City of New York Office of Chief Medical Examiner
Mass Fatality Management Guideline Annex:
*Pandemic Influenza Surge Plan*
For Managing In- and Out-of-Hospital Deaths
October 2008

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Healthcare Emergency Preparedness Program (HEPP)
Office of the Assistant Secretary for Preparedness and Response (ASPR)
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The City of New York Office of Chief Medical Examiner (OCME) developed a plan to manage a surge in deaths that may result from a Pandemic Influenza (PI) event affecting New York City (City). This PI Surge Plan is an annex to the City of New York All Hazards Mass Fatality Management Plan, which outlines the City’s all-hazard response strategy for managing mass fatality operations. The concept for managing deaths due to a PI event is simple: the OCME will recover, process, and hold decedents from residential and healthcare facility (HCF) locations until private sector entities are able to manage final disposition. The goal of this OCME response strategy is to honor life by respectfully managing one’s death.

This annex was developed with the support of the City of New York Department of Health and Mental Hygiene’s (DOHMH) Bureau of Communicable Disease, Healthcare Emergency Preparedness Program (HEPP). Additionally, it has been developed in accordance with the Citywide Incident Management System (CIMS), as constructed by the City of New York Office of Emergency Management (OEM), and the PI Phases outlined by the World Health Organization (WHO).

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**Plan Map**

The Pandemic Influenza (PI) Surge Plan for Managing In- and Out-of-Hospital Deaths is an Annex to the City of New York All Hazards Mass Fatality Management Plan.

The Plan Map Table below provides a guide regarding the contents found in the following segments: Introduction to the Plan, Hazard Overview, Function Overview, Decision-Making Strategies, Executive Level Operations, Operational Strategies, Interagency Coordination, Emergency Support Function (ESF) Coordination, OCME Agency Operations and Supporting Technical and Reference Sections addressing Update and Maintenance, Training and Exercises, Key Contact Information, Glossary, Acronyms, and Annexes.

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**Supporting Technical and Reference Sections**

| A | Update and Maintenance | Describes how the Plan will be updated and maintained, including a schedule of activities with specific tasks and deadlines assigned to agencies. |
| B | Training and Exercises | Describes how the Plan is tested and how OEM and agency staffs are trained on the Plan operational elements. |
| C | Key Contact Information | Identifies important contact information. |
| D | Glossary | Defines technical terms used in the Plan, specific to fatality management operations. |
| E | Acronyms | Identifies acronyms used in the Plan and what those acronyms represent. |
Section I: Citywide Plan For Managing Fatalities During a PI Event

This section of the planning document provides information about how New York City Agencies will organize and support fatality management operations, should numerous fatalities occur as a result of a Pandemic Influenza event.
I. Introduction

This segment of the document provides an overview of the Office of Chief Medical Examiner’s fatality management response and its agency authority to manage decedents during a pandemic influenza event.
I. Introduction

Overview

A pandemic influenza (PI) event is defined as a global outbreak of disease in the human population, resulting in serious illness and death. A pandemic event is different from seasonal outbreaks or epidemics, since pandemic outbreaks are caused by new virus subtypes that have never circulated among people, or by subtypes that have not circulated for a long time.\(^1\) When a major change in the virus genetic subtype occurs, usually involving a new hemagglutinin antigen derived from a bird or animal influenza strain, numerous illnesses and deaths result because most humans have no pre-existing immunity.

Some recent historic examples of PI events include:

- **The “Asiatic Flu,”** 1889-1890, caused by the H2N8 flu virus, purportedly having had a very high mortality rate.

- **The “Spanish Flu,”** 1918-1919, a world-wide pandemic caused by a deadly and virulent H1N1 virus. The Centers for Disease Control and Prevention (CDC) estimated the total worldwide related deaths at over 50 million, with more than 675,000 deaths occurring in the United States (US). If this virus occurred today, some studies indicate it would kill approximately 51-81 million people worldwide; with 96% of deaths occurring in developing countries.

