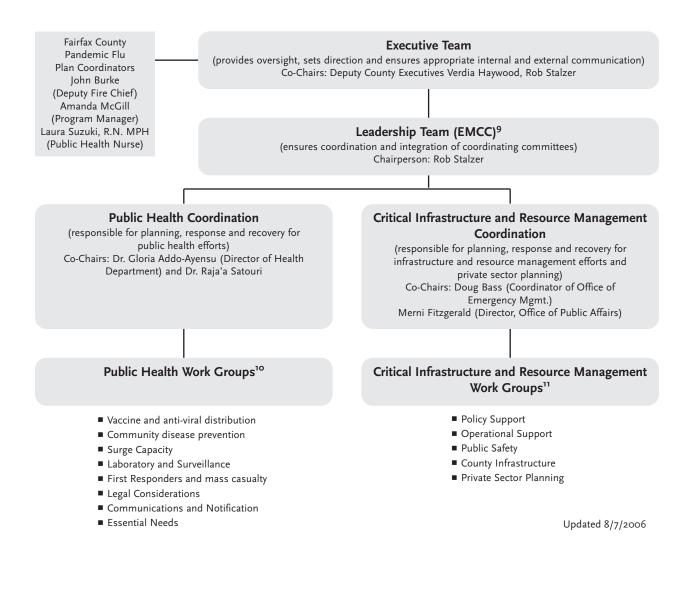
^{7.} http://www.fairfaxcounty.gov/living/transportation/

^{8.} http://www.fairfaxcounty.gov/oem/

"Having two Deputy County Executives involved from the beginning of the planning process played a big part in our successes. The deputies were directly involved in giving clear direction and ensuring there was cross-county communication. Visible and active executive leadership was key."

AMANDA MCGILL, OFFICE OF THE COUNTY EXECUTIVE, EXECUTIVE TEAM AND CRITICAL INFRASTRUCTURE AND RESOURCE MANAGEMENT COORDINATION

Fairfax County Pandemic Flu Planning Initiative Structure



^{9.} The Emergency Management Coordinating Committee will serve as the Leadership Team for this effort 10. Steering Committee: Dr. Gloria Addo-Ayensu, Dr. Raja'a Satouri, Barbara Antley, Holly Clifton, Kimberly Cordero, Zandra Duprey, Marilyn McHugh, Michelle Milgrim, John Niemiec

^{11.} Steering Committee: John Burke, Carol Lamborn, Amanda McGill, Becky McKinney, Larry Moser

Planning Approach

As part of the county's post-9/11 planning efforts, all departments were tasked with developing emergency operations and continuity of operations plans, and many aspects of these plans have been drafted and exercised. When developing the pandemic planning approach, county officials quickly recognized the value of integrating this type of planning into the existing emergency operations and continuity of operations plans, to create an all-hazards approach. The pandemic plans of every county department—and the county itself—are now a component of its existing emergency operations plans.¹²

The existing emergency plans developed by Fairfax County departments addressed many challenges that could be encountered during an emergency. However, some of the pandemic-specific impacts had not been as closely considered. Realizing that a pandemic may greatly reduce workforce availability, the Critical Infrastructure and Resource Management Work Group worked extensively to identify and raise awareness of critical infrastructure issues, such as staffing, service provision, and supplies that might be reduced during a pandemic. Work group members met with agency heads and key staff from the county's Departments of Information Technology, Purchasing and Supply, Human Resources, and Risk Management to ensure there was a clear understanding of potential challenges associated with a reduced workforce on the critical infrastructure.

Mulitagency Work Sessions

The work group team also facilitated two half-day sessions attended by representatives of every Fairfax County agency, public schools, utility companies and other entities. Examples of issues discussed include: the possible redefinition of essential services and job functions during an emergency flu

pandemic, the development of policies and procedures for increased telecommuting, revision of emergency staffing plans given the possibility of 30-to 50-percent absenteeism, and the impact of the loss or substantial reduction of services and resources the county relies upon. During these sessions, key staff members were paired together, and discussions were professionally facilitated to identify key considerations unique to a pandemic. This format promoted needed dialogue regarding strategies to address business/operational continuity.

Release of the Plan

Fairfax County's Pandemic Flu Preparedness Plan was released in September 2006. The goals of the plan are to minimize the disruption of critical government functions, protect the workforce during an outbreak, and maintain business continuity in the event that a pandemic occurs. The plan provides general guidance to planning agencies and outlines, step by step, the activities that follow the phases of a pandemic.

To assist departments in supplementing their existing emergency plans, the county developed a website and numerous planning and informational resources, such as a pandemic flu planning checklist. Developing the checklist involved sitting down with managers in each of the many critical county departments (e.g. Department of Human Resources, Department of Information Technology). Participants noted that the process was as important as the resulting tool, because these meetings required the county's leaders to think critically about the impact of a reduced workforce, current policies, core activities, and other considerations for pandemic planning. These meetings also provided the agencies and departments with an opportunity to provide input into the county's efforts (See Appendix A, County Checklist).¹³

^{12.} Moser 2006

^{13.} The Fairfax County Pandemic Flu Preparedness Plan and additional county resources and planning documents are available at http://www.fairfaxcounty.gov/emergency/pandemicflu/

"The most useful thing was coming up with the checklist and sharing it with heads of the departments. It got people thinking along those terms. You never think, 'What would happen if I only had 50 percent of my staff show up?' While you don't know who will be affected, thinking through it and doing some planning will at least have you in the mindset in case a pandemic occurs."

CAROL LAMBORN, STRATEGIC INITIATIVE MANAGER, FAIRFAX COUNTY DEPARTMENT OF PUBLIC WORKS

5. THE POLICE DEPARTMENT'S PANDEMIC PLANNING

Excerpt from Fairfax County Pandemic Flu Preparedness Plan

Public Safety Agencies (Fire and Rescue Department, Police Department, Office of the Sheriff,14 Department of Public Safety Communications) play an integral role in county operations during a pandemic. Due to stresses placed upon the health care system and other critical functions, calls for emergency medical assistance are anticipated to be higher than normal and civil disturbances and breakdowns in public order may occur. Likewise, the local 9-1-1 emergency call center may be overburdened with calls for assistance, including requests to transport influenza victims, and local law enforcement agencies may be called upon to enforce movement restrictions or quarantines, thereby diverting resources from traditional law enforcement duties.

Through the establishment of joint response protocols and linkages among the key

components of public health, emergency management, fire and rescue, and law enforcement and through county guidance, joint training, and the use of exercises, all public safety agencies have a better understanding of their respective roles and applicable governing legal authorities so they can coordinate their efforts in the event of a pandemic outbreak.

-Fairfax County Pandemic Flu Preparedness Plan, p. 35

In early 2006, as Fairfax County was ramping up its multi-agency continuity of operations plans and pandemic planning efforts, Police Chief David Rohrer stressed the importance of focusing on this topic. In January, with the chief's support, Craig DeAtley, the Police Department's assistant medical director, and William Hauda, the operational medical director, met with the chief and command officers to discuss preparedness efforts and present medical information on pandemic influenza, the threat to-date, and basic considerations for the department.

What Chief Rohrer took away from that meeting was a realization that he needed to integrate the Police Department's plan with the county plan. Chief Rohrer directed Major Josiah Larry Moser, commander of the Technical Services Bureau, to serve as liaison with the county and to prepare the police department internally for the pandemic threat.

When Chief Rohrer approached Major Moser, he made it clear he was not merely seeking a paper plan; he wanted to ensure that all employees were in fact protected and best prepared to respond to a threat of this nature. He selected Major Moser because of his previous work during the anthrax threats and his well-established relationships with related service providers.

^{14.} In Fairfax County, the Police Department handles patrol, investigative, and other functions, and the Sheriff's Office manages the detention center, provides courthouse security, and serves civil law process.

Planning Approach

The county's planning approach was to expand existing emergency operation plans, resources and partnerships, and this theme carried over heavily into the police department's approach to planning. The Fairfax County Police Department's goal was to develop a flexible plan that builds on existing emergency operations planning and relies on existing policies and procedures internalized within the department. FCPD's existing emergency operations plan is based on the Incident Command System (ICS). The department built upon that by examining pandemic-specific situations, including functioning with fewer employees and enforcing public health orders.

Key Plan Components

A primary tenet of the department's approach is to keep the plan within the framework of the existing emergency operations plan (EOP).

Within the existing operations framework, pandemic preparedness efforts are focusing on: (1) Continuity of Critical Operations (e.g., staffing and maintaining information databases); (2) Training Officers for a Public Health Emergency (e.g., enforcing public health orders); and (3) Protecting and Educating Officers and Their Families.

The following sections describe the department's approach to these preparedness efforts in more detail.

(1) Continuity of Critical Operations

STAFFING

A major challenge that departments are likely to confront during a pandemic is maintaining critical department functions with reduced staffing. Unlike other emergencies, public health emergencies—and particularly an influenza pandemic—could take out a sizeable portion of the workforce. Based on national estimates, a pandemic could impact 20 percent (low attack rate) to 30 percent

(high attack rate) of the population. Fairfax County estimates that up to 40 percent of its workforce could be absent due to illness, the need to care for ill family members, or self-imposed quarantining. For planning purposes, these estimates are used to anticipate reductions in staffing for periods of time, as the pandemic may hit communities in waves lasting six to eight weeks at a time.¹⁵

PLANNING FOR UNEVEN STAFF REDUCTIONS

Unlike other critical incidents, a pandemic does offer some lead time for preparing for a reduced staff, but predicting the actual impact on staffing in various divisions is impossible. For example, it is difficult to predict whether employees from various divisions would become ill at similar rates, or whether a pandemic might decimate certain divisions while leaving others relatively unscathed. Thus, departments need to be prepared to scale back operations in all critical services areas and cross-train personnel for multiple functions.

"While calculations that estimate the loss of workforce are important in planning, in reality you don't know exactly where these staffing losses will occur. Half the personnel in one bureau may be unavailable, but another bureau may only have a few personnel out. The ability to adapt to ever-changing dynamics is crucial in our roles as community leaders. Planning is important, but the plan should merely help guide us. Leaders need to keep a finger on the pulse of their agency and adapt resources and plans accordingly. Remaining calm and communicating with honest confidence will allow the workforce we are privileged to lead to perform, problem-solve, and do their best while also instilling calm in a community seeking leadership."

MAJOR LARRY MOSER, COMMANDER OF THE TECHNICAL SERVICES BUREAU

^{15.} Fairfax County Pandemic Flu Preparedness Plan, 2006.

A GREATER NEED FOR INFORMATION TECHNOLOGY EMPLOYEES

FCPD's operations and patrol bureaus have a process for reallocating resources, allowing them to increase operations with supplemental officers who have trained and maintained proficiency in various functions. Fairfax County patrol officers are generalists, and the department cross-trains officers to fill in some of the specialty units. For example, FCPD has a 200-person, non-standing Civil Disturbance Unit (CDU). Officers join the CDU voluntarily and receive training in various areas of expertise so they can be placed on call to assist in response to daily needs or during special events.

Increasing or scaling back operations is a common practice for the operations and patrol division and is ingrained in the department's daily operating culture. However, the Administrative Services Bureau (ASB) and Information Technology Bureau (ITB) had not traditionally needed to ramp up or down and had not seen themselves as essential personnel. That changed as officials realized, for example, that during a pandemic, the ITB would play a key role in maintaining computer systems that would allow police employees to work from home or allow the department to take crime reports online. In planning for a pandemic, Fairfax County police focused much of their attention on ensuring planning efforts within the Administrative Services and Information Technology Bureaus. Using the same approach used by the County's Critical Infrastructure and Resource Management Committee, FCPD organized an internal police department committee with representatives from the Personnel Division, the Criminal Investigations Bureau, and the Chief's Office of Research and Support, along with the school liaison commander, the Patrol Bureau commander, the wildlife biologist, 16 the occupational health liaison, and the department safety officer. Using a team approach garnered departmental "buyin" and support within the many bureaus. Team members were then given various assignments, with minimal requirements for meetings.

IDENTIFYING CRITICAL OPERATIONS

The FCPD plan establishes a system to reprioritize calls for service and other critical functions as needed during a pandemic. This will help ensure that priority calls can be maintained with a reduced workforce, despite a probable increase in calls for service and other situational demands on department resources. The specific priorities will be determined through daily communication based on actual staffing availability and other demands. In a pandemic, emergency response calls will continue be a critical function. To maintain the ability to respond to all of them, the department will change its response to other calls for service, such as suspending non-injury motor vehicle accident investigations and certain types of alarm calls. Communications personnel may direct these calls to online reporting or give other instructions over the phone. For instance, in a car accident without injuries, the motorists would be instructed to exchange insurance information and then file a report online. FCPD has been experimenting with online crime reporting, so that if needed, more crimes could be reported on FCPD's website. The Information Technology Bureau has taken the necessary steps in the planning process to quickly put this in place when it is needed.¹⁷

Fairfax County police have classified their services into three categories in their continuity of operations planning. These categories are: "mission critical—no interruption," "immediate post incident—services restored within 12 hours of incident," and "normal services—restored at conclusion of incident up to 30 days out." Thirty-three functions are

^{16.} The Fairfax County Police Department has one full-time wildlife biologist, who works with the Animal Services Division. The wildlife biologist's responsibilities include: responding to community complaints about wildlife, training officers in wildlife-related issues, and implementing programs that deal with problematic wildlife species within the community.

^{17.} Moser 2006

listed as mission critical; 21 are listed as immediate post incident, and 50 services are classified as normal services. ¹⁸ Examples of each include:

Mission Critical:

- Security at critical sites,
- SWAT,
- Homicide investigations, and
- Payroll¹⁹

Immediate Post-Incident:

- Sex crimes unit,
- Gang investigations, and
- Victims services

Normal Services:

- Crime prevention coordinator,
- Enforcement of animal control laws, and
- Parking enforcement.

The preparation of the essential function/ services list was intended to provoke thought about the services provided by the various bureaus and divisions of the police department. Bureau/division personnel are accustomed to justifying their own needs for resources in the regular budget process, but are not usually engaged in defending another division's needs or factoring what the impact would be on their own bureau if they were denied services provided by other sections of the department. The use of a written list brought issues from all bureaus equally into discussion and helped ensure equitable representation and discussion.

Three steps were used to create this list. First, bureau representatives were asked to submit a list of their critical functions and services offered.

Individual submissions were then merged into a single list and redistributed among command staff for comment. Finally, a facilitated discussion was held during a command-staff meeting. Commanders were divided into diverse groups and asked to prioritize the items on the list. This group discussion provided safe commentary about what was truly most important during critical periods. It also provided a platform where commanders could have some spirited discussions about what is really important when services need to be altered.

The resulting list of functions and rankings is flexible, and depending on the threat, the criticality or role of the specific function may drastically change. Officials said that the most important part of this process was creating the list and thinking through the importance of each function, so that during an emergency no functions and bureaus will be overlooked, even if a shift in priorities does occur. During a critical incident, the list will serve to remind decision-makers of the various services that exist and will help them to select the best ramp up/ramp down options.

MAINTAINING KEY INFORMATION TECHNOLOGIES AND DATABASES

Fairfax County's databases and remote access servers are generally shared among all county agencies. Fairfax County agencies also have telework policies, which allow some employees access to county databases from remote locations (including home). During a pandemic, the county has instructed all agencies to use the policy's "maximum flexibility" to reduce risk of transmission of flu virus within the workplace.^{20, 21}

As the demand for emergency services and teleworking increases during a pandemic, it is anticipated that these shared systems may be

^{18.} For a more detailed list, see Appendix B.

^{19. (}It may seem surprising to find payroll on a list of highest priorities, but a failure to maintain payroll for any reason could cause some employees to fail to report to work, worsening the reduced-workforce problem.)

^{20.} Fairfax County Pandemic Flu Preparedness Plan, 2006.

^{21.} Within FCPD, selected positions are authorized for teleworking, and these positions are typically administrative. However, during a public health emergency, most positions that are not linked to responding in an operational capacity will have some latitude for teleworking with supervisor approval.

heavily strained. As part of the planning process, Fairfax County police also designated certain databases as "critical" and "non-critical" to their continuity of operations and developed a plan for ensuring access to these systems.

To ensure that the critical systems would be available to the necessary personnel during an emergency, FCPD worked with the county's Department of Information Technology (DIT) and the police IT Bureau to observe the system demands during peak days and times to estimate its capacity. If the demand should exceed capacity, then DIT will be able to regulate who has access. As with other prevention measures, DIT will first seek to gain voluntary compliance to reduce system demand by telling users about any problems with excess demand and explaining the objectives of restricting access. Although the details are not finalized yet, extensive discussion has occurred to assign blocks of time for various tasks. For example, time and attendance clerks would have priority access during pay period submissions. Although voluntary compliance is the preferred method, DIT will have the ability to regulate access privileges.

If necessary, the IT Bureau has the ability to regulate who has access to the "critical" databases and which databases are able to run. The information technology systems are structured so that noncritical databases may be shut down in an emergency. Examples of critical systems include the radio and computer-aided dispatch and the records management systems. These systems are able to handle a full capacity even if everyone is using them. Non-critical systems include the employee database, court scheduling, the geographic information system, and non-criminal tickets. The IT Bureau is clustering databases that are related to essential services and functions. By bundling certain databases together, IT will be able to essentially "turn off" non-critical databases without impacting the critical ones.

Also, the police IT Bureau is identifying and prioritizing authorized telework and Citrix-access personnel who will be able to access critical databases remotely if needed. Communications, computer-aided dispatch, and the records management system will have priority if the remote access systems become taxed during a peak period. Moreover, it is now policy to keep hard copies of critical digital documents (such as time sheet templates and employee contact information) in case they become inaccessible online.²²

MAINTAINING INTERAGENCY AND INTERNAL COMMUNICATIONS

Maintaining interagency communications will be critical for coordination and effective response during a pandemic. Fairfax County Police, the Sheriff's Office, and the Emergency Management and Fire Departments use a shared emergency communication system for all emergency responders.

The service is managed by the Department of Public Safety Emergency Operations Center and uses a shared computer-aided dispatch and public safety radio system to communicate emergency and non-emergency public safety information. The county also has a teleconference ability that is run out of this center. The center's audio conference capability can accommodate 1,900 simultaneous users on one call. This system has been used for interagency communications in the aftermath of Hurricane Isabel in 2003, during the Beltway Sniper incidents in 2002, after the terrorist attacks of September 11, 2001, and during the 2001 anthrax attacks. For interagency communications, emergency services providers in and around Fairfax County dialed in to the communications center at preset times for incident briefings, updates, discussion, and direction on next steps.

^{22.} FCPD Internal Memo regarding Pandemic Planning, 2006, pgs. 10-11.

AUDIO-CONFERENCING LATEST PANDEMIC INFORMATION AT ROLL CALL BRIEFINGS

FCPD currently uses the communication center's audio conferencing capabilities for internal communications. Some members of the police patrol bureau use it weekly at preset times. During critical events in the past, the police department has used the communication center's audio conference capability as frequently as several times every day for briefings during roll calls. In the event of a pandemic, it is anticipated that briefings would be timed in conjunction with shift changes to ensure that employees are best informed and leaders have accurate, up-to-date information on the status of staff availability and demands for service. During initial planning, FCPD worked with the county to develop a fixed schedule of available use times for the department. In a pandemic, FCPD will use the system in conjunction with the hours associated with their various staffing plans. For example, during their standard 11.5-hour shift, briefings will occur at 0545 hours, 1345 hours, and 1915 hours.²³

To further enhance communications, Fairfax County police have taken the lead and partnered with the Fire Department to install video conferencing equipment at each of their key facilities. This equipment has substantial expansion capacity, but was primarily intended to communicate with all eight district stations, headquarters, the criminal justice academy, operations support, the Department of Public Safety, and other county emergency management and key fire and rescue sites. It is expected that videoconferencing will further facilitate interagency communications during critical incidents as more agencies obtain this capability.

MANY TECHNOLOGIES FOR COMMUNICATING WITH EMPLOYEES

FCPD's internal communication plans include multiple means of communicating with personnel. The method of conveying these messages may change according to whether it is a routine communication about preparedness, or an emergency communication about a potential or existing critical incident or emergency situation. For routine communications (and those which are not time-sensitive), general command staff memorandums, standard operating procedure memorandums, employee networks, roll-call boards and other standard communications methods will be utilized. FCPD's communication plan includes sharing information with personnel through mobile communications terminal (MCT) announcements (messages on the terminals in police vehicles), emails, an employee staffing and information hotline, the Emergency Action Notification (EAN)²⁴ Message Alert System, and the Operations Intranet site.

(2) Training Officers for a Public Heath Emergency

During a pandemic, officers may be called on to assist with activities that vary from routine, such as enforcing quarantine and other public health orders. FCPD is anticipating assisting public health authorities in issuing such orders in the early phase of a pandemic—when such orders will likely be issued and are more likely to be enforceable. Since most FCPD officers have not previously served these types of orders or had to respond pandemic-like situations, FCPD recognized the need to provide specialized officer training on pandemic response. The department has provided education on pandemic preparedness and response to its officers and other personnel; however, comprehensively training

^{23.} FCPD Internal Memo regarding Pandemic Planning, 2006, p. 10 and Moser, 2006.

^{24.} Emergency Alert Notification (EAN) is a free notification service that citizens can enroll in through the Emergency Management Department, which offers various methods of communicating emergency and other important information via email, pager, cell phone, and other digital communication devices.

the entire force would be unwieldy at this point and would require ongoing in-service training updates. A manageable solution that FCPD has implemented was to identify a core team of volunteer officers to be specially trained and involved in an initial pandemic response and to phase in other employees' training.

CIVIL DISTURBANCE UNIT TRAINING

FCPD's approach to staffing has been to train all officers as generalists and then to cross-train patrol officers to staff specialty units. FCPD has a 200-person, non-standing Civil Disturbance Unit (CDU) that is composed of personnel from various parts of the department. While this unit is non-standing, it trains regularly and is deployed periodically to ensure readiness. Officers in the CDU are comfortable with receiving various assignments to address daily service needs and in preparation for special events. Further, FCPD also has 108 auxiliary officers and 100 certified pre-screened volunteers in service who may supplement the department.

As planned, an initial team of 30 officers from the 200 CDU volunteers has received comprehensive education on the elements of a pandemic (e.g., risk factors and protective measures) and training on law enforcement response, including relevant legal authorities, PPE requirements, how to serve public health orders, assisting with appeals of public health orders, and enforcing voluntary and involuntary movement restrictions. This select group will be composed of "positions," not specific individuals, so if one person leaves the department, another person will be trained to fill that slot in a continuous process.

FCPD is currently working with other first responders in the county to develop a training protocol for the initial response group and preparing tabletop exercises to assist in training. Topics include:

- Pandemic Influenza 101
- Detailed Orientation to Departmental Plan
- PPE and Fit Testing
- Briefing by Health Department

- Legal Issues Associated with Service of Quarantine and Isolation Orders
- Table Top Quick Review.

"By bringing this small percentage of our workforce to a higher level of knowledge and readiness, the department will have an immediate response capacity of willing, appropriately trained and equipped staff. The existence of this smaller group of trained personnel will reduce communication challenges, while offering a buffer as additional staffs are ramped up. Having a core group of volunteer officers who are well trained will likely also help reduce anxiety within the department and the community." MAJOR LARRY MOSER, COMMANDER OF THE TECHNICAL SERVICES BUREAU

ENFORCING PUBLIC HEALTH ORDERS

Training for the core group of officers will specifically outline how officers are to carry out the law enforcement roles as delineated in the county's planning process. In Fairfax County, these roles include assisting with the following:

Assisting the Health Department with its lead responsibilities regarding:

- Voluntary quarantine and social distancing
- Mandatory quarantine and service of court orders associated with quarantine and isolation
- Public health order appeals
- Protection and distribution of medical resources.

Voluntary Quarantine and Social Distancing

For a voluntary quarantine, the state health commissioner and the county Health Department will specify voluntary compliance. No law enforcement action will be needed, except to assist in spreading the message by educating members of the community with whom officers come in contact during routine policing activities about the importance of complying with a voluntary quarantine.