- **The “Asian Flu,”** 1957-1958, an H2N2 virus identified in China in late February 1957, which spread to the US by June 1957, resulting in 70,000 US deaths.

- **The “Hong Kong Flu,”** 1968-1969, caused by an H3N2 virus, was first detected in Hong Kong in early 1968 and spread to the US later that year resulting in approximately 34,000 US deaths. The H3N2 virus still circulates today.\(^2\)

The World Health Organization (WHO) suspects the H5N1 virus will be the next virus to cause a PI outbreak. The H5N1 avian influenza strain has currently caused human illness in Asia, Africa and the Middle East. To date, over 300 human cases of H5N1 have been reported, with a greater than 60% fatality rate in humans. Most of these cases, however, were due to direct or indirect exposure to infected poultry and were not the result of human-to-human transmission. While there is currently no imminent threat of a pandemic being caused by H5N1 or any other novel influenza strain, the WHO is concerned about the possibility that this H5N1 viral strain may mutate to a form that is more easily transmittable from person to person and thus cause a PI outbreak.

Recognizing the possibility of a future PI outbreak, key New York City (NYC) government and private sector agencies have conducted planning sessions and developed response strategies both for managing the influx of medical patients and for handling the fatalities.

The City of New York Office of Chief Medical Examiner (OCME), as part of the NYC Department of Health and Mental Hygiene (DOHMH), has developed an annex to its City of New York All Hazards Mass Fatality Management Plan. This annex, entitled “The City of New York Pandemic Influenza Plan For Managing In- and Out-of-Hospital Deaths,” is designed to outline the OCME’s planned response to a naturally occurring influenza outbreak that results in many deaths.

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\(^1\) Centers for Disease Control and Prevention Definition, 2007  
Although the OCME developed this Plan to address the inherent complexities associated with managing PI fatalities, many of its operations, strategies and practices are applicable to other biological outbreaks of disease and events that would require the OCME to expand its capacity to manage mass fatalities.

**Office of Chief Medical Examiner Jurisdictional Authority**

By the provisions of Section 557 of the NYC Charter, the OCME shall have all powers and duties as may be provided by law in respect to bodies of persons dying from criminal violence, by accident, by suicide, suddenly when in apparent health, when unattended by a physician, in a correctional facility, mental health facility, or in any suspicious or unusual manner or where an application is made pursuant to law for a permit to cremate the body of a person.

The OCME may, to the extent permitted by law, provide forensic and related testing and analysis and ancillary services in furtherance of investigations concerning persons both alive and deceased, including but not limited to: performing autopsies; performing deoxyribonucleic acid (DNA) testing and other forms of genetic testing and analysis; obtaining samples and exemplars performing pathology, histology and toxicology testing and analysis; and determining the cause and manner of injuries and/or death.

The OCME shall perform the functions of the city mortuary and related functions, including the removal, transportation and disposal of unclaimed or unidentified remains and the remains of those individuals who have died outside of a medical institution.

At present, the OCME recovers, stores and facilitates decedent final disposition when health care facilities (HCFs) are not able to hold bodies due to a lack of storage space. The OCME currently holds approximately 30 bodies per day on behalf of HCFs.

**Bodies being held include:**

- **Unidentified decedents**—bodies that have not been identified or where contacting next of kin (NOK) is not possible.
- **Unclaimed decedents**—bodies that have been identified, but where NOK has not been identified or has not claimed the body.
- **Claimed decedents**—bodies that have been identified, where the body is being held until the NOK acquires the necessary resources to accomplish final disposition.

The OCME is also responsible for managing final disposition for unidentified and unclaimed bodies and for claimed bodies when requested by the NOK.

In addition to its normal jurisdiction, the OCME is responsible for the Fatality Management Core Competency during disaster events, as specified by NYC’s Emergency Management Plan, Citywide Incident Management System (CIMS).

Moreover, during a declared public health emergency, it may be necessary for the NYC Commissioner of Health (COH) to legally expand the OCME’s authority to include management of all naturally occurring deaths during a PI event. The COH may expand the OCME’s authority in a limited manner, particularly if its involvement helps prevent a potential public health hazard. A more significant expansion of authority will require the issuance of detailed Emergency Orders by the Governor and/or Mayor. In such instances the OCME will contact the General Counsel for Health at DOHMH and the City’s Office of the Corporation Counsel as soon as a public health emergency is anticipated, in order to discuss expanding jurisdictional authority.
II. Hazard Overview

This segment of the document describes the hazards that New York City will likely face during a pandemic influenza event resulting in numerous fatalities.
II. Hazard Overview

Characterization of Deaths Due to a Pandemic Influenza Event

As numerous deaths occur during a PI event, the Office of Chief Medical Examiner (OCME) will characterize the event as a “mass fatality event,” consistent with OCME’s Mass Fatality Incident (MFI) criteria.

Magnitude

National planning experts have not been able to characterize fully how a PI event might unfold. PI deaths will likely increase and decrease in waves, over a 12-18 month period nationally, affecting NYC for several weeks. Many agencies use a 5-7% mortality rate of the infected population (as indicated by the Department of Defense Joint Task Force Civil Support), but vary the time period when these fatalities may occur. Some experts believe a PI event may encompass two or three 8-week periods, spanned over 8-10 months. In any event, the OCME must be prepared simultaneously to recover bodies, conduct operations to identify remains, determine cause and manner of death and, in many cases, facilitate final disposition, in addition to managing its usual caseload.

To understand the magnitude of a PI event in NYC, the OCME worked with the Department of Health and Mental Hygiene (DOHMH) to estimate the number of decedents. Based on NYC’s estimated population of 8.2 million (which increases to about 8.7 million during business hours3), an estimated infection rate of 25-35% of the population and an associated mortality rate of 2.1% of the population infected,4 the OCME must be prepared to manage 51,747 additional decedents. This is more than twice the number of decedents that the OCME processes annually and it must be prepared to manage this influx during an 8-week period. (See figure on pg. 7 for other fatality rate calculations.)

These deaths will occur over the entire 303 square miles that make up New York City’s five boroughs. They will occur at private residences, at NYC’s 68 hospitals, its more than 200 nursing/assisted living homes, its 400-plus clinics and physicians’ offices and at the 11 correctional health care facilities (HCFs) associated with NYC’s prisons.

3 http://www.answers.com/topic/demographics-of-new-york-city
4 Centers for Disease Control and Prevention Pandemic Influenza Website
**Modeling Different Case Fatality Rates for an 8-week Pandemic Influenza (PI) Event using a 30% Influenza Attack Rate**

**Calculation Principles** -
- NYC Population: 8,213,839 (NYC Department of City Planning, Population Division, July 1, 2005).
- 30% Attack Rate - 8,213,839 NYC residents x 30% Attack Rate = 2,464,152 NYC residents infected with influenza during an 8-week pandemic.
- The percentage distribution of location of death in NYC (NYC DOHMH Bureau of Vital Statistics, 2005): 67% in hospital, 12% in assisted living centers, 19% at private residences and 2% in other locations.
- Case Fatality Rates range: 1.1-3.5%. *Note: These numbers serve only to estimate the PI-related death burden on HCFs in NYC and will vary based on the virulence of the actual influenza strain and the virus’ epidemiology. Additionally, the occurrence of deaths most likely will NOT be homogenously distributed among NYC hospitals or long-term care facilities.

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<th>Most Likely Scenario 2.1%</th>
<th>Maximum Scenario 3.5%</th>
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<td><strong>ESTIMATED TOTAL PI-RELATED DECEDENTS OVER AN 8-WEEK PI-EVENT:</strong></td>
<td>27,105.7</td>
<td>51,747.2</td>
<td>86,245.3</td>
</tr>
<tr>
<td><strong>ESTIMATED NUMBERS FOR HOSPITALS:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total in Hospital PI-related Deaths:</td>
<td>18,161</td>
<td>34,671</td>
<td>57,784</td>
</tr>
<tr>
<td>Daily Average of Citywide PI-related Deaths in Hospital over an 8-week Pandemic:</td>
<td>324</td>
<td>619</td>
<td>1,032</td>
</tr>
<tr>
<td>Daily Average of PI-related Deaths at each NYC Hospital (Assuming 68 Hospitals):</td>
<td>5</td>
<td>9</td>
<td>15</td>
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</table>

*Note: 7-21 decedents/day per facility (68) during peak weeks (weeks 6-7) of the outbreak.