Mandatory Quarantine and Service of Court Orders

Police and sheriffs' departments are expected to play a role in enforcing any mandatory quarantine. The Virginia state health commissioner issues all mandatory quarantine orders. Previously, Fairfax County police officers had limited authority to serve civil orders; this responsibility fell mostly under the authority of the sheriff's office. However, because of the widespread impact a pandemic could have, the Virginia General Assembly revised the State Code, effective July 1, 2007. The code now authorizes police officers to serve isolation and quarantine orders (Virginia State Code Section § 15.2-1704).

The sheriff's office will take primary responsibility for serving quarantine and isolation orders. If the person being served the order complies, no other law enforcement action will be needed. But if the subject of the order does not comply, then the state health commissioner will issue an emergency detention order allowing law enforcement officers to take the person into custody. Defying the mandatory quarantine order is punishable as a Class 1 misdemeanor, resulting in confinement in jail for not more than 12 months and/or a fine of not more than \$2,500. Fairfax County police will help the health department ensure that initial cases are contained, as they realize that the first cases may have the greatest impact on limiting the spread of a pandemic, giving medical authorities valuable time to begin working on a vaccine and other countermeasures.

When serving these civil orders and in responding if the orders are violated or appealed, FCPD officers will be expected to continue to use discretion in the amount of force needed to carry out these responsibilities. Current use-of-force policies are flexible enough to allow officers to use prudent judgment and to examine their experience

and factors in the field to make the best determination of how to handle a situation. In most cases, Fairfax police officials say they expect that the orders will offer options of mandatory quarantine at locations other than jail confinement; an arrest will be made as the very last resort.

One innovative idea that has been proposed for enforcing the mandatory quarantines is using electronic surveillance bracelets. This measure could deter violations, assist in monitoring those under public health orders, and reduce the need for law enforcement intervention. The sheriff's office is currently using electronic bracelets for persons sentenced to home detention.

Public Health Order Appeals

Law enforcement will also be involved whenever a person complies with a mandatory quarantine order but chooses to appeal the order. Because of the need to resolve such appeals immediately, health order appeals, unlike other types of civil litigation, will not be scheduled for court hearings days, weeks, or months later. Rather, the police will be responsible for taking the person to a Circuit Court hearing. The appeal at Circuit Court could be conducted at the courthouse, through a videoconferencing system, or by bringing a judge or a mobile video conferencing unit to the client. The jail has a system for conducting arraignments and other hearings by a magistrate via video. If the client does need to be placed in confinement, one option is that the Sheriff's Office has a certain amount of "negative-pressure" space for people with tuberculosis and other airborne illnesses. FCPD will ensure that only those trained in and using personal protection equipment will be in contact with persons known to be infected.²⁵

Protection and Distribution of Medical Resources

Police also may be required to enforce movement restrictions as requested by the county. FCPD will provide security at vaccination sites, medical

^{25.} FCPD Internal Memo regarding Pandemic Planning, 2006, pgs. 8–9.

distribution sites, and quarantine sites as requested and as the department is able to respond.²⁶ In Fairfax, although the Police Department may handle any initial response for security at hospitals, it has been agreed that the Sheriff's Office will provide supplemental security at hospitals.²⁷ During later phases of a pandemic, it is assumed that courts will be closed and other court work may be modified, allowing those providing court security to redeploy to assist with field priorities such as hospital security. For many years the Sheriff's Office has participated with police Civil Disturbance Unit training, so it is well prepared for this role.

ACTIVATING THE EMERGENCY OPERATIONS PLAN

Because Fairfax County has modeled its planning stages after the phases set by the World Health Organization (WHO), a pandemic emergency operations would be initiated when the county is in Phase 5 of a pandemic based on the WHO or the Centers for Disease Control and Prevention stages. At this stage the county's Emergency Operation Center will have been activated.

(3) Protecting and Educating Officers and Their Families

OCCUPATIONAL SAFETY PROGRAM

FCPD's occupational safety program has been involved in planning for a pandemic flu. This program is led by the Fairfax County Fire and Rescue Department. Following National Incident Management System (NIMS) training, the police department recognized the value of having a field liaison specializing in responding to various hazards, including respiratory and biological threats.

Following the fire and rescue department's lead, FCPD designated a safety coordinator to meet this need. Master Police Officer Kenneth Brennan has been serving as the FCPD safety coordinator for about a year with a staff of five supplemental safety officers, who volunteer for these responsibilities in addition to their regular duties. All officers participating in this role attend the National Fire Protection Association (NFPA) officer's school, where they receive in-depth training on working with hazardous materials, including live agents and weapons of mass destruction (WMD).

The safety coordinator also helps to ensure that the department is taking adequate precautions to prevent job-related injuries. For example, the safety coordinator has been involved in planning for extended operations and deployment in hot or cold temperatures. The safety coordinator and safety officers have worked to ensure that officers will have the supplies needed to prevent hypoglycemia or dehydration.²⁸ In a pandemic situation the planned precautions include education on infection control measures, such as maintaining a six-foot distance from people who have cold or flu symptoms.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

To date, the police safety coordinator's largest role in pandemic planning has been to provide guidance on personal protective equipment (PPE) and to assist in identifying, ordering, and maintaining the equipment. One of the critical decisions FCPD had to make was to determine how much PPE was needed. This issue was discussed at length, as FCPD had to think about how much may be needed and the cost of the equipment and storage. The department has stockpiled N95 masks,²⁹ hand cleaner (containing 60 to 90 percent alcohol),

^{26.} FCPD Internal Memo regarding Pandemic Planning, 2006, p.7.

^{27.} As mentioned earlier, Fairfax County has both a Police Department and a Sheriff's Office; the two agencies have overlapping authority, with the Sheriff's Office providing security to courthouses, managing the detention center, and serving civil law process.

^{28.} Interview with Kenneth Brennan, 2007.

^{29.} The Food and Drug Administration (FDA) defines N95 masks as disposable devices that cover the mouth and nose during medical procedures. N95 masks help protect the caregiver and patient against microorganisms, body fluids, and small particles in the air. They fit closely to form a tight seal over the mouth and nose and require fit-testing to provide the intended effectiveness. http://www.fda.gov/cdrh/ppe/masksrespirators.html

protective gloves, eye protection, and surgical masks. FCPD has stockpiled a base amount and will continue to order additional items strategically through grant and budget opportunities.³⁰

In December 2006, FCPD began fit-testing N95 masks and PPE distribution during officers' annual physicals. Currently, fit-testing is only being conducted for selected groups of non-sworn and sworn field personnel. Civil Disturbance Unit members are being prioritized for receiving PPE and fit-testing. Previously, all CDU patrol officers and specialty units were issued Level C PPE³¹ and were fit-tested according to the equipment requirements. Now, most employees receive annual fit-testing for their issued Millennium Chemical-Biological Mask.³² FCPD will continue to fit-test its employees during firearm recertification and other prescheduled functions.³³

While many officers have been fit-tested, little equipment will be issued until it is actually needed. The equipment degrades and becomes damaged if stored in the trunks of patrol cars where temperatures are not regulated. Instead, equipment is strategically placed in the field and at storage sites. In 2006, Fairfax County police participated in stockpile distribution rehearsals with the health, schools, and emergency management departments.

SICK LEAVE AND HYGIENE POLICIES

The Fairfax County Department of Human Resources establishes leave policy and has determined that the regular department leave policies are appropriate for a pandemic flu. This policy provides for maximum flexibility in using family, annual, compensatory, sick, transferred, and advance sick leave to meet emergency needs. Worker's compensation-related leave can also be used. ³⁴ In general, personnel are expected to use all of their leave hours; then, if necessary, they can draw from the employees' bank of donated leave hours.

"The department's philosophy is clear that everything in its power will be done to support our employees and their families, so that they can care for themselves and ultimately return this same level of support for their community through their service to the department."

MAJOR LARRY MOSER, COMMANDER OF THE TECHNICAL SERVICES BUREAU, 2006

FCPD strongly recommends that employees not report to work if they believe they are sick or they believe they have been in contact while not wearing PPE with someone who has the flu virus. The department is educating officers on the importance of this policy. It is hard to predict the impact of a pandemic, but the department is stockpiling enough surgical masks to ensure that masks will be available to meet their needs and ensure employee safety. Additional stockpiles of N95 masks have also been acquired, and the masks are routinely inspected for damage or degradation.

^{30.} Brennan, 2007.

^{31.} The Occupational Safety and Health Administration (OSHA) classifies PPE into four categories: A, B, C, and D. The highest level, A, is used when "the greatest level of skin, respiratory, and eye protection is required." Level D equipment is used for "nuisance contamination only." Level C PPE is for airborne substances that require air-purifying respirators. Other PPE used in level C may include: coveralls, gloves (both inner and outer), and boots. More information can be found at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9767

^{32.} The National Institute for Occupational Safety and Health (NIOSH) approved this full-face gas mask for protection against chemical, biological, radiological, and nuclear (CBRN) agents. More information can be found at http://media.msanet.com/NA/USA/DomesticPreparedness/GasMasksAPR/MillenniumCBA/0517-06MilleniumCBRN.pdf

^{33.} The process of fit-testing all officers for N95 masks is estimated to take up to three years because some of the younger officers receive physicals only every three years. If an emergency arises before all are fit-tested, the department will issue the masks to personnel regardless of testing. The department is able to approximate mask sizes when ordering stockpiles, because 85 percent of the population wears a medium-size mask.

34. Fairfax County Pandemic Flu Preparedness Plan, 2006, pg. 59.

"With proper education, officers will recognize that they are doing more harm than good by coming into work sick."

MASTER POLICE OFFICER KENNETH BRENNAN, 2007

FCPD has established guidelines for personnel hygiene during a pandemic, based on the suggestions made during the county's planning process. These recommendations emphasize good general hygiene habits such as washing hands and covering the mouth with a tissue or sleeve when coughing. When dealing with persons who have been exposed to or have contracted a virus, personnel should wear gloves, N95 masks, long-sleeve clothing, and protective eyewear. Personnel should also have the exposed person wear a surgical mask and maintain a distance of at least six feet when possible. Other practices recommended by the department include social distancing (e.g., avoiding close personal contact and avoiding attending unnecessary public places and gatherings) and cleaning frequently used surfaces (e.g., door handles, computer keyboards, and elevator buttons). Currently this is strictly a personal responsibility, but if pandemic Phase 5 or 6 were reached, the county's facility management department would likely take a greater role in ensuring the cleanliness of department facilities and work stations. Importantly, facility management officials plan to modify the scope of work for cleaning and maintenance based on the threat. For instance, rather than spending time vacuuming floors, cleaning personnel would frequently wash doorknobs and other shared surfaces.

GUIDELINES FOR DEATH INVESTIGATIONS

Fairfax County has an existing fatality management plan that addresses mass casualties during a pandemic. The county also participates in a workgroup of regional funeral directors, cemetery directors, hospital officials, county emergency planners, and first responders to assist in refining the fatality management plan for the county. The county anticipates that most flu-related deaths will be easily distinguished from other deaths, because the victims will have sought some type of medical treatment. All homicides, accidents, suicides, and violent, sudden, and unexpected or suspicious deaths are required to be reported as usual to the local medical examiner.³⁵

The Police Department continually communicates with the Chief Medical Examiner's Office and the Health Department to assess risk to its employees, and will make policy changes accordingly. During Pandemic Phase 5 and 6, the department anticipates requiring personnel to use at least a minimal level of the following PPE: disposable hooded Tyvex coverall (lightweight paper-like disposable material); single-layer non-sterile ambidextrous gloves which cover the cuffs of the coverall; N95 filter mask; eye protection; and Tyvex shoe covers. While this PPE is currently available, it is not mandated. At the time of this writing, FCPD is communicating with the medical examiner's office and will follow the prescribed recommendations from the medical examiner's office, which will be determined by assessment of the threat faced. Mass fatality procedures continue to be discussed regionally.

EDUCATING OFFICERS AND THEIR FAMILIES

In the Fairfax County Police Department's pandemic planning, much consideration was devoted to providing guidance to personnel on family health issues. The department encourages families to have an emergency plan and to discuss good hygiene and social distancing practices. The department demonstrated the value of a program called the Family Assistance Services Team (FAST) during the aftermath of the May 8, 2006 shooting of two of their officers. FAST is defined as a team of human resources professionals who establish

^{35.} Fairfax County Pandemic Flu Preparedness Plan

contact with employees and their families and provide them with all available resources so that emergency operations employees (including police, fire, EMS, etc.) may perform their jobs.

Fairfax County police have been refining and expanding FAST based on this experience, and have given a high value to the FAST concept; the department is committed to making a high priority of communicating with and supporting officers and their families. FCPD also suggests that families prepare "HomePacks" which would include supplies needed in case of an emergency, such as surgical masks, disposable gloves, and disinfectant (See Appendix C for a complete list). The department has stressed emergency self-preparation during the initial policy dissemination. However, agency leaders realize that people often fail to prepare. Accordingly, the department anticipates prioritizing this message during annual in-service wellness assessments and by repeating the message during unrelated videoconferences. The department also anticipates using the Civil Disturbance Unit members as ambassadors of the message.

PUBLIC EDUCATION

The Fairfax County Pandemic Influenza Plan includes a detailed public education and risk communications plan. The Department of Health is the lead organization for official public communications, and has put extensive effort into public education on pandemic preparedness. The health department has also worked with the community and has participated in business summits and business continuity/disaster planning.

The county's medical spokespersons will be the health director and the deputy medical director of the Fairfax County Health Department. Nonmedical spokespersons may include the director of the Office of Public Affairs for Fairfax County, the Fairfax County Executive, and the director of communications for Fairfax County Public Schools.

The police department's community, crime prevention, and business liaisons have taken the

lead on educating the public about health department education and planning sessions. Police representatives have also joined in county meetings. The police department views its role as a conduit for referrals to county services, helping to relay the information the county puts forth. For example, the police disseminate information on community summits and events. For any police-related issues that may need to be communicated during a pandemic-such as how security will be handled at vaccination sites, reductions in routine services, or when to call the police—the police Public Information Office (PIO) will be the spokesperson for the department. The department also plans to use the county's Emergency Alert Network (EAN) to issue any public information or directives from the department.

"One of our duties as police officers is responding to community members seeking guidance or resources by helping refer them to appropriate county agencies and resources. Often, when people don't know what to do, they call the police, and the officers in the field are their first contact in reaching any county service. Accordingly, we try to make sure officers can make the appropriate referral. This is a daunting task for a county that offers so many services. To assist, officers have access to phone directories available on the mobile communications terminals, and they are exposed to roll call training sessions and other service awareness efforts. Each police station also has two crime prevention officers and a standing Neighborhood Patrol Unit that have expanded knowledge and contact with various service providers."

MAJOR LARRY MOSER, 2006

6. CONCLUSION

Fairfax County has taken many important steps in preparing for a pandemic or other similar public heath emergency. The Police Department's planning efforts have emphasized:

- Developing multi-agency partnerships and plans,
- Identifying mission-critical functions,
- Incorporating pandemic-specific planning elements into its existing plans,
- Maximizing capacity through the use of technology,
- Focusing on cross-training administrative personnel, and
- Educating personnel on the threat.

Future Directions:

At the time this document was released, the Fairfax County Police Department was continuing its planning efforts. FCPD is currently working on the following activities:

- Training all of its Civil Disturbance Unit officers on the pandemic preparedness plan and their roles and responsibilities,
- Ongoing PPE fit-testing,
- Working on technology issues and implementing video conferencing, and
- Working with courts and the Sheriff's Office to further define response protocols.

APPENDIX A

Fairfax County Pandemic Influenza Critical Infrastructure Agency Planning Checklist³⁶

The following document is intended to assist agencies in generating discussion and addressing continuity-of-operations concerns associated with Pandemic Influenza planning. It is assumed that agencies will facilitate discussions and conduct planning exercises that will focus upon scenarios in which the entire globe would be faced with a pandemic event that places extreme demands upon countries' standard operational norms. This checklist is merely a planning tool and is intended to help agencies address topics of preparedness.

While we may or may not face a pandemic near-term, experts seem to agree that when we do face a pandemic such as one that could stem from H5N1, as much as 25–40% of our workforce might

be absent caring for loved ones, or from illness themselves. We have all dealt with localized incidents that paralyze our daily functions for a few days during a snowstorm. But it is wise to plan beyond those instances, and to be prepared to address challenges that have a sustained global impact outside of our control. You know your business, but when planning, consider how reduction of your service affects others, and how the reduction of services that you rely upon would impact your ability to do business. When considering critical services it is asked that you think in terms well outside of your traditional planning and consider that systems will be taxed and technology will be overwhelmed, if or when we face such a challenge.

Respons	sibility &	Status	
:	STARTED	COMPLETED	Core Issues
& Positions	Critical Functions & Positions		When addressing critical services, keep in mind that we are planning for an escalating loss of personnel with longer durations than our standard emergencies. Value might be derived from looking at this as being similar to budget planning when identifying/prioritizing lines of business and identifying vulnerabilities. Inventory and prioritize the following:
ns &			
ical Functio			■ Critical Services [Without these services, critical components of the county would not function. Example, Dept. of Vehicle Services (DVS) must provide fuel to ensure ambulance service.] What impact will occur without the service?
Critic			■ Non-Critical Services [Services that are important, but are not deemed critical to sustain county services. For example, police crime prevention services.] What impact will occur without the service?

^{36.} Fairfax County Pandemic Flu Preparedness Plan, 2006, pgs. 66-71.

Respons	Responsibility & Status			
:	STARTED COMPLETED		Core Issues	
	0 0		 Assign key staff with the authority to develop, maintain and act upon influenza pandemic preparedness and response plan. 	
uthorities			 Determine who will serve as your agency Pan-Flu Liaison (should be a critical thinker, facilitator and should have an overall knowledge of agency). 	
Appropriate Authorities			 Appropriate authorities will determine the potential impact of a pan- demic on your Department/Division's usual activities and services. Plan for situations likely to result in an increase, decrease or alteration of services you deliver. 	
			■ Determine the potential impact of a pandemic on outside resources or services that your Department/Division depends on to deliver services.	
			You should begin involving and educating your employees at all levels about influenza pandemic preparedness. The county has and will continue to provide additional resources to assist with educating your employees.	
	_		Determine how you will communicate with your employees and critical staff on a scheduled basis during a pandemic.	
			■ Who needs to be notified or included in communications?	
			■ How will communications occur?	
trategy			What will be the frequency of communication (pre-scheduled to minimize capacity demands)?	
ication S			How will you carry out pulse checks regarding: staffing, service demands, morale, etc.?	
Communication Strategy	_		Determine the number of critical staff that would need access to teleconference or video conference equipment. This will assist Dept. of Information Technology (DIT) in their efforts to address systems capacity.	
			Some agencies already have scheduled communications or briefings. To assist DIT with systems load management, identify existing or desired communications options and schedule. For example, police and fire roll calls with field personnel occur at pre-scheduled re-occurring times. This information may assist if prioritization of technology usage is required. (For example, off-hour teleconferences, rotational schedule such as Health Department every a.m. at 0900 hours, DVS every Wednesday at 0600 hours, etc.).	

Responsibility & Status		Status			
STARTED COMPLETED		COMPLETED	Core Issues		
			Consider that during a pandemic, systems will likely be taxed and prioritization must occur to sustain services.		
			Service Methodology		
			 Determine how you will assess service demands. Examples: Projected number of on-line users at peak times, projected number of facility visitors during a pandemic. 		
			 Consider how selected services may be offered through non-traditional means. Example: Police expanding the types or incidents permitted to be reported by phone vs. in-person. 		
	_		■ Determine how you will take services off-line or reinstate them. Example: During an ice storm, police might modify their accident reporting policy to ensure that the highest-priority events are addressed. A designated commander then reinstates normal reporting procedures based on call volume and staffing.		
S			Identify telework options		
Methoc			 List who are critical users (remember this is trying to ensure critical services are sustained). 		
ons			■ Determine how you will manage usage to avoid system overload.		
Operati			 Determine how many employees currently have on-line or remote access capacity. 		
Service and Operations Methods			 Determine how many employees truly need on-line or remote access capacity. 		
Servic			What would occur if DIT only offers selected services to prioritized groups at scheduled times?		
	0		List what services can be supported by volunteers, retirees, private service providers.		
			■ How would this occur?		
			■ What training is required?		
	_		Identify what policies/laws would need to be modified to accommodate required change in service methodology. In some instances purchasing is required to hold public forums associated with bids. Would a business change require code amendments?		
			Review the most critical functions that may benefit by implementing some type of quarantine at work in the most critical periods. Example: Are there some functions that are so critical that it may be wise to house the employee and/or their family either at or near the workplace?		

Responsibility & Status		Status				
STARTED COMPLETED		COMPLETED	Core Issues			
			 Establish a written line of succession for key leaders, managers and essential employees. 			
			■ Determine how authority will be delegated or transitioned.			
ssion			 Identify and train essential staff (including full-time, part-time, retirees, and unpaid or other volunteer staff). 			
Lines of Succession			 Outline what the organizational structure will be during an emergency. The outline should identify key contacts with multiple backups, roles and responsibilities, and who is to report to whom (NIMS model). 			
Lines			 Determine what skill sets or knowledge is needed to sustain critical services. 			
			Evaluate and list positions with skill sets that can be shared or cross- trained and what positions could be reallocated to like functions else- where in the agency or county.			
			Keep in mind that a pandemic is global and that system access must be prioritized to minimize systems overload:			
les/ ttabases			 Determine the critical systems that need to be running to support critical services/functions. 			
Critical Files/ Records or Databases	_		■ List and prioritize what systems could be taken off-line to maximize capacity.			
Ci			■ Determine how employees could access vital files, records, databases needed to support critical services/functions: Removable Drives, Citrix, Phone, Hard Copy Records, On-Line, etc.			
			Dept. of Human Resources (DHR) is working on leave and compensation-related matters to assist in guiding policy in these areas (To Be Determined).			
ions			Assess agency policies for compatibility with circumstances unique to a pandemic.			
Agency Policy Considerations			Many agencies have agency-specific policies that interpret county policy for specific work areas. In the event of a pandemic, flexibility to react to changing conditions is critical for continuation of critical functions. As a result, agencies must assess agency-specific policies to ensure that they are conducive to protocol introduced during a pandemic as well as compatible to any changes to county policy to respond to a pandemic.			
			Evaluate and resolve policy conflict to ensure that recommended responses are capable of being implemented. (For example, Board of Supervisors meetings via video conference from remote sites would require code change. What impact does postponement of performance evaluations have?)			

Responsibility & Status		Status	
STARTED COMPLETED		COMPLETED	Core Issues
Personal Protection and Basic Supplies for your Employees	Personal Protection and Basic Supplies for your Employees		Determine what number of employees will be performing under critical- service conditions that would have unavoidable face-to-face contact requiring Personal Protective Equipment (PPE) in order to sustain critical services. Face mask Eye protection Hand cleaner Surface cleaner The county is researching training options regarding Personal Protection and related equipment usage. You should evaluate what are the most critical supplies that might not be available from suppliers during a pandemic.
Family support	0	0	While the county has services to offer to your employees for mental health, etc., it is wise to evaluate additional options for caring for one another to ensure morale and other family support during the most critical times. Evaluate the depth of services currently utilized. Consider what your Division or Department can do to assist families to ensure that sick family members do not come to work, and healthy members are able to feel confident their family is cared for so they are willing to come to work.
Logistics			Based on your outcome of the previous questions, your agency's logistics needs can be better addressed. While it may not be feasible or necessary to stockpile supplies for all hazards, it is prudent to strategically obtain supplies needed do sustain critical services. This is an understandably difficult task. However, if you are able to quantify these needs, it may assist the county in possible submissions as large-scale orders (stock goals regarding: meals, protective equipment, and office surface-cleaning supplies). Some agencies may need to address lodging options as well.
Testing			Determine how your agency will test your Pandemic Flu plan. For example, can a tabletop exercise test the plan sufficiently?
<u>–</u>			Determine the frequency of testing.

APPENDIX B

Sample Critical Functions

Fairfax County Police Department Pandemic Influenza Continuity of Operations (COOP) Planning

- 1 Mission Critical = No interruption in these services
- 2 Immediate Post Incident = The service will be restored within 12 hours of incident.
- 3 Normal Services = The service will be restored at conclusion of incident. Up to 30 days out.