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<td><strong>ESTIMATED NUMBERS FOR OTHER LOCATIONS:</strong></td>
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<td></td>
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<tr>
<td>Total Assisted Living Center PI-related Deaths:</td>
<td>3,253</td>
<td>6,210</td>
<td>10,349</td>
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<tr>
<td>Weekly Average of Citywide PI-related Deaths in Nursing Homes over an 8-week Pandemic (Assuming 200 facilities):</td>
<td>59</td>
<td>4</td>
<td>185</td>
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*Note: 3-9 decedents/week per facility (200) during peak weeks (weeks 6-7) of the outbreak.

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<td>Total Residential PI-related Deaths:</td>
<td>5,150</td>
<td>9,832</td>
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<td>Daily Average of Citywide PI-related Deaths in Private Residences over an 8-week Pandemic:</td>
<td>92</td>
<td>176</td>
<td>293</td>
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*Note: 267 decedents/day during peak weeks (weeks 6-7) of the outbreak.

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<td>Total Other Location PI-related Deaths:</td>
<td>542</td>
<td>1,035</td>
<td>1,725</td>
</tr>
<tr>
<td>Daily Average of Citywide PI-related Deaths in all other locations over an 8-week Pandemic:</td>
<td>10</td>
<td>19</td>
<td>31</td>
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</table>

*Note: 28 decedents/per day during peak weeks (weeks 6-7) of the outbreak.
II. Hazard Overview

OCME Normal Daily Case Load

Approximately 75 cases are reported to the OCME each day. On average, 25 (33%) of these cases require an investigation; the remaining 50 cases (67%), which come from hospitals, do not.

Of the 33% of cases that must be investigated, about half require an autopsy. The others require an external exam. Of the 67% of cases that do not require investigation, most are claim-only cases, to be held by OCME pending disposition arrangements by the next of kin (NOK), or are certified at the scene by a medicolegal investigator (MLI) and granted direct release to a licensed funeral director.

Quantitative Hazard Analysis: Trigger Points

Since a PI event can occur before authorities know about the outbreak, the OCME has established caseload hazard trigger points. These will help professionals determine whether a situation that might signal a PI event has occurred.

In addition to identifying an unusual incident, these trigger points are associated with specific response activities. Based on the trigger points, the OCME can modularly increase its capability in relation to the magnitude of the event.

- **60-100 Deaths per Day** — with no surveillance indicators reported by OCME, DOHMH or the Office of Emergency Management (OEM).
- **100-200 Deaths per Day** — with or without surveillance indicators reported by OCME, DOHMH or OEM.
- **200-500 Deaths per Day or Cumulative Total** — additional surveillance indicators should be present.
- **500-2,000 Deaths per Day or Cumulative Total** — additional surveillance indicators should be present.
- **2,000-5,000 Deaths per Day or Cumulative Total** — additional surveillance indicators should be present.
- **5,000 Deaths per Day or Cumulative Total** — additional surveillance indicators should be present.
Qualitative Hazard Analysis Factors

In addition to specific trigger points, OCME must assess several variables when conducting the hazard analysis.