Bureau	Service/Function	Criticality Under Extreme Conditions
Public Information Officer	Public Information Officer	1 Mission Critical
Patrol Bureau	Patrol Response to Life Safety Emergencies	1 Mission Critical
	Patrol Response to Serious Crimes, In Progress/ Just Occurred	1 Mission Critical
	Respond to Animal Complaints — Threat to Human Life Safety	1 Mission Critical
	Security at Critical Sites	1 Mission Critical
	Security for Fire and Rescue Operations	1 Mission Critical
	Animal Shelter — receiving and custodial operations	1 Mission Critical
	Traffic Control	1 Mission Critical
	Citizen Reporting Section	1 Mission Critical
	Staff Duty Officers	1 Mission Critical
	Police Communications Assistant	1 Mission Critical
	Crossing guards	1 Mission Critical
	School Resource Officers	1 Mission Critical
	School Liaison Commander	1 Mission Critical
Operations Support Bureau/	AUXILIARY POLICE	1 Mission Critical
Traffic	MOTORS	1 Mission Critical
	CRU Critical/Fatal Accident Investigation	1 Mission Critical
Operations Support Bureau/	Civil Disturbance Unit	1 Mission Critical
Special Operations Division	Explosive Ordnance Disposal	1 Mission Critical
	SWAT	1 Mission Critical
	Safety Officers	1 Mission Critical
	HOSTAGE NEGOTIATIONS	1 Mission Critical

Bureau	Service/Function	Criticality Under Extreme Conditions
Operations Support Bureau/ Helicopter	PD MISSIONS/MEDEVACS	1 Mission Critical
Information Technology Bureau	Network Administrator	1 Mission Critical
Internal Affairs Bureau	Investigation of Critical/Major Event	1 Mission Critical
	Support of Civil Litigation	1 Mission Critical
Criminal Investigations Bureau –	Child Services	1 Mission Critical
Major Crimes Division	Homicide Investigations	1 Mission Critical
Criminal Investigations Bureau – Investigative Support Division	Crime Scene	1 Mission Critical
Administrative Support Bureau	Casualty Assistance Plan – Support Serv & Fast Team	1 Mission Critical
	Medical Liaison Officer	1 Mission Critical
	Payroll	1 Mission Critical
	Purchasing	1 Mission Critical
Technical Services Bureau/	Fleet Services	2 Immediate Post Incident
Field Support Division	Property Room	2 Immediate Post Incident
Patrol Bureau	Patrol response to Minor Crime, In Progress/Just Occurred	2 Immediate Post Incident
	Patrol Response to Serious Crime, Report Only	2 Immediate Post Incident
	Resolve Rabies Vector Threats	2 Immediate Post Incident
	Gang Investigations	2 Immediate Post Incident
	Fleet/ Equipment Mgt – Station level	2 Immediate Post Incident
Operations Support Bureau/Traffic	Virginia Dept. of Transportation LIAISON	2 Immediate Post Incident
	Alcohol Test Unit	2 Immediate Post Incident
Operations Support Bureau/	CANINE	2 Immediate Post Incident
Special Operations Division	SEARCH RESCUE	2 Immediate Post Incident
	Underwater Search and Recovery Unit	2 Immediate Post Incident
Information Technology Bureau	Radio Coordinator	2 Immediate Post Incident
Internal Affairs Bureau	Compliance Monitoring	2 Immediate Post Incident
Criminal Investigations Bureau –	Robbery Unit	2 Immediate Post Incident
Major Crimes Division	Sex Crimes Unit	2 Immediate Post Incident
	Juvenile Fugitive	2 Immediate Post Incident
Criminal Investigations Bureau – Investigative Support Division	Victim Services	2 Immediate Post Incident
Criminal Investigations Bureau –	Criminal Intel Unit	2 Immediate Post Incident
CID	Special Investigations	2 Immediate Post Incident
	National Capital Region Intelligence Center	2 Immediate Post Incident

Bureau	Service/Function	Criticality Under Extreme Conditions
Technical Services Bureau/ Field Support Division	Uniform	3 Normal Services
Patrol Bureau	Patrol response to Minor Crime, Report Only	3 Normal Services
	Traffic Enforcement	3 Normal Services
	Non-Critical/Non-Fatal Accident Investigation	3 Normal Services
	Crime Prevention Coordination	3 Normal Services
	Patrol Response to service calls	3 Normal Services
	Resolve Injured Animal Complaints	3 Normal Services
	Respond to Animal Complaints – Threat to Animal Life Safety – No Threat to Human.	3 Normal Services
	Enforce animal control laws	3 Normal Services
	Respond to Animal Complaints – No threat to human life safety	3 Normal Services
	Criminal Investigation (CIS – property crimes, street robberies, telephone threats, prescription fraud and stalking)	3 Normal Services
	Court Liaison Section	3 Normal Services
	Crime Analysis	3 Normal Services
	Crime Prevention Officers	3 Normal Services
	Neighborhood Patrol Units	3 Normal Services
	School Resource Officer Coordination	3 Normal Services
	Field Training Coordinator	3 Normal Services
	Gang Outreach Coordination	3 Normal Services
	Regional Gang Database Mgt	3 Normal Services
	School Education Officers	3 Normal Services
Operations Support Bureau/	Motor Carrier Safety	3 Normal Services
Traffic	TRAFFIC SERVICES	3 Normal Services
	IMPOUND OFFICER	3 Normal Services
	CRIME ANALYST	3 Normal Services
	DWI COORDINATOR	3 Normal Services
	PARKING ENFORCEMENT	3 Normal Services
Operations Support Bureau/ Special Operations Division	MARINE PATROL	3 Normal Services
Operations Support Bureau	ADMINISTRATIVE STAFF	3 Normal Services
Internal Affairs Bureau	Response to Freedom of Information Act Request	3 Normal Services
	Response to Legal Process (i.e. Lawsuit, Subpoena)	3 Normal Services

		Criticality Under	
Bureau	Service/Function	Extreme Conditions	
Internal Affairs Bureau	Appeal Process	3 Normal Services	
	Investigation of Routine Complaint/Event	3 Normal Services	
	Response to Citizen/Agency/Etc. Inquiries	3 Normal Services	
	Database Entry and Maintenance	3 Normal Services	
	Policy Development	3 Normal Services	
	Scheduled Inspections	3 Normal Services	
Criminal Investigations Bureau –	Money Laundering	3 Normal Services	
Organized Crime Division	Narcotics	3 Normal Services	
	Street Crimes	3 Normal Services	
Criminal Investigations Bureau –	Auto Theft	3 Normal Services	
Major Crimes Division	Financial Crimes	3 Normal Services	
	Fugitive	3 Normal Services	
Administrative Support Bureau	False Alarm Reduction Unit	3 Normal Services	
	Polygraph	3 Normal Services	
	Recruiting	3 Normal Services	
	Applicant	3 Normal Services	
Criminal Justice Academy	Basic Training	3 Normal Services	
	Firearms Training Unit	3 Normal Services	
	Emergency Vehicle Operations	3 Normal Services	
	In Service Training	3 Normal Services	

APPENDIX C

HomePacks

The Fairfax County Police Department has provided guidance to assist personnel in preparing themselves and their families for a pandemic influenza. The following excerpt entitled "Family

Support" is from a pandemic influenza planning memo sent to all FCPD command staff. This information was compiled by FCPD.

Family Support:

The care and well-being of our employees is the number one priority and is paramount to ensuring our ability to professionally serve the public. Care of employees and their families will be prioritized. Employees are strongly encouraged to have a family emergency plan.

Should we face a pandemic influenza of concern, employees shall not report to work if they believe they have contracted the virus or have been in contact with someone who has the virus without proper protective equipment. This is essential for the agency to maintain healthy staff and ensure employees are willing and able to come to work when we need them. To assist employees and their families, the Administrative Support Bureau has substantial resources including FAST teams, Peer Support, EAP, and a Department Psychologist.

Employees and their family members will have to shop, buy gas and have other limited public interaction during the course of a pandemic. They may also need to care for sick family members and may be exposed to the pandemic illness. Simple, basic precautions are the best way to prevent infection. Remind your family to:

■ Practice "Social Distancing." Reduce exposures to individuals who may be infected.

- Be careful what you touch, and wash hands often with soap and water or alcohol-based hand cleaner.
- Cover your cough. If a family member has a cough, have them wear a mask.
- In a pandemic situation, wear a simple procedure mask if you are within 6 feet of anyone.
- Clean surfaces that may have been contaminated.
- Exchange your emergency contact and medical information with your neighbors and family.
- Arrange for someone to check on your family.

One suggestion for taking care of yourself and your family is to prepare an "Employee Support Pack" or "HomePack." The HomePack items are intended to support the guidelines above and offer protection away from home. As part of family disaster preparedness, employees may wish to purchase additional supplies for Infectious Disease HomePacks. The numbers provided below will support an employee for up to 30 days. Increase amounts for the number of family members. Suggested items include:

1 box of 30–50 Procedure or Surgical masks—
 NOT fitted HEPA masks³⁷

- 1 box of Nitrile or Latex Gloves 50 pair³⁸
- Small containers of alcohol-based hand cleaner or Antimicrobial hand wipe packets³⁹
- Surface disinfectant wipes—such as Clorox or other non-chlorine wipes⁴⁰

If you are caring for a sick family member you may need:

- Disposable gowns
- Eye protection⁴¹

Some sources of the supplies are listed below: **Prepare NOW**

In the event of a pandemic, availability of many supplies will be severely limited. The list below is not intended as an endorsement or recommendation. It is provided only as a resource and indication of availability.

(Information obtained from Seattle Fire Department)

	Costco	Drug Stores	Internet Orders	Home Centers
Procedure/ Surgical Masks ³⁷	2 boxes 50 ea \$11.30 Costco Business Centers Only	N95 = ~\$2.00 ea Surgical 20 for \$12.99	www.life-assist.com www.excelgloves.com www.boundtree.com	Dust and unfitted N95 \$.40 – \$5.00 ea
Disposable Gloves ³⁸	Latex 3x100 \$9.99	50 / \$8.00	Google search	Vinyl 100/~\$12.00
	Nitrile \$4.49 box 100 Costco Business Centers	Vinyl 100 / \$8.00		
0.5 – 2 oz. Waterless Hand Cleaner ³⁹		< \$2.00 ea		
Hand Wash Packets ³⁹				
Surface Disinfectant Wipes ⁴⁰	Clorox 3 x 75 \$9.49 Kirkland 3 x 185 \$9.00	35 / \$5.00		
Disposable Gowns			See Above	
Eye Protection ⁴¹				\$3.00 – \$10.00 ea

37. Not reusable. Remove carefully and discard after exposure. Medical experts agree that simple Procedure/Surgical masks are the most appropriate mask for general use. Flu virus is spread by droplets, and simple masks offer protection. Rated (N95 or greater) masks must be individually fitted to offer rated protection and are only recommended for health care workers doing medical procedures within 3 feet of patients. We have inventoried these mask for employees who by the nature of their assignment will have forced public interaction. In general, cone-shaped particle masks do not provide a very good fit for larger and smaller faces. Use flat masks similar to Procedure or Surgical masks. If they fit you properly they are probably OK. Fit-tested HEPA masks are uncomfortable for long-term use and much more expensive. One exception is the ALPHA STYLE™ N95 Particulate Respirator which seems to fit most people and is relatively inexpensive at less than about \$ 0.75 each. Available from www.life-assist.com.

- **38.** Not reusable. Remove carefully and discard after exposure. Nitrile gloves are recommended because of latex allergies in some individuals and because latex may break down in the presence of some cleaning products. If neither is available, consider vinyl.
- **39.** Available in a variety of stores. Small, 1-2 oz. containers of alcohol-based waterless hand cleaners are readily available, inexpensive, convenient and can be refilled. **Label should indicate 60% or greater alcohol content.** Examples are Purell and Avagard D. Rated Hand Disinfectant packets are generally not available from consumer sources.
- **40. Available in a variety of stores** NOT FOR HAND CLEANING. At home, normal disinfectant cleaners are adequate. Surface Disinfectant Wipes come in a large tub of more than 100. Keep in original sealed container for storage. For portability, place a convenient number in a ziplock bag.
- **41.** Wraparound safety glasses or shields that provide splash protection.

The Toronto Police Service Case Study

1. OVERVIEW OF THE POLICE SERVICE

More than 5,200 uniformed officers and 2,200 civilians work for the Toronto Police Service (TPS).1 The department has six primary commands:

- Human Resources
- Administrative
- Executive
- Divisional Policing
- Specialized Operation
- Detective Services

The jurisdiction is divided into 17 divisions and spans 243.6 square miles. The department serves a population of approximately 2.5 million residents.²

THE JURISDICTION The city of Toronto is the capital of the province of Ontario, the largest city in Canada, and the fifth most populated city in North America, after New York City, Los Angeles, Chicago, and Houston.³ More than 40 percent of the city's residents consider themselves as

being part of a "visible minority" (primarily

Chinese, South Asian, black, and Filipino).

2. DESCRIPTION OF

^{1.} Toronto Police Service Public Information Unit (2006). Toronto Police Service. Annual Report 2005. http://www.torontopolice.on.ca/publications/files/reports/2005annualreport.pdf

^{2.} Toronto Police Service (2006). Annual Statistical Report. http://www.torontopolice.on.ca/ publications/files/reports/2005statsreport.pdf

^{3.} http://en.wikipedia.org/wiki/Toronto,_Ontario

^{4.} Statistics Canada, the nation's central statistical agency, defines "visible minority" as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour."

Toronto is home to 31 public and private hospitals, many of which contain smaller facilities.⁵ There are also five "Community Care Access Centres" that provide long-term care for adults, and a number of "Community Health Centres" (nonprofit organizations that provide primary health care and related programs for individual residents, families and communities).

There are nearly 700 public and private elementary and secondary schools and 150 high schools in the city.^{6, 7, 8, 9} Toronto is also home to three public universities, four community colleges, an art college, and many private institutions.¹⁰ In the fall of 2005, 155,905 students were enrolled in the universities and the art college, and all of these institutions provide on-campus housing. The two main private colleges in Toronto are Master's College and Seminary (376 students)¹¹ and Tyndale University College & Seminary (479 students).¹²

According to the Greater Toronto Airports Authority, Toronto Pearson is the busiest airport in Canada, with more than 78,000 passengers traveling through the airport each day in 2004 (approximately 21,000 international passengers, 23,000 transborder [within Canada] passengers, and 34,600 domestic [within Ontario] passengers). Nearly 29 million passengers flew into Toronto Pearson International Airport in 2004. Toronto also has a regional airport, the Toronto City Centre Airport, with approximately 120,000 annual take-offs and landings.

Toronto's extensive public transit system includes a subway system, streetcars, buses, and trains. Its mass transit system is the second largest in North America, surpassed only by New York City's. 15

The Toronto Transit Commission (TTC) serves the city of Toronto, while GO Transit is an interregional public transit system for the entire Greater Toronto Area.16 In 2005 the TTC served 431.2 million customers.¹⁷ GO Transit carries approximately 48 million customers a year on its train and bus networks.¹⁸ The center of Toronto's transportation system is Union Station, which serves over 41 million GO train and bus passengers, 20 million TTC subway passengers, and 2.34 million passengers on the VIA Rail Canada nationwide rail carrier each year.¹⁹ A unique aspect of Toronto's transportation network is its underground pedestrian system (PATH). It connects Union Station, 5 subway stations, and numerous stores, restaurants, office towers, and hotels under Toronto's city center.20 Four major highways serve the city,²¹ and there are more than 10,000 streets and over 20,000 intersections in the city of Toronto.²²

The top five private-sector employers in Toronto are all in the financial industry. Other major private employers are Bell Canada, Apotex, Bombardier Inc., IBM Canada Ltd., and Shoppers Drug Mart Inc. These companies collectively employ approximately 71,100 people.²³ The top four major public-sector employers are general government entities at the municipal, provincial, and federal levels; other major public-sector employers are the Toronto Catholic District School Board, the University Health Network, Canada Post, Sunnybrook and Women's College Hospital, the University of Toronto, and the Hospital for Sick Children. These organizations collectively employ approximately 136,900 people.²⁴

^{5.} For a complete list, see http://www.health.gov.on.ca/english/public/contact/hosp/ toronto_7_dt.html#toronto.

^{6.} Information found on Toronto District School Board web page: http://www.tdsb.on.ca/

^{7.} Information found on Toronto Catholic District School Board web page: http://www.tcdsb.org/

^{8.} http://www.csdcso.on.ca/

^{9.} http://www.csdccs.edu.on.ca/

^{10.} http://education.yahoo.com/college/essentials/school_search/search?txt_or_state%5B%5D=CAN

^{11.} http://education.yahoo.com/college/facts/6184.html

^{12.} http://education.yahoo.com/college/facts/7981.html

^{13.} Information found on Greater Toronto Airports Authority web page: www.gtaa.com

^{14.} http://www.torontoport.com/airport_facts.asp

^{15.} http://www.toronto.ca/toronto_facts/infrastructure.htm

^{16.} http://www.toronto.ca/toronto_facts/infrastructure.htm

^{17.} http://www.toronto.ca/ttc/pdf/ttc_annual_report_2005.pdf

^{18.} www.gotransit.com

^{19.} http://www.toronto.ca/union_station/numbers.htm

^{20.} http://www.toronto.ca/toronto_facts/infrastructure.htm

^{21.} http://www.toronto.ca/invest-in-toronto/tor_overview.htm

^{22.} http://www.toronto.ca/toronto_facts/infrastructure.htm

^{22.} http://www.toronto.ca/toronto_racts/infrastructure.

^{23.} http://www.2ontario.com/communities/majoremployers.asp?mun_name=3520005&topic=1

^{24.} http://www.2ontario.com/communities/majoremployers.asp?mun_name=3520005&topic=2

3. THE CITYWIDE APPROACH TO EMERGENCY OPERATIONS

According to the Basic Plan section of the city's 2005 emergency plan, "The City of Toronto is vulnerable to numerous hazards. These can be human-caused, such as airport crashes; technological, such as those involving hazardous materials; infrastructure disruptions that could involve utility and power failures; and natural hazards such as severe weather." The Office of Emergency Management (OEM) lists the following specific hazards: 26

- **Natural Events.** Severe weather, floods, blizzards, tornadoes, food or human health emergencies.
- Human-Caused Events. Incidents intended to do harm to public safety and security; civil disorder; bomb threats; Improvised Explosive Devices and Improvised Dispersal Devices. Chemical, biological, radiological and/or nuclear agents may be used on their own or in combination with the explosive or dispersal devices.
- Technological and Infrastructure Disruptions. Incidents involving hazardous materials, utility and power failures, transportation accidents, aircraft crashes, water supply failures, building or structural collapse, critical resource shortages, or computer-related incidents.
- Nuclear. Although construction and operation of nuclear power plants are closely monitored and regulated, an accident, though unlikely, is possible. The potential danger from an accident at a nuclear power plant is exposure to radiation.

The Office of Emergency Management is the agency in charge of developing plans and programs to prevent disasters and reduce their effects on residents. The OEM also coordinates city agency

emergency response and recovery plans. The OEM's work is based on five phases of emergency management: risk identification, mitigation, preparedness, response, and recovery.

An Administrative Overview of the City's Plan

The Toronto Emergency Management Program Committee (TEMPC) is a panel made up of the mayor, the city manager, the chief of police, the medical officer of health, the chief general manager of the Toronto Transit Commission, the fire chief, and other key personnel from city agencies, including parks, electric services, and the port authority. The TEMPC has a subcommittee known as the Control Group, which is responsible for activating and coordinating the emergency plan (p. 10).

While the typical role of the emergency plan is described as proactive, "In the event of an emergency," the plan states, "the...committee convenes as it becomes reactive" (p. 7). The plan includes 15 Operational Support Functions (OSFs), similar to the United States' National Response Plan's Emergency Support Functions.²⁷ In addition to specific scenarios (e.g., debris management, evacuation, caring for large numbers of victims), the plan includes functions regarding how members of the TEMPC are to be notified of an emergency situation, the emergency operations center, and the incident management system. The plan also includes specific guidelines for seven types of critical incidents, including the city's response to an infectious disease outbreak (e.g., a pandemic), which in turn includes the supporting roles and responsibilities of various city departments (p. 17). More information about the infectious disease OSF is presented in a subsequent section of this case study.

^{25.} http://www.toronto.ca/wes/techservices/oem/pdf/emergency_plan.pdf

^{26.} Taken directly from http://www.toronto.ca/wes/techservices/oem/risks.htm

^{27.} The Office of Emergency Management chose not to share OSFs with the PERF project staff for security reasons.

4. THE CITYWIDE APPROACH TO PANDEMIC-SPECIFIC PLANNING

In December 2002, Toronto Public Health (TPH) began planning for an influenza pandemic, saying that its mission was "to reduce the morbidity and mortality associated with detection of a novel and virulent strain of influenza and to minimize societal disruption during pandemic influenza in the city of Toronto."28 Planning was temporarily halted in 2003 to allow the department to respond to the Severe Acute Respiratory Syndrome (SARS) outbreak, in which a form of severe pneumonia killed approximately 40 people in the Toronto area and resulted in thousands of residents being quarantined. The report "SARS and Public Health in Ontario" noted that when SARS appeared in Ontario, the province had no influenza pandemic plan in place and was largely unprepared to deal with a significant outbreak of infectious disease. Based largely on lessons learned from the SARS outbreak, the first version of the city's pandemic plan was published in November 2005; it was updated in March 2006.

Toronto Public Health sought contributions from key stakeholders in fields such as health, volunteer services, and social services when preparing the plan (see page 3 of the city pandemic plan, found at the Website below). The agency created five workgroups that each consisted of community stakeholders and Toronto Public Health representatives to help fine-tune roles and responsibilities in the following areas:

- 1. Laboratory and Surveillance
- 2. Communications
- 3. Emergency Measures
- 4. Health Services
- 5. Vaccine/Antiviral Medications

The Emergency Measures Workgroup included representatives from TPH, the Toronto

Police Service, OEM, Emergency Medical Services, and Fire Services. Other members represented the Canadian Red Cross, several hospitals, the chief coroner's office, funeral homes, and long-term health care providers. The workgroup focused on how to maintain public safety and order during a pandemic. This included security for vaccine transportation and distribution, volunteer management, and the development of a mass fatality plan.

An Administrative Overview of the City's Pandemic Plan

The mayor of Toronto (or his/her designate) is the chair of Toronto's Emergency Management Program Committee (TEMPC) and is responsible for declaring that a pandemic emergency exists. Once an emergency has been declared, the mayor is to make arrangements for notification of the city's solicitor general, the minister of community safety and correctional services, and members of city council (see page 31 of the plan). The chief of police is a member of the TEMPC.

The OEM is responsible for maintaining the city's pandemic plan, which includes coordinating agencies in creating and updating documents that make up the plan. Senior staffers from the Toronto Police Service and other city agencies work together to develop these documents. The physical maintenance of the Toronto Emergency Operations Centre (TEOC) also is a duty of the Office of Emergency Management.

The city's pandemic plan is divided into eleven chapters, described in Table 1.

Incident Management

Under the Pandemic Influenza Plan, a pandemic or other emergency in the city would be managed through the Incident Management System (IMS), which is a system "used by government agencies across Canada, including Toronto Public Health and all other agencies of the City of Toronto, to

^{28.} Toronto Public Health (2006). *Toronto Pandemic Influenza Guide*. Available at: http://www.toronto.ca/health/pandemicflu/pdf/toronto_pandemic_influenza_plan.pdf

Table 1. City of Toronto Pandemic Plan Chapters

Chapter	Description	
Chapter 1: Planning Approach	 Presents overall goals of plan Describes planning process in detail Presents ethical framework for local decision-making 	
Chapter 2: Pandemic Influenza	 Provides an overview of influenza, pandemics, and the bird flu Describes pandemic phases Describes scope and impact of illness (specific to Toronto) 	
Chapter 3: Roles and Responsibilities	 Presents roles of World Health Organization, national, provincial, and city public health agencies 	
Chapter 4: Surveillance	■ Describes methods used to monitor a threat	
Chapter 5: Communications	 Summarizes communications plans Toronto Public Health would employ to provide information to its staff, hospitals, and government agencies (including Toronto Police Service) 	
Chapter 6: Emergency Planning	 Describes relevant Operational Support Functions (OSFs) and lead agency roles Toronto Police Service and the Office of the Chief Coroner are the lead agencies for the Mass Fatality OSF 	
Chapter 7: Health Services	 Describes issues that will affect the health care system Focuses on health care capacity and surge issues 	
Chapter 8: Public Health Measures	 Provides an overview of movement restrictions, community education, and case management 	
Chapter 9: Vaccine and Antiviral Medications	 Describes Toronto Public Health role in coordinating and distributing vaccine and antiviral medications 	
Chapter 10: Infection Control	 Provides general information on influenza (e.g., symptoms, communicability) Describes infection control practices for the general public and in health care and community settings 	
Chapter 11: Self-Care	 Provides advice to residents on prevention, recognizing the symptoms of influenza, and basic care 	

manage an emergency" by coordinating the workload and resources of various government agencies (p. 36). Five functions make up the IMS structure:

- Command (establishes the decision-making process and communications flow),
- Operations (manages response operations such as providing security for vaccine transport),
- Planning (continually monitors the situation and creates an Incident Action Plan). In the case of a pandemic, this plan lists the public health objectives for the emergency and nonemergency response activities.
- Logistics (provides personnel, services, materials, and facilities to carry out the emergency response), and
- Finance/administration (tracks all expenses, claims, and contracts initiated during the critical incident).

The Police Role in the City's Pandemic Plan

A comprehensive search of the city's plan found several mentions of Toronto Police Service roles. These are discussed in the order in which they appeared in the plan.

Under Chapter 5, "Communications," the plan states, "Toronto Public Health Communications Unit will coordinate media requests, verify appointed spokespersons, establish and build credibility for spokespersons and TPH, and provide risk communications management and media training for key staff as needed" (p. 52). If a pandemic occurs, TPH plans to provide expert medical advice and leadership through key "corporate spokespersons" (including Toronto Police Service representatives). Currently, the chief of police works regularly with the department's Public Information Unit to create public messages and

ensure that police spokespersons are trained to deliver them.

In Chapter 6, "Emergency Planning," the Toronto Police Service and the Office of the Chief Coroner are named as the lead agencies for Mass Fatality Operational Support Functions (OSF) (p. 67).²⁹ The plan explains that TPS was involved in developing this OSF. During a pandemic period, TPS is expected to "establish representation at the [Toronto Emergency Operations Centre and] implement the ...[OSF] as outlined." The TPS role in this function is described in more detail later in this case study.

Chapter 9, "Vaccine and Antiviral Medications," states that the role of the police is to "provide security for the transportation of vaccine." The Toronto Police Service has agreed to this and to provide security to Toronto Public Health with regard to mass vaccinations (p. 129). The chapter also lists "provide perimeter control in high traffic areas such as hospital parking lots" as a TPS role. These components are also part of the Police Service's pandemic-specific draft plan (discussed later in this case study). According to Toronto Public Health, more planning needs to be done in the area of having the police enforce public health orders (p. 67).

TPH is using a variety of surveillance efforts in order to receive an early warning of the flu strain in the city. These efforts include monitoring trends in febrile respiratory illness, identifying and working with "sentinel physicians" in the city, and examining 911 calls and emergency room complaint data. TPH also plans to ask some larger employers to provide weekly absenteeism data. Currently, the Toronto Police Service is acting as a pilot workplace for sharing this data (p. 46).

During the SARS outbreak of 2003, the large majority of residents were "very cooperative about quarantining themselves voluntarily" (p. 4). The Toronto police were asked to help serve quarantine orders on only one community member.

^{29.} Operational Support Functions (OSFs) listed in the city's emergency plan are comparable to Emergency Support Functions (ESFs) found in the U.S. National Response Plan.

box 3.1 Lessons Learned from the SARS Experience

Julian Fantino, former commissioner of the Toronto Police Service, recent past commissioner of Toronto's Office of Emergency Management, and current chief of the Ontario Provincial Police, authored the article "2003 SARS Outbreak: The Response of the Toronto Police Service." In it, he explains what led to the first medical emergency ever declared in the province of Ontario (on March 26, 2003), the police response to the emergency, and the lessons that TPS learned from the SARS outbreak and incorporated into its pandemic-specific plan.

On the same day the medical emergency was declared, the province created a SARS executive group, to which the Toronto Police Service detailed a deputy chief of police and a staff superintendent (the rank below deputy chief). In accordance with the TPS Emergency Preparedness Plan, the department activated its Police Command Centre (PCC), and for several weeks after the declaration, the PCC operated 24 hours a day, seven days a week. The PCC operated under the Incident Management System, and was responsible for:

- Dealing with health threats to the TPS and its staff (the biggest of which was the threat of contamination of police employees, which could affect operational efficiency),
- Supporting TPS field units in the maintenance of normal police operations,
- Acquiring and disseminating information about the crisis and developing appropriate

responses to it based on available resources, and

Capturing and recording all information relevant to the TPS for the duration of the event, both to respond to the crisis and to use in debriefing exercises after its conclusion.³¹

Staff at the Police Command Centre included an incident manager, an incident specialist and liaison officer (the manager of the Occupational Health and Safety Unit), a public information officer, communication operators, and planning and logistics staffers. Throughout the emergency, the PCC maintained continuous communication and regular briefings with TPS units and command staff, and spoke with other local law enforcement departments daily. They also recorded and disseminated pertinent, accurate information to the TPS staff.

The department's Occupational Health and Safety Unit (OHS) maintained regular contact with both local and provincial health authorities, and "took the lead role in researching and analyzing information, seeking appropriate advice, and contacting police personnel regarding quarantine and safety practices." Former Police Chief Fantino wrote, "OHS staff members were also instrumental in obtaining needed safety equipment for field personnel, particularly the N95 masks needed to prevent the transfer of the SARS virus" (p. 3).

Providing "accurate, timely information," according to Fantino, enabled TPS to continue to

^{30.} Fantino, J. (2005). "2003 SARS Outbreak: The Response of the Toronto Police Service." *Police Chief Magazine*, 72(3):1–8.

^{31.} Taken directly from the article (p. 2).

provide law enforcement services, support the response to the crisis, and protect officers. "One of the main priorities of the TPS command officers," he writes, "was to ensure that all members of the organization had the information needed to keep themselves safe, and to de-escalate the fear and concern they had on their own behalf and on behalf of their loved ones" (p. 3).

Information from the city's Health Department Operations Centre (HDOC) was sent quickly to TPS command and field staff. Any time new or conflicting data was presented, TPS worked with a medical consultant to help clarify the issue. One key objective was to create confidence that would sustain police officers, who were being subjected to incorrect information that was "at best misleading and at worst outrageously speculative" (p. 3). To help prevent an atmosphere of chaos or panic and to establish a sense that even in a crisis, things could be under control, the message "Effective risk management equals business as usual" was printed on each

information sheet distributed through the department's Intranet. For the sake of consistency, TPS now requires that only one person serve as the liaison between the HDOC and the PCC.

The article also lists several effects the outbreak had on TPS staff. First, nearly 6 percent of the force was quarantined during the outbreak (307 members total). Because many of them had been to hospitals where SARS was present, they were quarantined immediately. A scale was subsequently created to evaluate exposure risks for those who had come into contact with places or residents affected by SARS. Quarantined TPS employees could not leave their homes and had to wear masks when in the presence of other home residents for a 10-day period. Quarantined members did not have to use any sick time during that period—TPS decided to pay them as if they were on duty. (This was decided in part because it had been determined that they had likely been exposed to SARS while on duty. This policy is also part of the TPS pandemic-specific plan.)

box 3.2 **Toronto Police Service Occupational Health and** Safety Program³²

By Tom Imrie, Unit Commander, Occupational Health and Safety, Toronto Police Service

The Toronto Police Service Occupational Health and Safety Program ensures that all police officers and some civilian staff receive training in communicabledisease risk management and appropriate personal protective equipment (PPE). Through this program, PPE has been provided to every patrol officer and some civilians deemed at risk as a result of their duties, such as court security officers and staff who clean the insides of police vehicles.

Police officers and court officers are issued PPE, including "officer safety kits" that are contained in pouches on an officer's duty belt. These kits include antimicrobial gloves, antiseptic towelettes, saline solution and a one-way CPR air mask. Higher-level kits are stored in the trunks of patrol vehicles and include enhanced PPE such as: N95 masks,³³ protective eye wear, waterless antiseptic hand wash, needle debris containers, Tyvex or similar material coveralls, heavy duty rubber gloves, and biohazard storage bags for contaminated clothing. The foregoing is considered basic equipment and is available to all members who may be exposed to communicable diseases.

The capability to identify which officers to provide with enhanced PPE was one benefit of the lessons learned during the SARS epidemic and from other events such as anthrax hoaxes.

Through risk assessment, the Toronto Police Service determined that there was a need for officers who could respond to natural or manmade public health

emergencies. In preparation for such incidents, the department trained and equipped specific forensic identification officers in Level 4 Hazmat. The equipment provided to these officers consists of positive pressure self-contained breathing apparatus (SCBA), and full coverage, total isolation biohazard containment suits. These officers were then trained on recognition, assessment and control of biological hazards. In a biohazard emergency, whether the emergency is natural or manmade, their function is to mitigate the biological hazards that resulted in the emergency, through appropriate means (e.g., containment, isolation, decontamination), and then conduct an investigation into the cause of the event including packaging and collecting evidence of the offence.

The department has also similarly trained and equipped officers who perform investigations into clandestine drug labs and "hydroponics grow" operations. These officers can also be deployed to assist in the event of natural and manmade incidents. They are provided with SCBA, Level 1 Hazmat suits, and evidence collection and packaging materials suitable to the risks present. This model has been adopted throughout Canada.

Having this type of program gave the Toronto Police Service an advantage during the SARS outbreak. All TPS officers were supplied with PPE and the Occupational Health and Safety Unit communicated regularly with them. "In spite of more than 1,500 documented high-risk contacts," Fantino wrote, "not one member of the TPS contracted SARS through an occupational exposure" (p. 4).

^{32.} Reprinted with permission. Richards, E., Rathbun, K., Solé Brito, C., & Luna, A. (2006). The Role of Law Enforcement in Public Health Emergencies: Special Considerations for an All-Hazards Approach. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Assistance. NCJ 214333. 33. Masks certified by the CDC's National Institute for Occupational Safety and Health as filtering out at

least 95 percent of airborne particles (http://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/).

Police officers were sent to hospitals in the beginning of the outbreak to secure checkpoints and enforce safety protocols. Once the situation was deemed under control, hospitals employed their security staffs to carry out those assignments. The TPS also had to reprioritize calls due to a personnel shortage (caused by the quarantining of officers as well as the additional responsibilities officers undertook).

Fantino wrote, "The biggest operational impact of the SARS outbreak on the Toronto Police

Service was on its own personnel. More than \$560,000 was spent on quarantined members, overtime, and call-back expense. More than 15,700 person-hours were dedicated to SARS-related duties" (p. 5).

Fantino concluded the article by grouping lessons learned into nine categories (Table 2). Below is a chart developed by PERF that summarizes his analysis (Table 2).

Table 2. Toronto Police Service Lessons Learned from SARS Outbreak

Lesson	Description
Training	 More training needed regarding communicable diseases More training needed in the Incident Management System
Pandemic Disease Planning	The SARS outbreak was the impetus behind the creation of the Toronto Police Service's pandemic plan.
Case Tracking	The TPS will implement a case-tracking program in the future that will help them follow exposed, quarantined, and/or ill personnel.
Communication	 Whenever possible, there should only be one spokesperson from TPS responsible for dealing with the issue This spokesperson should only disseminate information when sure it is correct
Command Center	 Certain renovations to the Police Command Centre were planned after the outbreak: Handheld communications devices were to be made available to all members. Information technology issues were to be addressed. Issues such as petty cash availability were to be addressed.
Staffing	■ The TPS staffing plan for critical incidents would be reworked to "make better use of staff and to improve the efficiency of the [Incident Management System]."
Emergency Preparedness Plans	■ TPS would work on continuity of operations planning.
Partnerships	 Should include emergency response agencies, health care providers, the private business community, and other city departments
Resources and Equipment	 TPS currently stockpiles N95 masks and antibacterial gel (due to shortages of both during the SARS outbreak)

5. THE POLICE SERVICE'S PANDEMIC PLANNING

Subsequent to the SARS outbreak, the Toronto Police Service took the lessons learned from its experience and created a draft "Public Health Emergencies/ Pandemic Response Plan." The plan was written with the assistance of several agencies (e.g., Toronto Public Health, Toronto Fire Service, Toronto Emergency Medical Services). TPS also sought guidance and information from provincial and federal agencies to ensure that plan components were within the framework of other governmental and law enforcement partners in the Greater Toronto Area. Both the Occupational Health and Safety Unit and the Emergency Planning Operations Section of the Public Safety Unit are responsible for the maintenance of the plan. The most current draft of the plan (used for this case study) was updated on December 15, 2006 and, at the time of this writing, had yet to be approved by the chief and Services Board. The plan is divided into five main sections: situation, mission, execution, administration, and communications (the last section only provides contact information for PCC staff and is not covered in this case study).

Situation

The first section of the TPS draft pandemic plan provides a general overview of influenza and the planning being conducted by the World Health Organization, provincial authorities, and Toronto Public Health. A list of definitions is provided for the reader, followed by a section that describes the influenza virus and pandemics in more detail. The impact a pandemic would have on the city is presented, accompanied by a table showing estimated morbidity and mortality range totals (based on 15 and 35 percent infection rates; see Appendix A). The section concludes with an explanation of WHO's pandemic phase designation; at the time this document was prepared, the world was categorized in Phase 3 (pandemic alert), with no or very limited human-to-human transmission of the bird flu.

Mission

This section of the draft plan lists the TPS mission statement and mission objectives during a pandemic or other public health emergency:

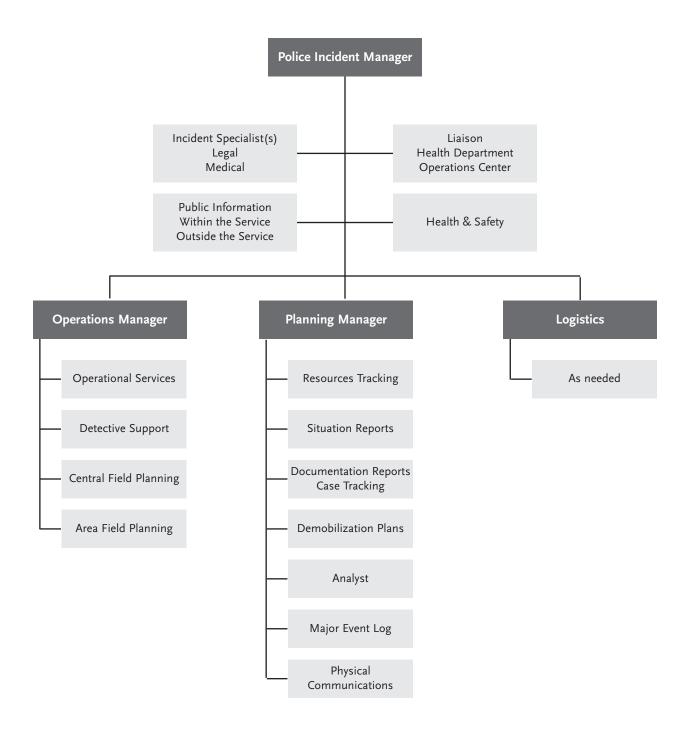
- 1. Provide priority-policing services
- 2. Act as a sentinel agency and share information with health officials
- Provide command and control over policing operations
- 4. Provide personal protective equipment, best health practices and up-to-date health information to TPS
- 5. Provide specially trained and equipped response teams to calls that refer to a person's sudden death
- 6. Provide alternate staffing models to address personnel shortages
- 7. Assist public health with the safe delivery of vaccines/treatments.

Execution

The bulk of the draft plan is contained in this section, which details when the plan will be activated and procedures that will be followed by police personnel. The pandemic plan can be activated either once WHO declares that the phase of alert has reached level 5 (evidence of significant human-to-human transmission) or once TPS has been notified that a pandemic is pending in the area. TPS will be notified of these situations by either city or provincial health representatives. Once the Police Command Centre (PCC) is activated, a senior officer will serve as a liaison officer between the HDOC and the PCC. Based on the vetted information provided by this officer, the PCC will be the sole source of health information to TPS.

Typically, the chief of police reports to the city's emergency operations center, leaving a deputy chief in charge of the PCC. The rest of the PCC will be staffed based on the Incident Management System organizational chart shown in Figure 1. The

Figure 1. Toronto Police Service/ Incident Management System Pandemic Organizational Chart



primary operational response is split into two commands—Area Field and Central Field—which are led by their respective staff superintendents.

Each TPS Unit/Division must report twice daily all sick notifications and current daily strength. The PCC will deliver daily situation reports and major event logs and will report all health information and recommendations to front line and support units.

PERF staff developed Table 3 to present the other procedures and unit responsibilities that will be put into place once the plan is activated.

Table 3. Post-Plan Activation Procedures and Unit Responsibilities

Protecting TPS Staff and Facilities

- Toronto Police Service members are instructed to don personal protective equipment (PPE) when dealing with an individual whose health state is not known. This equipment can include:
 - A disposable mask
 - Latex-free medical examination gloves
 - Infection control gowns or biohazard suits (if there is potential exposure to blood or other bodily fluids)
 - Antibacterial gel
- Employees and visitors to police facilities (including the Police Command Centre) will not be allowed access until they have answered a health questionnaire (Appendix B) and have complied with the hand washing/disinfectant protocol. The TPS Fleet and Facilities Management Unit is responsible for installing wall-mounted hand sanitizers at the entrance of each police facility.

Staffing Issues

- Each police Unit/Division must report twice daily all sick notifications and current daily strength.
- Each Uniform Division will supply a Quick Response Team to work with city Emergency Management Services teams. These teams will be available 24 hours a day and will be the only teams to be dispatched to "sudden death" calls.
- The Forensic Identification Unit will dedicate personnel for record keeping regarding arrival and relocation of the deceased. A garage in the city has been secured as a temporary storage area for bodies, and TPS will provide security at the gate.
- The Public Safety Unit will assist with civil unrest, security issues associated with vaccine/treatment distribution, hospital security, and apprehension orders.
- With regard to prisoner screening, police are instructed to question all new custody intakes about symptoms of bird flu or recent travel to any of the affected countries/areas. A Prisoner Screening Form can be found in Appendix C.
- The Toronto Police Service (through the Police Command Centre) will deal with guarding stockpiles of medical supplies and crowd control at vaccine/treatment distribution sites on a case-by-case basis.

Internal Communication

A senior officer will be assigned by the PCC as a liaison officer to the Health Department Operations Center (HDOC). Through this assignment, the liaison officer will communicate vetted health information from the HDOC to TPS. At the same time, the PCC will provide the liaison officer with daily updates of health-related TPS issues for him/her to share with the HDOC.

Dealing with Quarantine, Mass Deaths, and Staffing Changes

A breakdown of quarantine strategies (for TPS members, community members, and prisoners) is also found in this section of the TPS pandemic plan. As previously mentioned, TPS members who are directed to be quarantined—where it is determined to be as a result of occupational contact—will be compensated as if they were "on duty" during their regularly scheduled shifts. Either a Medical Officer of Health or the TPS Medical Advisory staff can order a police employee to be quarantined. Members who have been quarantined must immediately report this to the Occupational Health and Safety Unit, which will determine compensatory next steps with the Medical Officer of Health.

If a member of the public does not comply with a quarantine order, police may be called upon to enforce these orders. Toronto's Health Protection and Promotion Act is summarized in this section of the TPS plan, and it states, "The police force shall do all things reasonably able...to locate, apprehend and deliver the person in accordance with the order" (p. 16). The plan states that prisoners who are showing signs of illness (or those arrested under a court order) must be taken to the hospital for admittance. TPS is responsible for guarding these individuals until they can be looked after.

Next, the role of Quick Response Teams in dealing with mass deaths is described. Teams will be available 24 hours per day and will respond to calls (with Toronto EMS) at private residences where a person has died. They will work with EMS to determine if the death was potentially the result of the bird flu, notify the coroner, and record the event for police records. (A pandemic-specific field death report that would be completed, along with a Sudden Death Report, was being developed by TPS at the time this document was prepared.) The plan notes, "These teams shall require a suitable number of rehabilitation breaks due to the stress of wearing personal protective equipment for extended periods of time" (p. 18).

The next section deals with redeployment and staffing changes as a result of "severe staff shortages." Staff at the PCC may choose to implement a 12-hour shift schedule to make up for these shortages. Further, all leave may be cancelled and those working in plainclothes or in support roles may be redeployed. All training would likely be cancelled, and responses to lower-priority calls for service might have to be suspended.

Administration

This section of the TPS pandemic plan lists the hours of operation and staffing plan of the Police Command Centre. Currently, the plan calls for—at a minimum—an inspector, civilian planner and uniformed sergeant from the Emergency Planning Operations Section of the Police Service. As the incident escalates, the following staffers could be added to the Police Command Centre:

- One officer from Operational Services
- Two officers from Field Planning
- Two members from Occupational Health and Safety.

Daily situation reports that indicate the daily numbers of sick members, available on-duty members, and a synopsis of challenges encountered during the shift must be submitted to the PCC. The number of sick or absent members will be tracked in order to determine "Hot Spots" of illness within TPS.

6. Conclusion

The city of Toronto was in the early stages of planning for a pandemic when the SARS outbreak took place. Planning resumed at the end of the outbreak, and the city incorporated the lessons learned into its pandemic plan. The police service followed suit, emphasizing the following in its draft plan:

■ Training all personnel in daily PPE use and general disease prevention,

- Employing one person to serve as the liaison between the police and health communities in the event of a public health emergency,
- Working with city emergency management to respond to sudden death calls,
- Paying quarantined members who had been exposed to a pathogen while on duty as if they were on duty,
- Incorporating pandemic-specific planning elements into its existing plans.

Future Directions:

At the time this document was released, the Toronto Police Services was in the process of:

- Obtaining approval of the draft plan from senior-level officials,
- Finalizing information on family readiness strategies, and
- Finalizing and obtaining approval on a "Pandemic Field Death Report" form.

APPENDIX A

Estimated Direct Health Impact of Pandemic Influenza on the City of Toronto Based on Historical Mortality and Morbidity Rates³⁴

Clinically ill	392,000 – 914,000 individuals
Require outpatient care	175,000 – 431,000 individuals
Require hospitalization	2,900 – 12,000
Deaths	910 – 5,000

Source: Toronto Police Service Draft Public Health Emergencies/ Pandemic Response Plan.

^{34.} Based on estimates of 15 percent and 35 percent infection rates and on Statistics Canada population estimates of 2,611,661.

APPENDIX B

Employee/Visitor Screening Form Record³⁵

(This screening would be administered to visitors to police facilities and to police employees during a pandemic.)

VISITORS STOP – DO NOT ENTER THIS FACILITY UNTIL YOU HAVE COMPLIED WITH THIS SCREENING DIRECTIVE. HAVING COMPLIED WITH THIS DIRECTIVE THE VISITOR / EMPLOYEE SHALL SANITIZE THEIR HANDS BEFORE ENTERING THE FACILITY							
To be completed by staff member or other authorized person.							
SYMPTOMS: Are you experiencing any of the following symptoms?							
Myalgia (muscle aches)	☐ Yes	□ No					
Malaise (severe fatigue or unwell)	☐ Yes	□ No					
Severe headache (worse than usual)	☐ Yes	□ No					
Cough	☐ Yes	■ No					
Shortness of breath	☐ Yes	■ No					
Difficulty breathing	☐ Yes	□ No					
If the employee or visitor answers yes to two or more of the above there will be no entrance allowed to the facility							
CIRCUMSTANCES: Please answer the following questions.							
Have you had contact with a person with or under investigation for FLU in the last (incubation period) days?	☐ Yes	□ No					
Have you been to (endemic region) in the last (incubation period) days?	☐ Yes	□ No					
Have you been to (focus of outbreak) last (incubation period) days? If yes, please identify the date and the area?							
Date/Area:							
An answer to one of the above will cause no admittance to the facilit	ty						

35. Source: Toronto Police Service Draft Public Health Emergencies/Pandemic Response Plan

EMPLOYEES								
Section B to be completed by Supervisory Staff								
Temperature		(at or above 38 degrees	°C)	☐ Yes		□ No		
1. If the staff member/authorized person does not have a temperature at or above 38 °C, no abnormal clinical signs and answered no to the first two circumstantial questions, he/she may report for work.								
2. If the staff member person has had contact with a person with or under investigation for FLU in the last (incubation period) days, instruct him/her to call Telehealth Ontario at 1-866-797-0000 and also contact the Public Health Department.								
3. If the staff member/other person has attended (focus of outbreak) in the last (incubation period) days, he/she should submit to voluntary quarantine at home and contact his/her personal physician and the local Public Health Department.								
4. If the staff member/other person has a temperature at or above 38 °C, abnormal clinical signs or answered yes to either of the first two circumstantial questions, call Telehealth Ontario at 1-866-797-0000.								
If a staff member is absent from work as a result of these restrictions, a medical certificate certifying fitness to return to work must be provided. The Service will cover the cost of the certificate.								
Name			Signature					

APPENDIX C

Prisoner Screening Form³⁶

As a result of a declaration of a Pandemic Influenza emergency, Officers-in-Charge are to use the following screening tool when booking prisoners.