- **Infectiousness/Pathogenicity of the Biological Outbreak** — Although influenza is considered primarily a respiratory pathogen, which means that decedents cannot spread the infection, OCME personnel are still at risk of contracting an infection via exposure to blood and body fluids. Medical Examiners, mortuary staff, embalmers and those handling bodies are also at risk while performing autopsies, as aerosolizing infectious materials can create a respiratory hazard. The DOHMH will work with the OCME to develop and distribute guidance regarding standard precautions or transmission-based precautions that OCME personnel should practice. This information will cover required personal protective equipment (PPE) when performing specific tasks, distribution of prophylactic medications and other health and safety plan recommendations (such as establishing a fever watch program), specific to the disease outbreak. (See Appendix B-8 and E-2 for further information.)

- **Institution of Community Control in New York City** — During an outbreak, DOHMH will assess epidemiologic, clinical and behavioral characteristics of the pandemic virus strain. The Commissioner of Health (COH) will then recommend containment measures to City Hall officials, to limit the spread, morbidity and mortality of the disease. Such community control recommendations may include closing schools, canceling or limiting large public gatherings, issuing hygiene advisories, establishing voluntary isolation of confirmed or suspected cases and their household contacts during specific phases of the PI event, using masks in community settings, issuing travel advisories to and from specific locations, screening people at ports of entry and reducing crowding on mass transit vehicles. It is important to note that these community control measures may also slow responder activities.

- **Differentiation Between Cause of PI Deaths from Other Causes** — General signs and symptoms of an Influenza-Like-Illness (ILI) include a fever greater than 100.4 degrees Fahrenheit, combined with a cough, sore throat or shortness of breath. Laboratory diagnostic testing is the gold standard for identifying the presence of influenza. Immunoassays, a type of rapid antigen testing, can distinguish between Influenza A or B; however, sensitivity is low. Confirmatory testing requires culture and/or polymerase chain reaction (PCR), which detects the molecular structure/typing/subtyping of an influenza strain. The DOHMH may request that the OCME provide additional blood and tissue samples of sentinel cases, during each wave of the outbreak. This will help to distinguish influenza virus strains in patients who contract the virus and become symptomatic, but live, from the influenza strain in cases resulting in death. The DOHMH may also request that the OCME provide additional samples for extensive testing from decedents who were previously vaccinated.
II. Hazard Overview

- **Anticipation of Constraints in the Normal Process** — Several variables have the potential to slow down the process of managing decedents. During a PI event, the OCME has identified the following areas where such bottlenecks are likely to occur.

  - **Signing Death Certificates** - Physicians may not be available to sign death certificates, particularly when their patient dies at home, because they will be focused on providing medical care to the living.

  - **Unidentified Decedents** - During a PI event, decedent’s family members may also be ill and therefore unavailable to identify the body. Normal Disaster Victim Identification (DVI) Committee practices may need to be altered to accommodate a protracted response by family members. Potential delays will also affect the OCME process, since it may be difficult to store remains without implementing temporary interment.

  - **Private Sector Funeral-related Businesses** - Private funeral directors, cemeteries and crematoria may not be able to accommodate the large influx of deaths during a PI outbreak.

  - **Limited Hospital Storage** - Hospitals have limited cold storage facilities for decedents. Even in the best of times, they often require the OCME to hold bodies for them due to limited space.

  - **Decedents Brought to Various City Locations by NOK** - During a PI event, it is also possible that NOK will bring their deceased family members to a HCF, fire house, police station or OCME office, for lack of correct information and instruction.

  - **Death Certificate Registration and Burial/Cremation/Transportation Permit** - Typically funeral directors retrieve the deceased from private residences and HCFs, obtain the signed death certificate, go to the Office of Vital Records to register the death certificate and obtain the burial/cremation/transportation permit. During a PI event, too many funeral directors would converge on one NYC location, attempting to accomplish these tasks.

  - **High Death Rate at Alternate HCFs and Prisons** - These facilities are likely to experience a greater number of deaths than the general public, due to close living quarters and inability to leave the facility.

  - **Unattended Deaths** - Those who die without family and friends present different challenges, including difficulty establishing decedent identity or locating NOK; the ability to enter a residence, requiring the presence of an NYPD Officer; the management of decedent’s pets; and the management of decedent’s estate.
- **Attended Deaths and NOK with Special Needs** - There are times when OCME personnel will recover bodies where a decedent was attended by a family member with special needs, such as a hearing or speech disability or a language barrier. In cases where a NOK requires medication or home health care, there may be a need for the involvement of a social services agency.