36. Source: Toronto Police Service Draft Public Health Emergencies/Pandemic Response Plan.

Prisoner:		
Name:		
Date/Time:		
PART 1 (Symptoms subject to review)		
Do you have a fever?	☐ Yes	□ No
Do you have a cough (worse than usual)?	☐ Yes	□ No
	☐ Yes	□ No
Are you having difficulty breathing?		
Are you having difficulty breathing? Do you have muscle aches or pain (worse than usual) If the prisoner answers YES to two or more of these question (foot pursuit, pepper spray, resisted arrest, etc.), proceed to F		□ No s not obviou
Do you have muscle aches or pain (worse than usual) If the prisoner answers YES to two or more of these question (foot pursuit, pepper spray, resisted arrest, etc.), proceed to F PART 2 Have you traveled to (an endemic region), and returned	and the reason is	
Do you have muscle aches or pain (worse than usual) If the prisoner answers YES to two or more of these question (foot pursuit, pepper spray, resisted arrest, etc.), proceed to F PART 2 Have you traveled to (an endemic region), and returned within the last (incubation period) days?	s and the reason i	s not obviou
Do you have muscle aches or pain (worse than usual) If the prisoner answers YES to two or more of these question (foot pursuit, pepper spray, resisted arrest, etc.), proceed to F PART 2 Have you traveled to (an endemic region), and returned	s and the reason i	s not obviou
Do you have muscle aches or pain (worse than usual) If the prisoner answers YES to two or more of these question (foot pursuit, pepper spray, resisted arrest, etc.), proceed to F PART 2 Have you traveled to (an endemic region), and returned within the last (incubation period) days? Have you attended at (focus of the outbreak if applicable)	s and the reason in ART 2.	s not obviou

The Overland Park, Kansas Police Department Case Study

1. OVERVIEW OF THE POLICE DEPARTMENT

The Overland Park Police Department has 254 sworn officers and 56 full-time and 59 part-time

civilian employees. The city is not divided into districts; instead, the department operates under a targeted deployment strategy. The department has three bureaus, six divisions, and several other units:

Bureau	Divisions	
Tactical Operations	■ Patrol Division	Emergency Services DivisionTraffic SectionTactical Support SectionAnimal Control
Special Services	 Detective Division Investigation Section Analysis and Intelligence Section Crime Analysis Section 	 Community Policing Division Community Policing/School Resource Officers/DARE Officers Crime Lab/Property Room
Administration	Personnel and Training DivisionPersonnel SectionTraining Section	 Logistics and Support Division Technology Section (includes dispatch) Fleet Operations (includes school crossing guards)
	Policy ReviewBudget and Finance Analyst	 Homeland Security and Office of Professional Standards (under the Chief of Police)

2. DESCRIPTION OF THE JURISDICTION

Overland Park is located in Johnson County and is the second largest city in Kansas, after Wichita.1 Overland



Park has a population of approximately 167,000 and is part of the greater Kansas City metropolitan area. The 2000 Census reports that over 90 percent of the city's population is white, 2.5 percent is black or African-American, and 3.8 percent is Asian-American.² In 1996, Overland Park received the highest rating in quality of life variables by the County Economic Research Institute.³ Overland Park was named the "Number One Kid-Friendly City in the Nation" in 2001.4 Just two years later, Money magazine ranked Overland Park one of the best places with populations greater than 100,000 to live.⁵ The same magazine named the city one of the top 10 best places to live in America in 2006.6

There are five hospitals in Overland Park and one urgent-care facility.⁷ Two health care facilities which provide non-trauma health care services are located in Overland Park shopping malls.⁸ The Overland Park Police Department has jurisdiction over public and private schools in three school districts: 35 elementary schools, 11 middle schools, and 9 high schools. Several institutions of higher education are located in Overland Park. All of these universities generally cater to adult students, and none of the campuses houses students.

There are three regional airports located within or in close proximity to Johnson County: Johnson County Executive Airport (the second busiest in the state of Kansas),9 New Century Air Center, and Kansas City Downtown Airport. "The JO" (Johnson County Transit) is the city's main source of mass transit, with more than 100 buses and other vehicles operating five days a week.¹⁰ There are 23 major thoroughfares that run through Overland Park.¹¹

Overland Park is home to four major employers (Sprint Nextel, Embarg, and two school districts)¹² and serves as the regional headquarters for several Fortune 500 companies (e.g., YRC Worldwide [trucking] and Ferrellgas Partners [energy]).¹³ Both the Shawnee Mission Medical Center and Overland Park Regional Medical Center are also listed as "major employers." ¹⁴

^{1.} http://www.opkansas.org/_Vis/index.cfm

^{2.} http://quickfacts.census.gov/qfd/states/20/2053775.html

^{3.} http://www.opkansas.org/_Gov/History/index.cfm

^{4.} http://www.opkansas.org/_Res/News/kid_friendly.cfm

^{5.} http://www.opkansas.org/_Gov/History/index.cfm

^{6.} http://www.opkansas.org/_Gov/History/index.cfm

^{7.} http://www.opcvb.org/welcome/information.html

^{8.} http://www.opedc.org/living/health_care.htm

^{9.} http://jcac.jocogov.org/airport.html

^{10.} http://www.thejo.com/main.aspx?page=about

^{11.} Personal conversation with Brian Shields, City Traffic Engineer,

^{12.} http://www.opcvb.org/welcome/areafacts.html

^{13.} http://money.cnn.com/magazines/fortune/fortune500/ states/K.html

^{14.} http://www.opcvb.org/welcome/areafacts.html

3. THE CITY-WIDE APPROACH TO EMERGENCY OPERATIONS

Potential Hazards

Authors of the Johnson County *Local Emergency Operations Plan* grouped the hazards that affect that area of the country into three categories: natural hazards, technological hazards, and terrorism and weapons of mass destruction.¹⁵

Natural Hazards

Severe types of weather (especially high winds, tornadoes, and ice and snow storms) have been known to affect the county. The Emergency Operations Plan states that the county has a "moderate earthquake risk" and mentions that the area is "subject to naturally occurring infectious diseases, both those that affect humans and animals." (See page 6 of the plan.)

Technological Hazards

According to the Emergency Operations Plan, "The rapid growth and complexity of the county make the risk it faces from man-made and technological hazards at least as high as and perhaps higher than that of natural hazards. Risk from HAZMAT transportation accidents is especially high due to the presence of major national and international highway corridors, the main rail lines of two major railroads, and the flight path of commercial air traffic all serving the major industrial districts of the Kansas City metropolitan area." (p. 6)

Terrorism and Weapons of Mass Destruction

Johnson County, and Overland Park in particular, are home to several large companies, making the threat of terrorism a concern. The plan states, "Various programs are in place to enhance the county's ability to prevent, prepare for, respond to, and recover from terrorist events." (p. 7)

The Overland Park Police Department serves roles in the emergency operations plans of both the city and Johnson County. The most recent city plan was published in January 2003; the city is updating its plan to ensure it is NIMS-compliant and based on components similar to the National Response Plan. The updated plan will contain a public health annex that will refer to continuity-of-operations plans for each city department. The police department's supplemental support role to public health in securing mass prophylaxis sites will also be detailed. A major from the Overland Park Police Department is overseeing this process.

Administrative Overview of the City's Plan

The mayor of Overland Park is responsible for declaring a state of emergency. The city manager, with help from the emergency management coordinator, will be in charge of coordinating and directing the response efforts. The city manager will also serve as the Emergency Operations Center (EOC) coordinator. The city attorney will handle any legal issues associated with the critical incident. (p. 2)

Incident Management

According to the city plan, in the event of a critical incident, the lead representative from the Police Department will designate a director of field operations, who will establish a field command post if necessary. (p. 2) The city's current incident command structure follows:

■ The Incident Commander (IC) is responsible for the overall operation of the disaster response. The plan states that the main functions of the IC are "to develop, monitor, and evaluate the overall strategy employed toward the goal of preserving life and property and restoring the community to its original high standards of livability."

^{15.} Johnson County, Kansas (2005). Local Emergency Operations Plan. Available at http://www.jocoem.org/documents/LEOP/LEOP_(2005).pdf

- The lead agency commander will be appointed by the city manager, and will be a supervisor from the lead response agency.
- The director of field operations will oversee the assessment of the incident's magnitude, among other responsibilities.
- The emergency management coordinator maintains the plan and runs the Emergency Operations Center and related emergency planning.

In order to maintain the plan, the city manager has appointed a 13-person committee that consists of representatives from the following city departments: public works, planning and development, parks and recreation, the police and fire departments, and the city manager's office.

The Police Role in the City's Plan

A comprehensive search of the city's plan found several mentions of police roles during a critical incident. Specifically, should the police department be designated the lead response agency (and thus be made responsible for establishing a command post), the first officer on the scene would be expected to remain with his or her vehicle and report to communications. Once a field sergeant arrives, he or she will be responsible for: keeping a log of the units responding to the scene and their assignments; requesting that the radio be cleared; selecting a site for the field command post; and requesting the activation of the emergency operations plan.

In the "Duties and Responsibilities" annex to the plan, the police role includes traffic control and monitoring the scene for secondary incidents. As the incident progresses, the Police Department's responsibilities could include establishing a pass system, property center, and/or temporary morgue, and helping with rescue operations and notifying relatives of injured or deceased persons. Annex IV to the plan, "Overland Park Police Department," describes the department's resources that will be accessed in response to a critical incident (e.g., personnel, equipment, and communications). The department is listed as having a primary responsibility in the event of a major storm, but is listed as having a support role in most of the rest of the plan.

4. THE CITYWIDE APPROACH TO PANDEMIC-SPECIFIC PLANNING

The Overland Park Community Services Division (the city's equivalent of a public health department) focuses mainly on sanitation and inspection and permitting issues, and makes no information about seasonal or pandemic influenza available to web site visitors. The Johnson County Public Health Department (www.jocoflu.org/planning. html) has posted general seasonal flu information on its web page (e.g., where to get vaccinated), as well as some general information on planning for a pandemic flu. The department also publishes a monthly e-newsletter, EPI Update, to provide epidemiology information to the public. The county expects to release its Public Health Emergency Response Plan, including pandemic influenza and isolation and quarantine procedures, in the near future.

5. THE POLICE DEPARTMENT'S PANDEMIC PLANNING

In January 2006, Overland Park Police Chief John Douglass initiated the creation of the department's pandemic-specific plan. According to Chief Douglass, the goal of the plan is to "maintain order while maintaining services." In the early planning stages, Chief Douglass held a senior leadership meeting with division and bureau commanders and worked on a strategy for addressing the major components of a pandemic as they relate to the

^{16.} All direct quotes from Chief Douglass are from an interview with him on February 2, 2007.

department. The department employed a college intern over the summer who tracked pandemicspecific news articles daily.

OPPD members have met with Johnson County Health Department representatives a number of times to discuss the elements of a pandemic. Further, Chief Douglass and other OPPD staffers have attended and made presentations at several conferences on the topic. Chief Douglass explained that much of the department's plan is based on success stories presented at these conferences regarding the 1918 Spanish flu pandemic and the 2003 SARS outbreak in Toronto. All of the work on the plan was carried out solely by members of the police department and was overseen by Chief Douglass. The most current draft of the plan was finalized in August 2006.

Continuity of Critical Operations

In Chief Douglass's words, "This is not a plan for dealing directly with a pandemic. Our job is to figure out how to deal with the necessity of police services during a pandemic with a reduction in force." The primary focus of OPPD's plan is continuity of critical operations.

Staffing

The crux of the plan is a spreadsheet, prepared with Microsoft Excel, that will serve as a guide for the department to continue to provide service to the community with a reduced staff (see Appendix A). The plan is broken down into nine levels of a pandemic scenario. For each level, the staffing level decreases 10 percent, even as the demand for services increases by 10 percentage points, resulting in a shortfall in available employee-hours. As the pandemic levels increase, certain OPPD functions are given a lower priority or eliminated. The department projected the number of full-time hours needed to accomplish critical functions at each level, and projected *available* patrol full-time hours are also included. Other projections in the plan

include 1-percent and 5-percent fatality rates, based on the city's population of 170,000. Chief Douglass reported that he found these rates in the literature and chose to incorporate them into the plan.

Identifying Critical Operations

In the early stages of the planning process, Overland Park police command staff met several times to identify critical department functions. In Stage One of the plan, for example (this assumes a 10percent shortage in officer hours plus a 10-percent increase in demand for police services), all Drug Abuse Resistance Education and school resource officers would be placed on patrol. This decision was made based in part on the assumption that schools would be closed. Even if schools remained open, in this stage of the plan, school resource and DARE officers would likely be reassigned to meet the increase in demand for police services. At Stage Two, with a 40-percent total shortfall, the department's Traffic Accident Prevention Program would be suspended, and civilian staffers would likely handle non-injury accidents. The department would set up a phone bank staffed by civilians to handle calls for crimes such as vandalism and lost property. Tavern and business checks would be discontinued, as would the investigation of noise complaints. A decrease in revenue would accompany some of these discontinuations (e.g., the fees collected via traffic enforcement), and this has been noted in the spreadsheet.

"When it came to evaluating how we would provide our services, we prioritized those functions based upon the most mission-critical and took into consideration the natural changes that would take place. For example, the DARE and SROs would be the first to be reassigned, based on the assumptions that schools would close early on."

CHIEF JOHN DOUGLASS

Maintaining Information Technology and Communication

The city of Overland Park, including the Police Department, is in the process of identifying job tasks that can be accomplished remotely. All of the police department's information technology employees are currently able to work off-site. The Police Department hosts its own computer-aided dispatch and records management systems. Other local agencies share the system (e.g., the fire department), and the police department is in the process of determining whether planning for some sort of prioritization scheme would be necessary in the event of a pandemic.

Movement Restrictions and Site Security

While the decision to regulate social distancing, isolation, or quarantine rests solely with the Johnson County Health Department, the Police Department expects to have a significant role in the decision to enforce these restrictive measures. In Chief Douglass's opinion, from a law enforcement perspective, social distancing as an early intervention would have the most positive result in terms of limiting the spread of the virus. Challenges with social distancing remain, however. While shopping malls and similar sites in Overland Park could be closed to the public, Douglass cited the challenge associated with dealing with private house parties. The city, he said, is "really banking on communicating the benefits of social distancing and voluntary quarantine to the public before a pandemic occurs."

Douglass stressed that the Police Department is trying to be part of any city- or county-wide discussion regarding quarantines and to prevent agencies from creating plans that will be impossible to carry out. The department's main priority will be maintaining essential service levels, leaving very few law enforcement resources available to enforce mandated quarantine or to protect treatment sites and/or hospital/clinic perimeters.

The use of quarantine "is limited in its effectiveness as it contributes geometrically to the degradation of available human resources," Chief Douglass warned. In other words, "when you start

quarantining first responders based on their contact with the first to become sick, you quickly deplete your ability to respond."

Furthermore, isolation of infected persons "will have some major repercussions," Chief Douglass said, because "free movement is one of the pillars of our society."

Protecting and Educating Officers and Their Families

There is a citywide occupational health program for all employees, including those of the Police Department. The Police Department is currently working to ensure officers' family members have access to any vaccines that become available and other treatments in the event of a pandemic.

Personal Protective Equipment (PPE)

The OPPD has stockpiled a 90-day supply of PPE in the form of N95 masks, gloves, and protective clothing. Antibacterial gel is currently available to officers in the stock room, and many officers carry it with them. Most officers carry protective gloves on their belts and have been doing so for some time. Chief Douglass plans to secure training on the proper fit and use of PPE from infection control experts employed by local hospitals. Other prophylaxes such as vaccine or anti-viral medication have not been stockpiled, as they would be obtained through the health department and its plan.

Sick Leave and Vaccination Policies

While the OPPD does not yet have a pandemicspecific sick leave policy in place, which could ensure a continued income for officers who are placed under quarantine due to their exposure to a sick individual, Douglass said he plans to further explore the topic. The department currently has no plan to quarantine officers solely because of their contact as first responders, but plans to handle these situations on a case-by-case basis.

With regard to mandating vaccination (should a vaccine become available), Douglass stated, "The

controversial nature of a mandatory vaccination policy dictates that this policy decision be made by the governing body [the Overland Park City Council] when and if a vaccine becomes available."

6. CONCLUSION

The Overland Park Police Department's pandemic planning efforts emphasize continuity of operations and the effects of suspending non-critical operations on the department and the community. At the time this document was being finalized, the department was working on training officers in proper fitting of PPE and looking into creating a special leave policy for employees who have to be quarantined as a result of on-the-job exposure.

Current plans have emphasized:

- Developing multi-agency partnerships and plans,
- Identifying mission-critical functions,
- Incorporating pandemic-specific planning elements into the Police Department's existing plans,

- Maximizing capacity through the use of technology,
- Cross-training administrative personnel, and
- Educating personnel on the threat.

Future Directions:

At the time this document was released, the Overland Park Police Department was continuing its planning efforts. OPPD is currently working on the following activities:

- The feasibility of having certain employees work remotely,
- Training all of its civil defense unit officers on the pandemic preparedness plan and their roles and responsibilities,
- Ongoing PPE fit-testing, and
- Working on technology issues and implementing video conferencing.

APPENDIX A

Overland Park Police Department Continuity of Operations Draft Spreadsheet

Editor's note: The following spreadsheet shows the Overland Park Police Department's projections of how an influenza pandemic could reduce its workforce while increasing demands for service.

The spreadsheet suggests that as a pandemic worsened, the OPPD would reassign officers to patrol and take other steps to keep up with demands for service. But eventually, as the shortage of officers and the increased demand for services reached extreme levels, the department could become overwhelmed, the projections indicate.

For example, at Stage One of a pandemic, OPPD projects that 10 percent of its patrol officers would become sick or otherwise unavailable to work. The number of patrol hours normally available, 4,328, would drop 10 percent, to 3,895.2. Meanwhile, as the pandemic began to spread, the demand for service would *increase* 10 percent, resulting in the need for patrol hours to increase 10 percent, from 4,328 to 4,760.8. The overall result would be a shortfall of 865.6 work-hours.

However, by moving DARE and school resource officers to patrol and discontinuing patrol response to non-injury traffic accidents and non-verified burglar alarms, OPPD would gain 936

hours. The single step of assigning school resource officers to patrol would result in a gain of 540 of those hours. Thus, the department would be able to keep up with demands for service.

In Stage 2, with a 20-percent loss of patrol officers and a 20-percent increase in calls for service, OPPD would take additional steps, such as using civilians to handle calls regarding vandalism and other low-level crimes. There would be a diminishing return on some of the efforts to mitigate damage, however. For example, the gain from reassigning school resource officers would drop from 540 hours to 480 hours, because some of the school resource officers presumably would become infected with the flu virus or might have stay home to take care of ill loved ones (or children home from school), so they would be unable to work.

By Stage 3, with a 30-percent loss of patrol officers and a 30-percent increase in calls for service, the tide would turn against the OPPD. And by Stage 5, with a 50-percent loss of patrol officers and a 50-percent increase in demand for service, the department would have only one-third of the patrol officer hours required to maintain even a reduced level of services.

Overland Park Police Department Continuity of Operations Draft Spreadsheet 17

	Reduction of Officers + Increase in Demand for Service	Population Affected	Fatalit 1% of those affected	y Rate 5% of those affected	Patrol Full- Time Hours Needed	Available Patrol Full- Time Hours	Full-Time Hours Surplus or (Shortfall)
Normal Situation					4,328	4,328	0
Stage One Pandemic	Total Percent Change 20%	17,000	170	850	4,760.8	3,895.2	(865.6)
ACTION TO BE TAKE	N						
DARE Officers Moved Effect: The tempor		t of all DARI	E officers to t	:he patrol fur	nction would	I	180
suspend all DARE							
School Resource Office	ers Moved to P	atrol					540
Effect: The tempor suspend all SRO a	•			e patrol fund	ction would		
Discontinue Working	All Non-Injury A	ccidents					93
Effect: Suspension of non-injury accident reports for the duration of the emergency would result in accidents not worked by the patrol division. In order to remain consistent with reporting requirements in the law, civilian replacements to take reports would be necessary. We would train and deploy six civilian positions to take basic phone reports of non-injury accidents.							
Discontinue Answerin	g Intrusion Alai	ms—Verifie	d Response				123
Effect: The suspension of the Alarm Program in its current form would result in responding to only verified burglaries. Active armed robbery and bank alarms would continue to be handled as they are today. Although 99% of all alarms are false, we could still expect the public to respond negatively to the suspension of this program.							
Total Hours Gained by	y Actions Taken						936
Net Capacity							70.4

^{17.} Source: Chief John Douglass, Overland Park Police Department.

	Reduction of Officers +		Fatality Rate Patrol Full- Available		A 11-11	Full-Time	
	Increase in Demand for Service	Population Affected	1% of those affected	5% of those affected	Time Hours Patrol Full- Needed Time Hours		Hours Surplus or (Shortfall)
Stage Two	Total Percent Change 40%	34,000	340	1,700	5,193.6	3,462.4	(1,731.2
ACTION TO BE TAKEN	I						
DARE Officers Moved	to Patrol						160
SRO Officers Moved to	Patrol						480
Traffic Officers Commit Effect: This will susp are expected to incr will a small amount	pend our curre rease minimally	y in the shor	t term. Traffi				576
Discontinue Working A	ll Non-Injury A	ccidents					93
Discontinue Answering	g Intrusion Alai	ms—Verifie	d Response				123
Effect: Store security direct assistance from department. This sy potential of some comments Refer to Phone Bank	om the police. ystem would re	The paperwo	ork would the	en be forward	ded to the po	olice	
Effect: Developmen	t of a Phone Ba	ank of civilia	ns would	■ Station	Reports		50
allow for the transfe from Patrol to the F	erence of mino	r reporting f	unctions	■ Vandali			4
handle calls such as	s vandalism, lo	st property,	and	■ Lost Pr	operty		6
other information re operate 16 hours a	•			■ Destru	ction of Prop	perty	7
require five civilian	positions to st	aff. Reportin	g	■ Inform	ation Report	S	31
capability on behalf and positive satisfa			ayed	■ Harass	ment Repor	ts	3
•				■ Juvenil	e Info		9
				■ Juvenil	e Runaways		3
				■ Suspici	ous Person/	'Vehicle	9
Discontinue Service of Effect: Discontinuin backlog of these do	g service of M	unicipal and	Misdemean				57

	Reduction of Officers +		Fatali	ty Rate			Full-Time
	Increase in Demand for Service	Population Affected		5% of those affected	Patrol Full- Time Hours Needed	Available Patrol Full- Time Hours	Hours Surplus or (Shortfall)
Stage Two continu	ied	•	'	•	•	•	
ACTION TO BE TAKEN	I						
Discontinue Tavern Ch Effect: The discontin		rn Checks w	ould have or	ıly minor effe	ects on our c	operation.	5
Discontinue Business (Effect: The discontin		ness Checks	would have	only minor e	ffects on our	operation.	40
Discontinue Response Effect: The discontin	•	•	would have o	only minor e	ffects on our	operation.	39
Discontinue Response Effect: The disconting on our operation.		•	ise Complain	ts would hav	ve only mino	r effects	13
Total Hours Gained by	Actions Taken						1,761
Net Capacity							29.8
Stage Three	Total Percent Change 60%	51,000	510	2,550	5,626.4	3,029.6	(2,596.8)
ACTION TO BE TAKEN	l						
DARE Officers Commit	ted to Patrol						140
SRO Officers Committee	ed						420
Traffic Officers Commi	tted						504
Community Policing O	fficers Commit	ted					420
Personnel Officers Con	nmitted						392
Detectives Committed							
Discontinue Working A	ll Non-Injury A	Accidents					93
Discontinue Answering	g Intrusion Ala	rms—Verifie	d Response				123
Deferred/Assisted Rep	orting of Theft	s					53

	Reduction of Officers +		Fatali	hy Pata			Full-Time
	Increase in Demand for	Population	1% of those	ty Rate 5% of those	Patrol Full- Time Hours	Available Patrol Full-	Hours Surplus or
	Service	Affected	affected	affected	Needed	Time Hours	(Shortfall)
Stage Three cont	inued	•		•	•		
ACTION TO BE TAKE	N						
Refer to Phone Bank							
■ Station Reports							50
Vandalism							4
■ Lost Property							6
■ Destruction of P	roperty						7
Information Rep	orts						31
Harassment Rep	oorts						3
Juvenile Info							9
Juvenile Runawa	ys						3
Suspicious Perso	on/Vehicle						9
Stop Service of Munic	ipal and Misder	meanor War	rants				57
Discontinue Tavern Cl	necks						5
Discontinue Business	Checks						40
Discontinue 9-1-1 Har	ng Ups						39
Discontinue Noise Co	mplaints						13
Total Hours Gained by	Actions Taken						2,589
Net Capacity							(7.80)
Stage Four	Total Percent Change 80%	68,000	680	3,400	6,059.2	2,596.8	(3,462.4)
Stage Five	Total Percent Change 100 %	85,000	850	4,250	6,492	2,164	(4,328)
Stage Six	Total Percent Change 120%	102,000	1,020	5,100	6,924.8	1,731.2	(5,193.6)
Stage Seven	Total Percent Change 140%	119,000	1,190	5,950	7,357.6	1,298.4	(6,059.2)
Stage Eight	Total Percent Change 160%	136,000	1,360	6,800	7,790.4	8,65.6	(6,924.8)
Stage Nine	Total Percent Change 180%	153,000	1,530	7,650	8,223.2	432.8	(7,790.4)

The London Metropolitan Police Service Case Study

1. OVERVIEW OF THE POLICE DEPARTMENT

The Metropolitan Police Service (MPS) is London's largest employer, with more than 47,000 personnel (approximately 31,000 of whom are officers). London is comprised of 32 boroughs, all of which are under the jurisdiction of the Metropolitan Police Service. There are between 300 and 1,400 officers in each borough.