- **Homebound Individuals** - Three out of four NYC homebound residents are under the care of a large home care organization. Those not in a home care organization who die from influenza may go undiscovered for several days. Decedents not promptly reported to 911 will decompose and therefore make it more difficult for the OCME to identify the body.

- **Undocumented Persons** - The DOHMH acknowledges that undocumented persons/illegal aliens will encounter barriers to accessing health care during a PI. When the OCME recovers these bodies, they may find other undocumented persons who are unwilling to provide decedent identification.
III. Function Overview

This segment of the document provides an executive summary of the operational strategies necessary to manage an increase in decedents found in and out of health care facilities.
Fatality Management During a Pandemic Influenza (PI) Event

The New York City Office of Chief Medical Examiner (OCME) is prepared to manage multiple types of disaster incidents that would result in numerous fatalities. Past planning and response efforts have focused on fire incidents, such as the Happy Land Social Club fire on March 25, 1990; airline incidents, including the crash of American Airlines Flight 587 in Queens on November 12, 2001; water recoveries like the Staten Island Ferry crash, which occurred on October 15, 2003; terrorist incidents, including the February 26, 1993, World Trade Center bombing and the September 11, 2001, attack on the World Trade Center.

Through experiences such as these, the OCME has become accustomed to dealing with extensive fragmentation, portion reassociation, family grief and tremendous victim identification challenges. Now the OCME must prepare for a different disaster incident—a pandemic influenza (PI) event.

A PI event will be particularly challenging due to the potential for tens-of-thousands to hundreds-of-thousands of deaths to occur. The private sector could be left with the responsibility to deal with decedents, as most naturally occurring deaths never come under the OCME’s jurisdiction. The magnitude of a PI event, however, would demand a response from the OCME, to assist both City health care facilities (HCFs) and to support private sector funeral directors, cemetery/crematorium owners and religious communities. In such an instance, the OCME’s goal would be to provide a service to the community, so that decedents could be cared for respectfully even during a devastating disaster likely to create a “new normal” regarding how human remains are processed.

This planning document will present the OCME’s operational response strategies to arrange for the recovery, transport, storage, tracking and processing of PI and non-PI decedents. These strategies take into consideration expanding the OCME’s capability when mortuary affairs (MA) personnel, equipment and supplies will likely be limited.

This plan was developed in anticipation of responding to a PI event, but many of its tenets have potential application to other biological outbreaks or incidents that exceed the OCME’s current capability, or require a decentralized management approach.

As the OCME learns new methods of managing remains, caring for families and instituting new technology, these lessons will be incorporated into the operational response strategies. They will also be added to the City of New York All Hazards Mass Fatality Management Plan, just as the lessons learned from previous experiences have been implemented and used to formulate this PI Surge Plan.
Primary Objectives Governing the OCME’s Response

- The OCME will coordinate its response activities with the DOHMH to mitigate a public health hazard with regard to decedents.
- The OCME will make every effort to maximize staff safety, in order to prevent secondary exposures.
- The OCME will avoid competing with other agencies to obtain vital resources, by coordinating its requests through New York City’s Emergency Operation Center (EOC).
- The OCME will collect and preserve postmortem and antemortem evidence, required for the determination of the cause and manner of death and for identification of the decedent.
- The OCME will make every effort to minimize the burden placed on NYC’s health care system, by assisting HCFs with storing and processing decedents.
- The OCME will positively identify victims, determine the victim’s cause and manner of death and will release remains to the next of kin (NOK) without delay.
- The OCME will enhance its capabilities to buffer the impact placed on final disposition entities by holding bodies in storage until funeral directors and cemetery/crematorium owners are ready to manage final disposition.

“The people of America will not settle to see fellow Americans going to waste on the street. (Thus,) we must take the mission of mortuary affairs right behind saving lives, (and) its execution must be implemented concurrently.”