MPS is divided into 10 operational bureaus based on function. Emergency planning (including pandemic planning) is housed in the Central Operations Bureau. Each of the operational bureaus provides policing services across London and is led by an assistant commissioner who reports to the Commissioner, Sir Ian Blair.

The other bureaus provide various management, administration and support functions (e.g., recruitment, training and information technology).

Some functions, such as vehicle maintenance and aspects of information technology and telecommunications, have been contracted out to the private sector.²

2. DESCRIPTION OF THE AREA London—the capital of the United Kingdom and the largest city in the European Union—has a population of 7.2 million people in an area of 620 square miles. There are more than 30 general hospitals in London and hundreds of specialty medical clinics of all sizes.³ Within the London Metropolitan area there are hundreds of public and private schools.⁴

^{1.} London Metropolitan Police Department, http://www.met.police.uk/about

^{2.} http://www.met.police.uk/about/organisation.htm#pan

 $[\]textbf{3.} \ London \ Metropolitan \ Police \ Department, \ http://www.nhs.uk/England/Hospitals/AllHospitals.aspx$

^{4.} http://www.ealing.gov.uk/services/education/schools

In just the 21 square miles that cover Ealing Borough, for example, there are 96 public and private schools. Major employers include the Metropolitan Police Service, the transportation system (both public and privately run entities), and British Telecom. London is headquarters to more than 100 of Europe's 500 largest companies and a quarter of the world's largest financial companies.⁵

The London public transportation system is one of the largest in the world with approximately 30 million journeys made per day in Greater London—including journeys by bus, subway, rail, light rail, car, bike and foot.⁶ An extensive part of London's public transportation is the London Underground system or the "Tube," which carries passengers making more than 3 million trips per day at 275 stations.⁷ The bus system carries over 6 million passengers on more than 700 routes each day.8 London is served by five major international airports; three are located within MPS jurisdiction. Heathrow Airport has the highest number of international passengers in the world, with more than 60 million international travelers in 2004.9

3. CITYWIDE APPROACH TO EMERGENCY OPERATIONS

a. Administrative Overview of the City's Planning Approach

London has many area-specific risks. For example, major structures such as the Palace of Westminster and Buckingham Palace require continuous protection. The public transportation system is also at risk (as evidenced by the 2005 terrorist attacks). One naturally occurring threat is that of the Thames

flooding. London also hosts approximately 1,500 major events each year and has been selected as the site for the 2012 Olympic Games.

London Resilience Partnership

Prior to September 11, 2001, London had a limited system for multi-agency emergency planning. Emergency planning was coordinated by a panel of senior officials representing only emergency responders (police, fire, ambulance). Multi-agency partnerships with other entities were not formalized, and local planning efforts were not linked with those of the national government or critical private companies (such as those providing transportation and utility services).

In response to the attacks of September 11, the London Resilience Partnership (LRP) was established in May 2002 to coordinate all emergency planning efforts for London. The LRP is a multiagency team that consists of emergency responder agencies and government and private entities from many other sectors, including transportation, utilities, health services, central and local government, the military, and the business community.

Officials from these organizations meet routinely to evaluate risks and coordinate critical incident planning efforts. In addition, the LRP also has a staff that works full-time on emergency planning issues and risk assessment. Senior agency representatives in the London Resilience Partnership meet quarterly to review and approve plans.¹⁰

"Modular" Planning Approach

London's pandemic plan is one of a series of plans developed to address "all hazards" that the city may face. The overall planning structure set by the London Resilience Partnership is modular, with different modules addressing specific activities or risks. The

^{5.} http://www.london.gov.uk/london-life/business-and-jobs/financial-centre.jsp

^{6.} http://www.tfl.gov.uk/tfl/abt_tfl.asp

^{7.} Ibid.

^{8.} http://www.tfl.gov.uk/

^{9.} http://www.heathrowairport.com/assets/B2CPortal/Static%2oFiles/TopAirportso4.pdf

^{10.} For more information on London's emergency planning, see www.londonprepared.gov.

planning system has been compared to a set of encyclopedias, with each "volume" representing a plan. In an emergency, agencies would select the volumes that best address the overall situation. For example, during a pandemic, large numbers of fatalities could require officials to activate the mortuary plan in addition to the pandemic plan.

b. Incident Command

The London Resilience Partnership has required all of the city's agencies that participate in citywide emergency planning to adopt a "gold, silver and bronze" system for incident command. Agency officials serving in the gold, silver and bronze capacities during an emergency are chosen not according to rank, but rather according to their role in the agency and their level of knowledge about the type of incident that is at issue.

Command Structure:

- Gold (strategic): The gold group is composed of the overall command personnel, who establish the response strategy (there is usually only one gold representative from each agency).
- Silver (tactical): The silver group is composed of personnel who will respond to the incident and are responsible for formulating the tactics that will implement the strategy.
- Bronze (operational): The bronze group controls the resources and implements and directs the tactics that are determined by the silver group.

Note: Each agency involved in the city's emergency response will establish its own gold, silver

and bronze command structure internally. The detailed responses of the silver and bronze groups are determined by agency officials serving at the gold level. This case study highlights the roles and efforts at the gold level of incident command.

Gold Coordinating Group

All of London's emergency plans are developed by the "Gold Coordinating Group," and this group ultimately reports to the Prime Minister. Members of this group are gold level representatives from each of the various city agencies that are involved in the emergency response. Additional agencies and subject matter experts may participate in the Gold Coordinating Group based on the type of critical incident (Figure 1 depicts the basic Gold Coordinating Group structure).

The role of the Gold Coordinating Group is to develop the overall emergency response plan and to provide clarity and overall direction for responders during the incident. During a major event or crisis, the Gold Coordinating Group meets regularly, ensuring that the gold representatives from all agencies are coordinating with each other. As a matter of practice, the gold representative from each agency should not change during the emergency. This ensures that the strategy for each agency remains the same.¹²

"Two hundred different officials in a room would produce 300 different strategies. By having the same one person in the gold position, you keep the strategy consistent."

CHIEF SUPERINTENDENT SIMON LEWIS, MPS EMERGENCY PLANNING

^{11.} In an extreme emergency, the Prime Minister would lead this group with the top police and military officials.

12. Note on Fatigue: Because a pandemic may come in waves and last for an extended period of time, personnel fatigue is a critical issue that must be considered, especially when the department may be facing an already-reduced workforce. One principle of London and MPS's emergency planning structure is that only one representative will usually hold the gold position through the course of the emergency or event. Fatigue is addressed by limiting the scope of hands-on involvement of these representatives in overseeing response delivery, which is done by bronze representatives. However, the idea of only one gold representative raises important questions for London and MPS as to how this should be handled during a pandemic emergency and what will happen if a Gold Coordinating Group representative becomes sick.

"We are trying to build on the idea of multi-agency cooperation. In preparing for an emergency—and during an emergency—it is not only about what your agency has to do, but also what you can expect your partners to do."

SARAH WULFF-COCHRANE, LONDON RESILIENCE TEAM

Figure 1 shows the range of entities participating in the Gold Coordinating Group¹³ which reports to the Cabinet Office Briefing Room (COBR)—the Prime Minister's most senior officials.

c. Law Enforcement Role In the City's Emergency Operation Plan

The Metropolitan Police Service plays a critical role in London's citywide emergency plan. A police official serves as chairperson of the city's Gold Coordinating Group for most emergencies and is responsible for leading the group, ensuring representatives agree on clear objectives and actions, and overseeing the response to the emergency.

The department is also responsible for assigning a separate gold representative to participate in the Gold Coordinating Group meetings and to set strategy and ensure delivery of the police response. MPS may also play a key role in media communications.

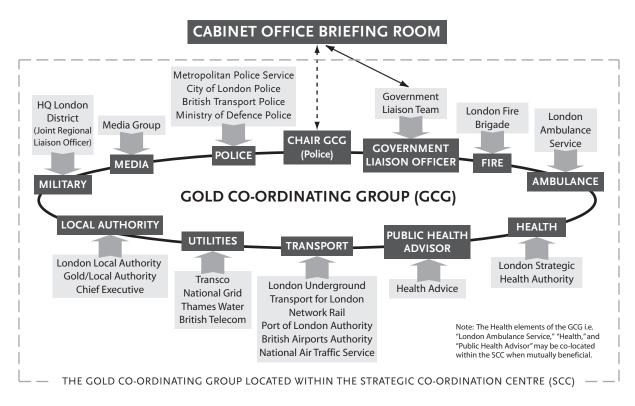


Figure 1. Representation of the Gold Co-ordinating Group

Source: London Resilience Partnership (2006). London Command and Control Protocol—Version 1 (p. 9). Available: www.londonprepared.gov

^{13.} Note: the Local Authority may represent schools as well as other important local sectors on the Gold Coordinating Group for a pandemic.

The London Resilience Partnership's Communications Plans

INFORMAL COMMUNICATIONS: FASTEST FINGER FIRST

The London Resilience Partnership has devised a system of sharing information called "Fastest Finger First." At the onset of any event, all Gold Coordinating Group partners will be informed of a crisis as soon as it occurs, because the first person to know about an event is charged with immediately informing everyone else in the group. As everyone in the Gold Group has access to cell phones and other communications devices, this system hopefully will ensure that Gold Group partners will first learn of an incident from their LRP peers rather than through news media inquiries. Every member has the responsibility to call; any member can make the first call.

FORMAL COMMUNICATIONS

Citywide, agencies are divided into two categories for receiving emergency communications. Category One responders include police, fire, ambulance, environment, health, and local authorities. Category Two responders include service providers such as utility and transport contractors who are not required to have emergency plans, but are obliged to assist if asked. Almost-daily alerts from various government departments are sent to all Category One and Category Two responders. 15

NEWS MEDIA APPROACH

To ensure a coordinated approach, the media strategy for a critical event will be decided by the Gold Coordinating Group, which includes a news media liaison, usually from the Police Service. ¹⁶ Compared to other agencies, the Metropolitan

Police Service has a very large media bureau, which is proficient at coordinating media communications during large-scale events. Although one of the public health agencies may take the lead, the MPS press bureau is likely to be closely involved in getting information to the media and providing support to the public health agencies in coordinating and carrying out the media strategy. After the Gold Coordinating Group meets, the media liaison will coordinate with other agencies' press representatives and will disseminate the details approved by the group.

4. CITYWIDE APPROACH TO PANDEMIC-SPECIFIC PLANNING

The London Resilience Partnership's (LRP) approach to pandemic-specific planning is very similar to the approach it has taken to preparing for other emergencies. The LRP has convened a Gold Coordinating Group to consider pandemic-specific issues, such as the need for stockpiling personal protective equipment and any available antiviral medications, and the need for a strategy to disseminate the stockpiled items effectively during an emergency. The LRP has also considered how other emergency plans, such as the plan for large numbers of fatalities, may dovetail with the plans developed for a pandemic. The specific response to a pandemic, depending on the scale of the pandemic and other factors, would be decided on by the Gold Coordinating Group during the emergency and would be carried out by the silver and bronze groups in each of the corresponding agencies.

The Department of Health will be the primary source of public health-related messages, and as the lead government department, will work closely with the central government's media center

 $[\]textbf{14.}\ \text{http://www.warrington.gov.uk/council/emergency/Civil_Contingencies_Act_2004.asp}$

^{15.} As delineated in the Civil Contingencies Act of 2004.

^{16.} Because of the scope and nature of a pandemic, this function may change to another appropriate lead agency, such as health. The central government may also take over this responsibility to ensure a consistent national message.

^{17.} Chief Inspector Graham Stokes, 2007.

to deliver a nationally-coordinated communication strategy. Plans for a print and broadcast campaign and a public information film have been developed. A national leaflet mailing will be activated if the pandemic threat reaches the World Health Organization's Phase 5.

5. POLICE DEPARTMENT APPROACH TO PANDEMIC-SPECIFIC PLANNING

Within MPS, emergency planning is coordinated in the Central Operations Command bureau, specifically within the Emergency Preparedness Unit. In addition, each police borough is responsible for developing detailed local plans. These plans are intended to serve as a foundation that local incident commanders can build upon during an actual emergency.

Police Command Structure for a Pandemic Emergency

Like other London emergency response agencies, the Metropolitan Police Service has its own gold, silver and bronze incident command structure that would be activated during any critical incident, including a pandemic. The chairman of MPS's Gold Group is also the representative to the City of London's Gold Coordinating Group. Currently, the MPS Gold Group for pandemic planning includes approximately 30 representatives, such as public health officials and medical officials from within the Police Service. MPS's silver and bronze groups have been activated to participate in planning and exercises of plan components.

The following sections of this case study provide an overview of the specific planning steps required for MPS to successfully maintain its incident command structure and response, as well as other critical operations during a pandemic.

Continuity of Operations Planning— Human Resource Resilience

"MPS... has a legislative obligation to maintain critical services throughout any pandemic. Indeed, the greater the severity of the pandemic, the greater the challenges that will be placed upon MPS to maintain the peace." 18

Within MPS, the Central Operations Bureau was tasked with coordinating resilience plans for all of the bureaus and units in the entire department. Early plans focused on the department's *physical* infrastructure, such as the lost use of a police building through fire or power failure; there were no plans in place for handling the loss of human resources.

In 2005, as international attention was drawn to the possibility of an influenza pandemic, MPS began to consider the impact of such an event on its human resources and the organization's ability to maintain critical functions. Initially, the Central Operation Bureau requested every unit to identify its critical activities. Personnel responded by naming thousands of activities that they considered critical. Bureau officials realized that to get to the core of the issue, they needed a detailed understanding of the impact of a pandemic on operations, so they devised a new approach for identifying the organization's most crucial functions.

In the spring of 2006, MPS set up a series of working groups of senior officials to identify and classify the core functions of the MPS and to devise a plan for dealing with high absenteeism. The approach was originally designed to deal with a pandemic, but later evolved into a "human resource resilience" plan that could be applicable during any critical incident which would require the MPS to work at maximum capacity for an extended period of time.

^{18.} MPS Staff Abstraction Appendix A, Contingency Planning for a Pandemic Influenza, "Preplanning"

"Throughout the process, it was important to demonstrate that the planning was about supporting the key activities of the MPS. We had to help them refocus on what is important and to understand that policing London will change. You may be dealing with riots caused by panic, there may be no gas, no food, no access to cash. The priorities for police will likely change, and [understanding] that is the benefit of focusing in on what we are all really about."

DAVID HILL, TECHNICAL AND LOGISTICAL ADVISOR, CENTRAL OPERATIONS BUREAU

The process of identifying the MPS's critical functions took approximately six weeks. Senior MPS officials identified the following 12 core functions:¹⁹

- 1. Receipt of 999 calls (similar to 911 calls in the United States)
- 2. Command and control (MPS Gold Group meetings and headquarters command center operations)
- 3. Response to emergency calls
- 4. Major incident response
- 5. Crime investigation
- 6. Maintenance of public order (street patrol; public security and safety; officer deployments to demonstrations and mass gatherings; crowd control; etc.)
- 7. Custody management (arrest and detention of prisoners)
- 8. Security and protection (related to royal, governmental, and diplomatic officials and buildings)
- 9. Health, safety and welfare of the MPS staff
- 10. Criminal case progression and management (management of prosecution papers and summonses prior to transfer to prosecutors)

11. Community policing

12. Communications and news media

Once the initial list was compiled, the group developed a "critical activities template" that included these core functions and identified how many staff members are currently needed to carry out each activity, as well as skills that are needed (See Appendix A). Using the template, officials in each bureau calculated the impact on the critical activities if there were 25-percent, 40-percent, 60percent, and 80-percent reductions in staff. The template also captured information on the minimum level of staff resources needed to deliver services at an acceptable level, and identified at what point during a pandemic the acceptable standard of delivery would no longer be viable. This process helped department officials to prioritize their core functions should such reductions in staffing occur.

"The level of staff absenteeism from work during a pandemic will depend significantly on the nature of the pandemic virus when it emerges.... Given the inevitable uncertainties, a range of percentile absenteeism should be planned for. [MPS bureaus] should ensure that their ... continuity plans have the flexibility to accommodate these ranges. It must be stressed that a clinical attack rate of, say 25 percent, should not be interpreted as equating to one-in-four absentee level across the workforce. Small teams working closely together will be particularly vulnerable to higher levels of absenteeism, for if one member of the team contracts the virus, there is every likelihood that many of the team will be similarly infected."20

^{19.} MPS 2007. Impact of Staff Abstraction on Critical Activities Worksheet.

^{20.} MPS 2007. Staff Abstraction Appendix A: Contingency Planning for a Pandemic Influenza: Introduction and Guidance Notes on the Completion of Templates for Assessing the Impact on Service Delivery when Subject to Significant Staff Abstraction.

As the police operational plans were completed, the MPS Emergency Preparedness Unit reviewed the plans for operational viability, and any changes needed were discussed with the unit commanders. Discussion and revision of the bureau's operational plans gradually raised the awareness of the MPS staff regarding the overall impact of an influenza pandemic and how it would affect the police service. It took approximately six months for plans to be completed.

Contract Services

As part of this planning exercise, unit commanders were also tasked with identifying the contract services relied on for the provision of critical business functions. Like many police departments, MPS contracts out for services such as cleaning and vehicle and building maintenance.

MPS recognizes that its local vendors would also be impacted by a flu pandemic, and is not taking vendor-supplied services and products for granted. MPS is requiring critical vendors to provide the department with details of their own continuity plans for mitigating the damage of a pandemic. When needed, MPS has entered into priority contracts with other service providers for additional and "backup" supplies, services and equipment that may be needed. These contracts give MPS first priority over other customers and often allow for orders on very short notice.

It should also be noted that a private company maintains the MPS's information technology structure and servers. MPS engages in a priority service contract for these services and requires its contractors who assist in providing critical functions to have a robust continuity plan that addresses human resource resiliency, and will ensure that contractors can continue to provide the services during a large-scale incident.

Activating the Human Resource Resilience Plan

During an emergency, each unit will redeploy employees as necessary to ensure that the most important MPS functions are taken care of, and to adjust for changes in staff availability. In general, it will be expected that each MPS bureau will manage its core functions and move personnel as needed. If assistance is required, then the bureau may reach out to the MPS continuity group for help in identifying staff in other bureaus that may assist in carrying out critical functions. This type of cross-bureau staffing request would need to be decided upon by the Central Operations Bureau Assistant Commissioner and would be discussed in the department's Gold Group meeting.

Special Skills

Through the process of identifying critical MPS functions, officials realized that to develop a truly effective resilience plan, they needed to consider the key skills needed to carry out the core functions, rather than just moving employees to fill gaps in the workforce. While it is unlikely that a pandemic would cause a 60-percent or 80-percent decrease in staffing across the MPS, such severe losses could be likely within one or two units. This is especially possible in the case of personnel working in small, specialized units who work closely together (e.g., engineers and explosives officers) and who may become ill at the same time.

When preparing the Critical Activities Templates (described earlier in this chapter under "Continuity of Operations Planning—Human Resource Resilience"), the MPS continuity group requested that all of the bureaus identify the key skills needed to carry out its core functions. From this "critical skills list," the group worked with the Human Resources Bureau to develop a register of skills of all operational, staff and administrative personnel and volunteers. This database of skills would be available to identify personnel who may be able to carry out core functions during an emergency.

Administrative and Support Staff Mobilization

One change that came out of the aftermath of the July 7, 2005 public transit bombings (see "Terrorism

and Bombings" sidebar, later in this chapter) was to identify additional MPS personnel, both uniformed and non-uniformed, to assist in various capacities during an emergency. As a result, during future emergencies, employees working on non-critical functions may be moved to assist with critical functions. MPS has also created a list of employees who have volunteered to assist either by working past regular duty hours or by conducting tasks outside of their usual scope of work. For example, administrative personnel were needed during the July 7th silver (tactical) group meetings, which ran through the night after the bombings. Prior to July 7th, the department had a police mobilization plan to bring in officers from other boroughs when assistance was needed. Now they have a volunteer list and plans for mobilization of administrative employees as well. Not only does this provide the administrative support needed, it also has given administrative staffers an important way to help during an emergency or large-scale event and has improved the sense of unity within the department.

The Metropolitan Police Special Constabulary (MPSC)

MPS also has a constabulary of volunteers who may be called to assist. These volunteer police officers—known as "Police Specials"—are members of the public who volunteer for at least 200 hours a year. Police Specials receive professional police training and have the same powers as regular officers. They also wear a uniform similar to that of regular officers.^{21, 22}

Since July 7th, MPS has also recruited members of its existing support staff to participate in the Police Specials program.²³ The benefits of having administrative and support staffers serve as Specials is that they will already be on site and ready to mobilize when needed. Employees serving as

Specials keep their uniforms and equipment onsite. To encourage participation in the program, police staffers are given two paid days off a month to participate in the program in their home borough.

"The staff-volunteer and 'police specials' program closes the gap between police officers and staff. Now the staff feels like a greater part of the family, and it brings them into the loop."

CHIEF SUPERINTENDENT SIMON LEWIS

Internal Communications

Like many departments, MPS works hard to ensure that the bureaus are working collaboratively and are sharing information. MPS has done a lot of work to share information across the department's bureaus and geographic units.

Because MPS is such a large organization, it relies heavily on the use of its Intranet for mass communications. MPS employees are instructed to check the Intranet's home page at the beginning of each shift. Through the Intranet, messages on current or upcoming events and brief educational information and tips are posted. Health and safety information is also posted here (see "Occupational Health and Officer Safety," below). Although this is a simple and efficient way of reaching every employee, MPS recognizes it is only effective if employees follow policy and read the information posted.

If specific information needs to reach a certain group of personnel (e.g., unit commanders), email is used. Each borough also has an emergency planner who is routinely contacted and briefed by the Central Operations Bureau. The borough's emergency planners have been involved in developing the detailed local response plans and will work with their supervisors to coordinate the boroughlevel resources and response.

^{21.} http://www.metpolicecareers.co.uk/default.asp?action=article&ID=32

^{22.} As many retired officers return as Police Specials, the business resilience group is also working with human resources to record the special skills of volunteers as well.

^{23.} To prevent double counting of staff, the continuity group has worked with the various bureaus to identify critical positions and to note whether these positions are held by staffers who also volunteer for the Specials program. Depending on the type of emergency, those who are not in critical positions may be called up to serve in their Police Specials role.

Briefing packets are prepared during an incident or event to provide specific operational information needed by those involved. Briefing packets include critical information on the incident/event, identify who is serving in critical roles of the command structure, and provide information on risk assessment and intelligence.

External Communications

Public Information and Education

Currently, the UK Health Protection Agency is responsible for providing public health information and assurance to the public. MPS is not currently involved with these efforts. However, because citizens look to the police for information, there is a role for the police in sharing information and providing guidance on whom to contact for additional information or assistance during an emergency. During previous incidents (e.g. the polonium-210 poisoning of Alexander Litvinenko in 2006), the London Resilience Partnership has set up a helpline for public information. During a pandemic flu, similar steps would be taken to reduce the pressure on the police agency for answering health-related questions and fielding calls.

Occupational Health and Officer Safety

Within MPS, there are two branches dedicated to officer welfare: Occupational Health, and Health and Safety. The Occupational Health branch has a full-time staff of doctors and nurses who provide services to officers, monitor post-event trauma, and provide advice upon request. The Health and Safety branch is the department responsible for assessing and planning for risks, and protecting the health and safety of officers. The Health and Safety branch routinely posts information on relevant health

topics on the MPS Intranet homepage. During a pandemic, a senior representative from this branch will sit on the department's gold group to provide updates based on health surveillance information and infection control measures.

Current health and safety efforts require all officers to attend a safety course every six months. This course includes a combination of self-defense training and health and safety topics tailored to the officers' role. For example, drug squad training emphasizes procedures for safe searches.

Personal Protective Equipment

The Police Service's Health and Safety branch has also been involved in the purchase of department personal protective equipment (PPE). A trained team of risk assessors is currently monitoring the possibility of a pandemic, and is advising the department to take simple precautions and to focus on managing anxiety among employees.

"We are taking precautions and issuing instructions, but we try to keep it simple. We haven't gone overboard, and the planning advice from our health officials is that we don't need to [go overboard]."

CHIEF SUPERINTENDENT SIMON LEWIS, EMERGENCY PREPAREDNESS

To date, there have been no formal recommendations from UK government officials on the types of personal protective equipment that need to be provided. The public health guidance that has been provided states that masks are not very effective unless used by persons who are sick (as opposed to the use of masks by healthy people who hope that the masks will prevent their infection with the flu virus).²⁴ Currently MPS has some PPE stockpiled in a central area. To avoid having the

^{24.} In general, paper masks worn loosely over the nose and mouth are good protection against blood splatters and prevent one from putting contaminated fingers into one's nose or mouth. As noted above, putting a mask on the person who has contracted a respiratory infection is a much more effective method of controlling the spread of respiratory diseases. (From Richards, E. Rathbun, K., Solé Brito, C., and Luna, A. (2006). The Role of Law Enforcement in Public Health Emergencies: Special Considerations for an All-Hazards Approach. Washington, D.C.: Bureau of Justice Assistance.

supplies used inappropriately and to avoid causing fear or alarm, stockpiled PPE will not be disseminated unless the police role requires its use.²⁵ MPS has set up priority contracts with several vendors that will enable them to order and receive incident-specific PPE when necessary.

Prophylaxis

The Greater London Authority has purchased doses of Tamiflu, which could be of benefit in reducing infected persons' symptoms during a flu pandemic. Some of the Tamiflu is intended specifically for distribution to the police, fire, and transport authorities. In the event of a flu pandemic, the Tamiflu will be released to four locations within London. MPS medical personnel will assist in disseminating the Tamiflu doses, and MPS operational personnel will assist in site security for all dissemination sites. The process for disseminating Tamiflu will be as follows:

- A central call center staffed by nurses will be set up to receive and screen requests for Tamiflu and to authenticate that the individual requesting the medication is eligible to receive it.
- An authorization code and pick-up location will be given to the individual.
- The individual or family member will report to the pick-up location with the authorization code and receive the Tamiflu.

Vaccinations

The UK's National Health Service recommends certain vaccinations for all citizens, but vaccinations are not mandatory. MPS offers annual flu shots to essential personnel within the department. Depending on the employee's role, the department may also provide hepatitis vaccine or require other vaccinations before deploying an officer. Certain roles (e.g., body recovery) require specific vaccinations, but these vaccinations are not mandatory;

if an officer does not receive a required vaccination, he or she will be reassigned to another role. It is left to officers in high-risk roles to receive the vaccinations and prove they are current before they will be deployed. Tetanus shots are recommended as a minimum for all officers.

Sick Leave Policies

Compared to most U.S. police departments, the MPS has very generous sick leave policies. Personnel are allowed eight consecutive sick days without documentation from a physician, and are eligible for paid sick leave at 100 percent of their salary for up to six months. After six months, paid sick leave may drop to 50 percent of salary unless an officer's sickness or injury was a direct result of using their powers as a constable. To ensure that sick leave policy is not abused, use of leave is monitored through a comprehensive absence management system, and excessive sick leave absences are tied to personnel performance evaluations and the ability to be promoted or transferred, unless mitigated. The department's Gold Group has agreed to possibly review this policy to prevent employees from being penalized because of flu absences in the event of a pandemic. The current rationale is that by not changing the policy now, MPS is remaining flexible but is not risking abuse. Compassionate leave can be taken for providing child care, caring for a sick family member, or for bereavement.

"Flexibility is good in your policies, but you don't want to set them up whereas they encourage extensive absences."

CHIEF INSPECTOR GRAHAM STOKES, EMERGENCY PREPAREDNESS

Police Roles and Responsibilities

During any event or emergency, the police will be responsible for carrying out the critical functions

^{25.} PPE training is provided every six months by the Health and Safety Branch.

of the MPS. During a pandemic, the MPS may be responsible, all or in part, for the following duties:

- Managing fear
- Enforcing public health orders
- Site security and cordons
- Coordinating mortuary services for mass fatalities

Managing Fear

During a pandemic, the London Resilience Partnership will give the police ongoing information briefings, and MPS officials will assist in managing fear by fielding calls for information and assistance, and by providing information to persons encountered during the course of their duties. MPS officials may also participate in a multi-agency call center that will be established, and police may play a role in the overall media strategy by discussing public order-related measures that the department has implemented.

Enforcing Public Health Orders

The UK has strong protections on civil liberties and freedom of movement, and currently MPS police officers do not have the power to isolate or quarantine individuals for public health reasons. Under the Terrorism Act of 2000, officers have the right to cordon off an area and keep people from moving in or out of the area, but only if there is reasonable cause to suspect terrorism. Police do not have the right to cordon off an area and keep people from moving in and out for public health reasons. However, the Civil Contingencies Act of 2004 does have a provision that enables the police to petition the Prime Minister for emergency powers.²⁶ Should the Prime Minister approve emergency powers such as quarantine, MPS officials would work to enforce these orders to the extent reasonable and possible with existing staff.

Site Security and Cordons

Site security and cordons may be required at sites where Tamiflu, vaccines, or PPE is distributed. MPS routinely provides cordons for approximately 1,500 sports and military events, marches, and royal events annually. MPS is responsible for the daily protection of royalty and diplomats and their buildings, government ministers, and the Palace of Westminster. While officers are very proficient at these tasks, the challenge is to ensure that the approach currently used is sufficient for a pandemic emergency, and to anticipate what may be different. Further, for an organization as large as MPS, an additional challenge is to ensure that the officers who are securing a site have the necessary information about why the site is being secured and who, if anyone, should be allowed access in or out of the cordoned-off area. For example, because a multi-agency response to a flu pandemic may require personnel from many public and private agencies and contractors to move in and out of an area, proper credentialing is needed. Proper credentialing and communication with site security officers about who should and should not be allowed access to the scene was an issue faced by MPS during the July 7th Tube bombings and is currently being addressed.

Note on Use of Force: The ultimate sanction for a public health violation is a fine. However, the possibility of an influenza pandemic that may cause mass fatalities raises the question of whether officers should use force (and how much) to maintain the integrity of a cordon. The MPS guideline on using any type of force in the line of duty is that the use of force must be reasonable given the situation. Officers are trained to use their discretion in choosing the type of action to take. Proper education to ensure officers fully understand the situation will assist in their use of discretion on the job.

box 5.1 Terrorism and Bombings

While the pandemic-specific plans have not been tested during an actual emergency, the Gold Coordinating Group and several of the London Resilience Plans were put to the test in two recent critical incidents: the public transit terrorist bombings of July 7, 2005 and the poisoning of Alexander Litvinenko in November 2006.

July 7, 2005 Suicide Bombings

At approximately 8:50 a.m. on July 7, 2005 (now commonly referred to as 7/7), four suicide bombers attacked the public transport system in Central London. Three bombs went off within minutes of each other on trains underground between stations. The fourth suicide bomber

detonated his bomb on a bus near Tavistock Square about an hour later. A total of 52 commuters were killed, and hundreds were injured.

What Worked Well in the Police Response

This tragic event provided the first real-life test of the London Resilience Partnership's Strategic Emergency Plans. The city's Gold Coordinating Group (gold-level representatives from every responding agency) convened, and the meetings were considered effective, because the group members were

familiar with the process and their respective roles had been agreed upon in advance. The LRP's mass fatality plan, which had been finalized only a few days before 7/7, also worked well. Using this plan, responders set up a temporary mortuary facility in a preselected site within the city. On 7/7, the mortuary was ready to operate. Importantly, it had four completely separate sections with different staffs, entrances, water systems, and other facilities, which helped to prevent cross-contamination of evidence from the four different bombing sites.

One aspect of planning that has since been developed is setting up "Humanitarian Assistance Centres" where family members, friends, and



July 2005 London bombings COURTESY OF EMPICS LIMITED OF PAVILION HOUSE, 16 CASTLE BOULEVARD, NOTTINGHAM, NG7 IFL

>> continued on page 92

survivors can go to inquire about loved ones who may have been involved in a critical incident.²⁷ The centers were not preplanned prior to 7/7, but with a structure of multi-agency collaboration already in place, the city was able to set up and staff a full-service assistance center within several days of the bombings.

Challenges

Several challenges arose from the 7/7 attacks. First, there was the problem of determining where the bombings occurred. Three of the explosions were underground, and the sound traveled in both directions, so it seemed that there were more explosions than actually took place. Another challenge involved balancing victim recovery and identification with the investigators' need to maintain the crime scenes. Another challenge which is common during major events was that the city's telecommunications system became overloaded. Currently, LRP is focusing on educating the public not to use the phone for an extended period of time and only when needed.

The cordon system that was in place also presented several problems on 7/7. Because many utility and transportation contractors and other officials may not have had proper identification, it was difficult to determine who should or should not be allowed through the cordon. This issue is now being addressed by the LRP.

Staff utilization was one of the most important issues that emerged from 7/7 and will especially be an issue in pandemic response, with the need for a sustained response over an extended period of time. On 7/7 MPS had approximately

35,000 officers and 15,000 civil staffers. Some officers and civil staff members worked long hours, especially those in the crime scene and investigation teams. The personnel in these offices were physically exhausted and mentally tired. Sustainability of this work schedule for these employees was an issue.

Many other officers and civil staff members would have liked to work more, but there was no system in place to arrange it. Since 7/7, MPS has taken one step to help address this issue by enlisting support staffers to volunteer for additional duties (See "Administrative and Support Staff Mobilization," above in this chapter).

Polonium-210 Poisoning

The poisoning of Alexander Litvinenko with polonium-210 in late 2006 is another recent critical event that has tested the emergency plans of the City of London and its Metropolitan Police Service. On November 1, 2006, Litvinenko became ill. He was treated at two hospitals but died on November 23. It was discovered that he was poisoned by the radioactive substance, polonium-210.

MPS took the lead in investigating Litvinenko's death. As a radioactive substance, polonium-210 leaves a radioactive "fingerprint" wherever it has been present, so investigators were able to track it to more than 30 locations. Because of the number of sites, the case's high profile, and the unknown health risks involved, London convened a Gold Coordinating Group of gold-level representatives from the relevant responder agency representatives. These representatives also activated internal command structures within their own agencies as needed to respond.

^{27.} http://www.londonprepared.gov.uk/downloads/lhacplan.pdf

The MPS and London's Gold Coordinating Group worked on the Litvinenko case with a number of agencies that are not usually involved in planning, including the Health Protection Agency (HPA)²⁸ and the Atomic Weapons Establishment (AWE). This provided MPS with an opportunity to expand its multi-agency partnerships.

At first it was unclear how much and what form of polonium would be required to injure or kill someone. This made it necessary to maintain clear internal communications about risks. MPS's Health and Safety Branch was closely involved in identifying experts on the subject, interpreting risk information and establishing guidance for the investigating officers on PPE and safety and decontamination issues. During the incident, briefing packets were sent to the boroughs

containing information about risk assessment and roles and responsibilities.

MPS was not directly involved in public health reassurance. When members of the public called or asked for information, they were given a hotline number set up by the Health Protection Agency. This took a lot of pressure off of the police in answering questions and fielding calls. During a pandemic, a similar hotline directed to health officials will be set up.

The polonium poisoning incident was one of the first times MPS worked so closely with health agencies. This experience provided the MPS with a glimpse of the types of cooperation that will be needed if a flu pandemic occurs. Thus, it is easy to see that a flu pandemic would bring challenges similar to, but far greater than, those presented in the polonium incident.

^{28.} Note: The London Strategic Health Authority is the usual representative at Gold Coordinating Group meetings. However, specialists on radioactive materials were needed in this instance.

Coordinating Mortuary Services for Mass Fatalities

During a flu pandemic, unless a crime is suspected, MPS's responsibilities in the mass fatalities plan will be limited to: assisting local authorities in coordinating mortuary services,²⁹ including assisting in setting up and securing temporary mortuary facilities; managing the reception and the documentation of the deceased at the mortuaries; security of mortuaries; and serving as liaison with the coroner's office and mortuary managers.³⁰

One challenge for London mortuaries will be managing large numbers of bodies with a reduced workforce. Public health officials and mortuary services and funeral directors have been closely involved at the borough level in planning for this type of event. Currently London has four mobile mass fatality centers that can be set up to assist if fatalities overload the mortuary service capabilities.

6. SUMMARY AND FUTURE DIRECTIONS

Multi-agency planning efforts and the recent experience with several critical incidents have put many key relationships and systems in place for responding to a pandemic. To date, London's efforts have focused on:

- Developing Gold Command Structures and establishing a Gold Coordinating Group (a multi-agency group of officials who will be in charge of the city's pandemic response)
- Engaging Gold Coordinating Group representatives and other senior officials in the planning process, including discussions about issues and decisions the group will face during a pandemic
- Coordinating pandemic planning efforts with other emergency plans to address various situations the city may confront during a pandemic (e.g., the mortuary plan)

 Developing a coordinated communications and media strategy for London and devising strategies for quick communications among key officials.

The Metropolitan Police Service's efforts have focused on:

- Identifying mission-critical functions
- Establishing a Business Resilience Planning Group
- Developing a plan for determining which functions may be suspended based on a reduction in workforce availability
- Creating a database of employees' specific skills to assist in continuation of critical functions
- Engaging other local authorities in planning at the borough level.

Future Directions:

At the time this document was released, London was continuing its citywide planning efforts. London is currently working on the following activities:

- Conducting nationwide exercises to test various aspects and levels of the response plans,
- Following up on exercise outcomes and incorporating findings into planning, and
- Conducting further work on managing large numbers of deaths in a flu pandemic.

Currently, the Metropolitan Police Service is:

- Exploring staffing options to prevent officer fatigue during long-term responses,
- Working with its boroughs to further develop local response plans, and
- Proceeding with approval of the critical functions staffing plan by the Police Commissioner.

^{29.} The temporary mortuaries have the capacity to handle 500 bodies per day.

^{30.} LRP 2005, April. Strategic Emergency Plan, Version 2.1.

APPENDIX A

Metropolitan Police Service Critical Activities Template

Editor's note: The following spreadsheet shows the template that the Metropolitan Police Service (MPS) uses to project how a staff reduction from an influenza pandemic could impact its 12 core functions. The example shows how one district might estimate the effects of a pandemic on its operations.

The left column of the template lists the 12 "critical activities" or "core business functions" of MPS. Varying levels of staff reduction—25, 40, 60, and 80 percent—are listed across the top of the document.

Each "business unit" in MPS has filled out this template based on that unit's current number of staff and the unit's role in supporting the department's critical functions. The template also captures information on the minimum level of staff resources needed to deliver services at an acceptable level, and identifies at what point during a pandemic the acceptable standard of delivery would no longer be viable.

In the sample provided, for example, the unit has 240 officers that support the department's core function of responding to 999 calls (the third function listed). As the workforce is reduced by 25 percent, the unit would still be able to respond to 999 calls but staff would be required to work rest days and longer shifts. However, once the unit's workforce is reduced by 80 percent, the unit would no longer be able to respond to 999 calls.

OCU/BUSINESS UNIT: Sample

	ACTIVITY OF		NT ESTABLISH		25% ABSTRAG		40% ABSTRA (FROM TOTAL WO		
MPS CRITICAL ACTIVITY (CORE BUSINESS)	OCU/BUSINESS UNIT TO SUPPORT/DELIVER MPS ACTIVITY	POLICE OFFICER	UNIFORM POLICE STAFF	POLICE STAFF	IMPACT ON DELIVERY OF ACTIVITY	Is an accept- able standard of delivery still viable?	IMPACT ON DELIVERY OF ACTIVITY	Is an accept- able standard of delivery still viable?	
RECEIPT OF '999' CALLS	N/A service provided by Information Room								
COMMAND AND CONTROL	CAD Room	8		12	Staff required to work rest days and/or longer shifts	yes	as for 25% and take officers from response teams	yes	
RESPONSE TO '999' CALLS	IBO and Response Teams	240			Staff required to work rest days and/or longer shifts	yes	Staff required to work rest days and/or longer shifts make use of PCSOs to deal with low grade calls	yes	
MAJOR INCIDENT RESPONSE	resources only allocated as and when required from response teams								
CRIME INVESTIGATION	CID, Crime Desk, Telephone reporting Bureau	60		25	Staff required to work rest days and/or longer shifts	yes	Staff required to work rest days and/or longer shifts also prioritise cases	yes	
MAINTENANCE OF PUBLIC ORDER	resources only allocated as and when required from response teams								
CUSTODY MANAGEMENT	Custody Team	11	9		Staff required to work rest days and/or longer shifts	yes	Brigade resources with neighbouring BOCU to have one 'clean' and one 'dirty' custody centre (in case of Pandemic)		
RDPG PROTECTION	not applicable								
HEALTH, SAFETY AND WELFARE OF	no dedicated resources, part of line management								
MPS STAFF CRIMINAL CASE PROGRESSION	responsibility CJU, Property Store	4		32	Staff required to work rest days and/or longer shifts	yes	Staff required to work rest days and/or longer shifts	yes	
COMMUNITY POLICING	Neighbourhood Policing Teams	60	60		Staff required to work rest days and/or longer shifts	yes	Staff required to work rest days and/or longer shifts	yes	
COMMUNICATIONS AND MEDIA HANDLING	Local Press Liaison (all other resources provided by DPA)	1			Continue with role on a part-time basis	yes	as for 25%	yes	
OTHER UNIT ACTIVI	TIES (in order of criticality)								
"MUST DO"	Duties planning, Critical Incident Gold Groups, Respond to PQs, Process Pay and Overtime claims., Daily Briefings	11		30	Staff required to work rest days and/or longer shifts	yes	as for 25%	yes	
"SHOULD DO"	Crime Pattern Analysis, Payment of Invoices, Maintain Front Counters	2	10	18	Staff required to work rest days and/or longer shifts	yes	as for 25% and only open Front Counters 7am–7pm	yes	
DISCRETIONARY	Schools Liaison, Crime Prevention Advice, Local recruiting, open days,	3	1	3	Continue with activities at a reduced capacity	yes	Cease activities and divert resources to critical activities	no	
	TOTAL ESTABLISHMENT	400	80	120	If the OCU/Business Unit continues to per- form the critical and 'must do' activities indicated above, it will have:		If the OCU/Business Unit continues to per- form the critical and 'must do' activities indicated above, it will have:		

Source: London Metropolitan Police Department, 2007

60% ABSTRACTION (FROM TOTAL WORKFORCE)		80% ABSTRACT	RESOU! DELIVE	UM LEVEL OF RCES NECESS. R ACCEPTABLI ERVICE PROVI			
IMPACT ON DELIVERY OF ACTIVITY	Is an accept- able standard of delivery still viable?	IMPACT ON DELIVERY OF ACTIVITY	Is an accept- able standard of delivery still viable?	POLICE OFFICER	UNIFORM POLICE STAFF	POLICE STAFF	Specific skills necessary to undertake the activity
as for 40%	yes	as for 60%	yes	4		8	CAD trained staff only to be used
prioritise calls	yes	only respond to most serious calls	no	84			Minimum requirement for 2 advanced drivers and 4 basic drivers each tour of duty
as for 40%	yes	as for 60%	по	20		7	Requirement for Accredited Investigators to perform particular roles
as for 40%	yes	Close BOCU Custody centre and concentrate resources in Area Bridewells	yes	4	4		Custody Officer must be a minimum rank of Sergeant
Prioritise cases (but caseload will decline due to fewer arrests and greater use of cautions)	yes	as for 60%	no	1		6	
Remaining resources diverted to response policing	no	as for 60%	no	20		40	
as for 40%	yes	as for 60%	yes	1			
as for 40%		as for 60%		7			
as 101 4076	yes	as 101 60%	no	,			
Cease activities and divert resources to critical activities	no	as for 60%	no	1	4	10	
as for 40%	no	as for 60%	no	1		1	
If the OCU/Business Unit continues to perform the critical and 'must do' activities indicated above, it will have:		If the OCU/Business Unit continues to perform the critical and 'must do' activities indicated above, it will have:					
Just enough staff		Insufficient staff					

Recommendations from the Field

he "Summary of Findings" section in Chapter 1 of this document provides a synopsis of the factors that police must consider when writing plans for a flu pandemic, and describes the similarities and differences in PERF's four sites' approaches to these issues. This chapter presents recommendations from the police planning officials who helped develop the flu pandemic plans in each site. These "lessons from the field" may be of particular value to law enforcement and other government officials starting the process of writing pandemic flu plans for their communities.

Start by gaining a thorough understanding of the threat. Before drafting protocols, it is imperative that those who are responsible for the planning have a thorough understanding of the threat, including the impact a flu pandemic may have on the community and on the department's ability to function. Understanding the threat and the issues that will arise will help police officials to accurately assess the planning components and resources needed, as well as to anticipate how a flu pandemic

may change the policing environment and department priorities.

Reach out to subject matter experts for help in the process. As with other emergency planning efforts, flu pandemic planning should be a multi-disciplinary, multi-agency effort. Police planning officials should reach out to other subject matter experts who are involved in the jurisdiction's emergency planning, and engage them in the police department's education and planning efforts. In all four sites, the police departments participated in jurisdiction-wide planning efforts that involved public health and medical officials, who in turn were able to help the police departments educate themselves and develop their own plans. In Toronto, for example, local and national experts in the medical, legal and other relevant fields reviewed the police department's plan. And Toronto and Overland Park police officials worked closely with the city's public health officials to ensure that the citywide plan would be practical and realistic.

Build on existing relationships. To identify local subject matter experts, police officials could reach out to public health or medical officials with whom the department interacts on a routine basis. Several of the police departments in the PERF sites had in-house medical professionals who were deeply involved in the process of writing plans. Representatives from all four sites worked with public health officials at some point in the planning process. The Fairfax County Police Department involved public health officials with whom it worked during the 2001 anthrax attacks. Police officials said that the anthrax investigation was the first time they had officially reached out to health department officials, and those relationships were helpful as they sought out information about influenza pandemics and began coordinating planning efforts. Similarly, the Toronto Police Service worked with public health officials and other experts with whom they had formed relationships during the 2003 SARS outbreak in that city. Lessons learned from the SARS experience were incorporated into the flu pandemic plans.

Look for outside resources and promising approaches in other departments. Many resources are being developed to assist local officials in planning for a public health emergency. For example, the Fairfax County Police Department's planning coordinator and Overland Park's police chief attended national and local conferences and symposiums, and used these events as an opportunity to make contact with national and local experts and others involved in pandemic flu planning. The information and resources provided during these conferences and the contacts made helped both officials make informed planning decisions for their departments.

To date, very few local policing agencies have completed comprehensive plans for a flu pandemic, but as more police departments begin to move forward in the planning process, they may develop resources and planning guidance that will prove useful to other departments' planning processes. Internet search engines also can be useful in finding the most up-to-date information and in identifying law enforcement agencies that have developed plans.

Identify relevant public health laws and authorities. Police department personnel need to become familiar with the relevant public health laws governing any response to a flu pandemic, such as the laws that specify who has the authority to declare a public health emergency, and any laws that give policing agencies special powers during this time. A good understanding of the role of law enforcement in enforcing public health orders will help policing agencies know what will be expected of them in enforcing quarantines and other sensitive matters. Departments may look to local public health officials for assistance in identifying relevant laws and regulations and in determining how this information will be incorporated into their internal flu pandemic response plans and training efforts, as well as in multi-agency efforts.

Include other local criminal justice entities in the planning efforts. Recognize that the other components of the justice system, such as courts, correctional agencies, and other law enforcement departments, will likely be impaired during a pandemic flu. Work with other local criminal justice entities to determine how each agency's plans may overlap and affect those of other criminal justice sectors.

Set realistic expectations of the law enforcement role in a pandemic flu scenario. In writing police plans, be very clear about the ability of the department to assist other agencies during a pandemic flu. In any large-scale emergency, police resources (and the resources of other first responders) can quickly be overwhelmed. In the case of a flu pandemic, police departments are likely to face the additional burden of operating with a reduced workforce, as some of their own officers may become sick or require isolation after being exposed to infected persons. A key part of the jurisdiction-wide planning for a flu pandemic is to identify the priority roles that only law enforcement

agencies can take, and to find alternatives to police assistance where possible.

Be strategic in determining how staffing losses may impact the functioning of the department. Work with each unit in the department to identify its core functions, and think about how the activities required to perform those core functions would be affected during a flu pandemic. Also consider what outside services and resources the department depends on for carrying out these activities, and ensure that those services and resources will be available. Identify police activities that can be suspended if necessary, and decide at what point each activity would be curtailed as a pandemic worsened.

Look for alternative ways to accomplish the functions that are critical and must be maintained—for example, through use of technology and teleworking (see below). Develop strategies for informing the public about the suspension of non-critical law enforcement duties.

Identify the key skills needed to maintain critical functions, and cross-train personnel to provide backup. For critical functions, look for ways to cross-train additional employees to be able to perform these functions if necessary. Identify the special skills required to carry out the critical department functions—especially tasks carried out by small, highly specialized units—and then identify other personnel or volunteers in the department who possess these skills or could be trained in them. The London Metropolitan Police Service updated a pre-existing database that contains the names of employees with particular skills, ranging from training in disarming bombs to fluency in languages, motor vehicle repair skills, and the ability to drive heavy trucks. These staffers could be called on during an emergency to use their skills to perform functions they might not usually perform.

Plan for sustaining law enforcement operations with minimum staffing over the long term. It may become difficult for departments to sustain operations—even those that are given the highest priority—for very long. Within a matter of weeks, a department could find itself operating with half its normal workforce. Officials need to consider how to supplement the department's workforce, for example by using volunteers. Also be aware of the need to prevent burnout and fatigue among the employees who do not become sick, some of whom may try to work many additional hours to help maintain the department's critical functions. The Overland Park chief said that he would resist moving to 12-hour shifts for as long as possible to prevent employee fatigue.

Use existing plans, and incorporate only the new components that are needed during a pandemic flu. Planning for a pandemic flu can be very similar to planning for other types of critical incidents. While there are pandemic flu-specific components that must be planned for (such as preventing disease transmission in the workplace), plans should be flexible and applicable to other types of public health emergencies. In London, for example, the overall emergency planning structure is "modular." Individual modules cover such topics as evacuation of the city, or how mortuaries should plan to handle mass fatalities. Depending on the nature of an emergency, different modules can be taken off the shelf and implemented. In developing pandemic flu plans, London police officials realized that their flu plan could also serve as a "human resource resilience plan" that would be applicable to any event in which the police workforce is diminished.

Build on processes that are already internalized within the department. "Ramping up" operations in response to large events—and subsequently scaling back—is a common practice for police departments. As more departments adopt Comp-Stat or other systems that involve strategically redeploying resources, such changes are becoming ingrained in the daily operating culture of policing. Planning for a pandemic can build on these basic principles. However, it is important to note that there are some departmental functions that traditionally have not needed to ramp up or down to any great extent, such as administrative functions and

building maintenance. Those units may need additional training to become familiar with the concepts of scaling back operations.

Begin department education efforts as soon as possible. An educated workforce will better understand the flu pandemic threat. That will help reduce fear and ensure that if a flu pandemic begins, employees will adhere to good hygiene recommendations that could significantly dampen the spread of the illness. Many educational resources already developed by federal and state health agencies may be easily incorporated into your department's educational efforts. Educate employees about how new plans and policies fit within the existing emergency operations framework. Plans also need to ensure that timely and accurate information will be provided to department personnel during a flu pandemic. The degree to which employees understand pandemic flu will affect the impact of a flu pandemic on the agency's workforce, and how well it is able to communicate information about the threat and manage fear during interactions with the public. (See "Develop a public communication strategy in advance," below.)

Communicate regularly throughout the planning process (both internally and externally). Ongoing communications are imperative to maintaining momentum in the planning process and to ensuring a coordinated response. Police department officials should endeavor to obtain feedback from agency personnel and meet regularly with others involved in the local process, to review the plan and update each other on new planning efforts. For example, London uses regularly scheduled meetings to facilitate continued discussion of its flu pandemic plan at the highest levels of authority.

Regularly update the plan. As new scientific information about pandemic flu becomes available or as situations or resources change, departments should update their plans and make the new versions available to all department personnel. London's Metropolitan Police Service posts department

information and news updates on its Intranet, which personnel are instructed to check daily at the beginning of their shifts. MPS officials are considering using this mechanism to communicate plan updates to their personnel. In Toronto, the Pandemic Planning Committee meets every six months (or as necessary) to discuss the flu pandemic plan, and the Police Service's Public Safety Unit is responsible for updating the plan annually.

Exercise the plan. Incorporate lessons learned and address components that need additional work. Provisions of a pandemic flu plan should be exercised to familiarize personnel with their roles and responsibilities and to identify areas that need additional work. Multi-agency testing of the plan will help identify any misconceptions about roles and responsibilities. Departments should also incorporate lessons that they learn from exercises or actual uses of the plan. For example, Toronto incorporated the lessons learned from its experience with SARS into its current public health emergency/pandemic flu plan. London's Police Service participated in several local and national exercises of the city's plan and identified a few areas for further development, such as local handling of mass fatalities. London's recent experience with the Polonium-210 poisoning of Alexander Litvinenko underscored the importance of obtaining accurate and reliable information about the nature of a public health threat and the risk to first responders.

Use technology as a force multiplier. Be creative in identifying ways in which technology may assist during an emergency. Jurisdictions that have a capacity for "teleworking"—allowing employees to access computer databases from remote locations, including home—should consider how they could use that capacity during a pandemic flu without compromising critical databases. Other strategic uses of technology, such as enabling residents to report nonviolent crimes via the Internet or setting up special hotlines or telephone reporting units,

can lessen the demand on police personnel during a flu pandemic or other critical incident.

Develop a public communication strategy in advance. Work with public health officials to develop messages and strategies for communicating risks to the community. Communications should include accurate and timely information and should follow responsible risk communication guidelines that will reduce unnecessary fear and panic. Messages should be very clear in explaining the threat, providing guidance on what the public should do in the event of an emergency, and emphasizing the importance of voluntary compliance with public health orders (such as self-quarantine and "social distancing" measures that are designed to prevent the congregation of people in movie theaters, churches, nightclubs, or other confined spaces where contagion is likely).

Law enforcement personnel should be well versed in how to describe the pandemic flu threat and the importance of voluntary compliance, so they can improve public understanding in all of their contacts with members of the community. Fairfax County already has prepared pre-written media messages to inform the public about particular types of incidents and events, and the police department is helping to deliver public communications through its community liaison officers when requested. Some departments recommend additional training for key spokespersons on the issue.

Carefully consider the amount and type of personal protective equipment (PPE) and emergency supplies needed, and consider staggered purchases so that equipment with a limited shelf-life will not expire all at once. Departments' health planning officials need to work with other government and law enforcement agencies to determine what types of PPE are being stockpiled locally and

what the department should consider stockpiling on its own. Planning officials should carefully determine what is reasonable to stockpile, in light of the anticipated need for various products and the fact that some products have a limited shelf-life. This should be done with the assistance of the occupational health department and/or within the county/state's guidelines. When stockpiling PPE, Fairfax County recommends making staggered purchases to avoid a "lump sum" investment in PPE that will all expire at the same time (thus requiring another lump-sum investment to maintain the stockpile). Also, carefully consider which types of PPE should remain in a central location and which should be immediately disseminated to personnel. Immediate dissemination of large quantities of PPE may result in undue concern and misuse (or unnecessary use) of the equipment, and will deplete the supply. And some types of PPE can deteriorate if left in the trunk of a police vehicle, for example.¹ Departments may consider setting up priority agreements with vendors to supply additional resources on an as-needed basis.

Review leave policies that may encourage employees to report to work when sick or possibly exposed. Law enforcement officials should review current sick-leave and family-leave policies to ensure that employees who are infected or who may have been exposed to the disease will not report to work. Officials in the studied sites noted that infected employees who report to work can do more harm than good if they infect other employees. The Toronto Police Service has taken this a step further, to the point of quarantining employees who have had an on-the-job exposure to a pandemic flu virus. Based on the city's experience with SARS, the policy provides that such employees will be compensated as if they were "on duty" during their regularly scheduled shifts. Toronto officials believe this will encourage officers to report possible

^{1.} See, for example, http://www.ojp.usdoj.gov/nij/pubs-sum/191518.htm, Guide for the Selection of Personal Protection Equipment for Emergency First Responders, NIJ Guide 102-00. November 2002.

exposures and to comply with quarantine orders. However, London Metropolitan Police Service officials noted that such policies need to be written carefully in order to avoid encouraging excessive absences.

Consider making recommendations that employees can share with family members (i.e., create a family plan). Protecting the families of police department personnel is critical to the continuity of police operations. Including "family plans" in a pandemic flu plan can help ensure that the greatest number of employees possible will report for duty. With this in mind, Fairfax County and the county's police department have issued recommendations to help employees create family emergency plans. They have also provided a list of recommended items for families to stockpile for a pandemic flu, such as water, canned food, antiseptic, and gloves.

CONCLUSION

The experiences of these departments underscore the need to approach the planning process systematically and logically, beginning with a thorough understanding of the issue. Lessons from the field indicate that department officials should focus on developing a flexible plan that builds on current public health recommendations specific to a pandemic flu. Engaging and educating the department, as well as incorporating existing multi-agency planning and emergency response efforts into the plan, will assist in the department's preparation process. As one official noted, "The planning process is just as important as the outcome—you have to go through the educational process of understanding the risk and thinking through the issues to truly understand the impact. Then, you (as a department) are able to break it down to its most simple elements."

List of Resources for Pandemic Flu Planning

POLICE-SPECIFIC LINKS

The Bureau of Justice Assistance has compiled a list of flu pandemic resources that are specific to law enforcement and public safety. Some of the resources include recommendations for flu pandemic planning and discussion of law enforcement roles and how to properly carry out a quarantine. These and other resources can be found at the Bureau of Justice Assistance's links below:

www.ojp.usdoj.gov/BJA/pandemic/pandemic_main.html and

www.ojp.usdoj.gov/BJA/pandemic/resources.html

RELATED LINKS

This link is to the U.S. government's pandemic flu site, a massive resource that is managed by the Department of Health and Human Services. It has tips on flu pandemic planning for various organizations at the federal, state, and local levels regarding flu pandemic planning in the workplace, schools, health care agencies, and communities.

www.pandemicflu.gov/

This link is to the World Health Organization's section on Avian Influenza. It contains reports, news and various other resources. It also lists contacts and cooperating partners who are working on this issue.

www.who.int/topics/avian_influenza/en

This is a link to the National Sheriffs' Association's flu pandemic resource center, which provides a list of various government flu pandemic sites that are pertinent for law enforcement: www.usaonwatch.org/PandemicFlu/Resources4
LawEnforcement_PublicSafety.php

This is a link to the White House's flu pandemic planning section. It has various reports on flu pandemics and pandemic flu planning, including a six-month status report on the implementation of the national strategy for pandemic influenza. www.whitehouse.gov/infocus/pandemicflu

This is a link to the American Red Cross pandemic flu section, which provides some information

about pandemic flu, how to prepare for and respond to a pandemic flu, and how to care for someone who is infected with a pandemic flu.

www.redcross.org/news/ds/panflu/index.html

The following is a list of websites for the police departments that participated in the PERF study:

Fairfax County, VA:

Police: www.fairfaxcounty.gov/police/

Health Department: www.fairfaxcounty.gov/hd/ Office of Emergency Management: www.fairfax

county.gov/oem/

Pandemic Flu Plan: www.fairfaxcounty.gov/ emergency/pandemicflu/countyplan.pdf

Toronto:

www.torontopolice.on.ca/

Health Department: www.toronto.ca/health/

index.htm

Office of Emergency Management:

www.toronto.ca/wes/techservices/oem/index.htm Pandemic Flu Plan: www.toronto.ca/health/ pandemicflu/pdf/toronto_pandemic_influenza_

plan.pdf

Overland Park, KS:

www.opkansas.org/_Res/Police_and_Fire/

Police_Department/index.cfm

Health Department: www.health.jocogov.org/

Office of Emergency Management:

www.jocoem.org/default.htm

Pandemic Flu Plans: www.jocoflu.org/docs/take%

205%20flyer%2005-25-06.pdf

London:

www.met.police.uk/

Health Department: www.dh.gov.uk/en/index.htm Office of Emergency Management: www.london

prepared.gov.uk/

Pandemic Flu Plans:

www.londonprepared.gov.uk/downloads/

flu_pandemic_response_plan_v2.pdf

ADDITIONAL RESOURCES

Continuity of Operations Planning (COOP)

Avian Influenza (Tabletop Exercise Number 1)
Harvard School of Public Health
www.hsph.harvard.edu/hcphp/products/exercises/
HSPH-CPHP%2oAvian%2o&%2oPandemic
%2oInfluenza%2oTabletop.pdf

Federal Guidelines

Model Operational Guidelines for
Disease Exposure Control
The Center for Strategic and International Studies,
Homeland Security Program
www.immunizecaadults.org/healthcare/documents/
draft_homeland_security_guidelines.pdf

Quick Reference Guide for the National Response Plan Department of Homeland Security www.dhs.gov/xlibrary/assets/NRP_Quick_ Reference_Guide_5-22-06.pdf

Policy

Large-Scale Quarantine Following Biological Terrorism in the United States Barbera, Macintyre and Gostin www.jama.ama-assn.org/cgi/reprint/286/21/2711.pdf

Quarantines: The Law Enforcement Role

The Police Chief

http://policechiefmagazine.org/magazine/index.cfm?

fuseaction=display&article_id=807&issue_id=22006

Risk Communication

Anthrax 2001: Observations on the Medical and Public Health Response *Gursky, Inglesby and O'Toole* www.liebertonline.com/doi/pdfplus/10.1089/153871303766275763?cookieSet=1

Crisis Emergency Risk Communication by Leaders for Leaders Centers for Disease Control and Prevention www.cdc.gov/communication/emergency/leaders.pdf

Communicating in a Crisis: Risk Communication Guidelines for Public Officials Department of Health and Human Services www.riskcommunication.samhsa.gov/RiskComm.pdf

Disease, Disaster, and Democracy: The Public's Stake in Health Emergency Planning Schoch-Spana, Monica, et al. www.liebertonline.com/doi/pdf/10.1089/bsp.2006.4.313

Obvious or Suspected, Here or Elsewhere, Now or Then: Paradigms of Emergency Events Sandman, Peter http://www.psandman.com/articles/obvious.pdf Pandemic Flu Public Affairs
Table Top Exercise
Departments of Health and Human Services,
Homeland Security, and Agriculture
http://www.ag-security.com/Library/
Business%2oContinuity/Pandemic%
20Flu%2oTable%2oTop%2o-%2o2oo5.pdf

Preparing for a Pandemic Influenza: A Primer for Governors and Senior State Officials National Governors Association www.nga.org/Files/pdf/o6o7PANDEMICPRIMER.PDF

The Pandemic Influenza Plan:
Implications for Local Law Enforcement
Colwell, Lee. The Police Chief
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About the Authors

Andrea Morrozoff Luna, M.A., PERF Chief of Staff, is the pandemic project director and the coauthor of the Fairfax County and London case studies. Ms. Luna's work at PERF includes directing federally-funded training and technical assistance projects. Currently, she is part of a team that is working on a Bureau of Justice Assistance (BJA) project to develop guidelines and other resources on police planning for a public health emergency, based on promising practices in the field. This project focuses on three areas of planning: occupational medicine, communication of information about risks to the public, and continuity of operations plans. Ms. Luna was also one of four authors of the recent BJA/PERF publication, The Role of Law Enforcement in Public Health Emergencies: Special Considerations for an All-Hazards Approach. Ms. Luna is also working on projects related to other policing topics, including immigration enforcement, violent crime reduction, witness intimidation, and police organizational effectiveness.

Prior to joining PERF, Ms. Luna served in a number criminal justice-related research and program administration positions. She directed the grants and planning section of a state law enforcement agency and served as a state coordinator and director of a federal block grant program for police. She has also managed and participated in several federally funded research programs on crime and justice issues. She earned her master's degree from the University of Memphis and a bachelor's degree from Virginia Polytechnic Institute and State University.

Corina Solé Brito, M.A., a senior associate with PERF's Homeland Security Unit, wrote the Overland

Park and Toronto case studies. She is currently working on the BJA project regarding pandemic planning guidelines for police, and is focusing on occupational health and risk communication issues. Ms. Solé Brito was a coauthor of the BJA/PERF All-Hazards report cited above. She recently oversaw a review of the City of Chicago's Emergency Operations Plan, in which she helped representatives of more than 40 city agencies update their individual plans. She also helped bring the Chicago plan into compliance with NIMS standards.

Ms. Solé Brito also recently worked with several large city agencies across the country to develop a communications tool that would allow them to share information about preparing for and responding to critical incidents. She was the lead author of PERF's "Partnering to Prepare for and Respond to Critical Incidents." She is also working to finalize PERF's curriculum *Improving the Response to Elder Abuse: A Curriculum for Law Enforcement Agencies*.

Ms. Solé Brito served as PERF's Community Policing Consortium Management Team representative for several years and helped create, deliver and oversee problem-solving training and technical assistance across the country. As a senior program manager with the Pacific Institute for Research and Evaluation, she managed data collection and presentation of a document entitled "Costs and Consequences of Substance Use"; oversaw a statewide project on impaired driving; and trained law enforcement representatives in electronic sobriety checkpoint data collection. She has been published in various media, including monographs, textbooks, training curricula, and conference proceedings.

She has also edited several publications for PERF, including three of the four Problem-Oriented Policing Conference Proceedings books, the newsletter *Subject to Debate*, and various problemsolving policing curricula. Ms. Solé Brito has an M.A. in Criminology from the University of Maryland at College Park.

Elizabeth Sanberg, a PERF research assistant with the Homeland Security Unit, co-authored the Fairfax County and London case studies. Currently, she is working on several research and technical assistance projects. Ms. Sanberg is the lead assistant on PERF's immigration initiative, part of 2007 Motorola Critical Issues in Policing Series, which explores the debate regarding local law enforcement of federal immigration laws. She is also the lead author of a guide to occupational health and safety for law enforcement officers, which is part of a project funded by the Bureau of Justice Assistance to develop guides on pandemic planning and preparedness for law enforcement.

Ms. Sanberg contributes to the "Meth 360" program, a methamphetamine demand reduction strategy created by the Partnership for a Drug-Free America, sponsored by the Justice Department's Office of Community Oriented Policing Services. She also is working on a project examining the relationship between law enforcement and state and local intelligence fusion centers, sponsored by the Department of Homeland Security.

Prior to joining PERF, Ms. Sanberg worked at the Justice Research and Statistics Association, where she conducted research on topics including the Weed and Seed program, information sharing technology, sexual assault, and crime victim assistance. She has worked for the Center for Homicide Research, where she researched gay, lesbian, bisexual and transgender homicide. Ms. Sanberg is currently pursuing her Master's Degree in Justice, Law and Society at the American University. She received her bachelor's degree in Sociology—Law, Crime, and Deviance and Political Science from the University of Minnesota.

About the Police Executive Research Forum

he Police Executive Research Forum (PERF) is a professional organization of progressive chief executives of city, county and state law enforcement agencies who collectively serve more than 50 percent of the U.S. population. In addition, PERF has established formal relationships with international police executives and law enforcement organizations from around the globe. Membership includes police chiefs, superintendents, sheriffs, state police directors, university police chiefs, public safety directors, and other law enforcement professionals. Established in 1976 as a nonprofit organization, PERF is unique in its commitment to the application of research in policing and the importance of higher education for police executives. Besides a commitment to police innovation and professionalism, PERF members must hold a four-year college degree.

PERF continues to conduct some of the most innovative police and criminal justice research and provides a wide variety of management and technical assistance programs to police agencies throughout the world. PERF's groundbreaking work on community and problem-oriented policing, racial profiling, use of force, less-lethal weapons, and crime reduction strategies has earned it a prominent position in the police community. PERF is one of the founding agencies of the Community Policing Consortium and the Commission on Accreditation for Law Enforcement Agencies (CALEA). PERF continues to work toward increased professionalism and excellence in the field through its publications and training programs. PERF sponsors and conducts the Senior Management Institute for Police (SMIP). This program provides comprehensive professional management and executive development training to police chiefs and law enforcement executives. Convened annually in Boston, SMIP instructors include professors from leading universities, with the core faculty from Harvard University's Kennedy School of Government.

PERF's success is built on the active involvement of its members. The organization also has types of membership that allow the organization to benefit from the diverse views of criminal justice researchers, law enforcement professionals of all ranks, and others committed to advancing policing services to all communities. As a nonprofit organization, PERF is committed to the application of research in policing and to promoting innovation that will enhance the quality of life in our communities. PERF's objective is to improve the delivery of police services and the effectiveness of crime control through the exercise of strong national leadership, the public debate of criminal justice issues, the development of a body of research about policing, and the provision of vital management services to all police agencies.

PERF has developed and published some of the leading literature in the law enforcement field. Recently, PERF released two publications on contemporary law enforcement issues. The books—entitled Exploring the Challenges of Police Use of Force and Police Management of Mass Demonstrations: Identifying Issues and Successful Approaches—serve as practical guides to help police leaders make more informed decisions. In addition, PERF has released a series of white papers on terrorism in the local law enforcement context, Protecting Your Community from Terrorism: Strategies for Local Law Enforcement, which examined such issues as local-federal partnerships, working with diverse

communities, bioterrorism, and intelligence sharing. Other recent publications include Managing a Multijurisdictional Case: Identifying Lessons Learned from the Sniper Investigation (2004) and Community Policing: The Past, Present and Future (2004). Other PERF titles include the only authoritative work on racial profiling, Racial Profiling: A Principled Response (2001); Recognizing Value in Policing (2002); The Police Response to Mental Illness (2002); Citizen Review Resource Manual (1995); Managing Innovation in Policing (1995); Crime Analysis Through Computer Mapping (1995); And Justice

For All: Understanding and Controlling Police Use of Deadly Force (1995); Why Police Organizations Change: A Study of Community-Oriented Policing (1996); and Police Antidrug Tactics: New Approaches and Applications (1996). PERF publications are used for training and promotion exams and to inform police professionals about innovative approaches to community problems. The hallmark of the program is translating the latest research and thinking about a topic into police practices that can be tailored to the unique needs of a jurisdiction.

To learn more about PERF, visit www.policeforum.org.

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