Lieutenant General Russell L. Honoré, Commanding General of the U.S. First Army
Former Commander of the Joint Task Force-Katrina
IV. Decision-Making Strategies

This segment of the document identifies Office of Chief Medical Examiner decision-making and emergency declarations strategies that may be implemented during a pandemic influenza event.
IV. Decision-Making Strategies

OCME Decision-Making Strategy

Due to the distributive nature of a pandemic influenza (PI) event, the Office of Chief Medical Examiner (OCME) has created a decision-making strategy that will drive its operational response. The goal is to support widespread recovery and processing of decedents throughout the five boroughs. This strategy allows the OCME the flexibility to manage its daily caseload, in addition to PI-related deaths by allocating a specific percentage of staff and resources to focus solely on the daily caseload and another to manage the PI caseload. The OCME will reallocate the percentage of staff and resources to both caseloads as needs change.

To manage the additional thousands of deaths, the OCME developed a general decision-making strategy based on hazard trigger points identified in the Hazard Overview Section. Each hazard trigger point is associated with an asset mobilization level and specific response activities, to enhance the OCME’s overall response. The various mobilization levels, depicted on the following pages, will guide the OCME response, so that it can modularly increase its capabilities in anticipation of PI-related deaths. The key response activities will reveal how usual processing methods will change to accommodate the increased caseload. These key activities include: recovering decedents from Health Care Facilities (HCF) and residences, medicolegal death investigations (MLI), facility storage, morgue operations and the death certificate registration and burial/cremation permit application process.
## Section I: Citywide Plan For Managing Fatalities During a PI Event

### Mobilization Level

- **60-100 deaths per day; No surveillance indicators**
  - **Tier I**
  - Key Response Activities:
    - RECOVERY - Normal OCME Medical Examiner Transport Team (METT) recovery
    - INVESTIGATIONS - Normal MLI operations.
    - SURVEILLANCE - Normal OCME biosurveillance.
    - STORAGE - Normal OCME facility storage.
    - EXAMINATIONS - Normal external and autopsy practice.
    - DEATH CERT REG - Normal death certificate/burial permit process

- **100-200 deaths per day; +/- surveillance indicators**
  - **Tier II**
  - Key Response Activities:
    - RECOVERY - Enhance METT operations by modifying METT schedule.
    - SURVEILLANCE - Heighten OCME biosurveillance.
    - INVESTIGATIONS - Normal MLI operations.
    - STORAGE - Maximize Borough Office of Chief Medical Examiner (B-OCME) storage facilities with unit shelving and space enhancing techniques.
    - EXAMINATIONS - Normal external and autopsy practice.
    - DEATH CERT REG - Normal death certification/burial permit process.
    - OTHER - Activate Point of Dispensing (POD) request if applicable and vaccine available.

- **200-500 deaths per day or cumulative PI deaths; +/- surveillance indicators**
  - **Tier III**
  - Key Response Activities:
    - RECOVERY - Establish Residential and Body Collection Point (BCP) Recovery Teams.
    - INVESTIGATIONS - MLI investigates a majority of cases by phone with input from the NYPD representative on scene. For cases requiring an on-scene investigation, the MLI will become part of the METT, thereby establishing a Residential Recovery Team (RRT).
    - STORAGE - Enhance storage by placing BCPs at specific HCFs.
    - EXAMINATIONS - Establish an Off-site Morgue (OSM) and Remains Storage Facility (RSF) at each B-OCME to process PI cases. Process daily caseload and suspected PI cases requiring examination/autopsy at B-OCMEs.
    - DEATH CERT REG - Establish Distributed Death Registration Process (DDRP) for registering death certificates and obtaining burial/cremation permits at B-OCMEs and OSMs.
    - OTHER - Activate Point of Dispensing (POD) request if applicable and vaccine available.

- **500-2,000 deaths per day or cumulative PI deaths; +/- surveillance indicators**
  - **Tier IV**
  - Key Response Activities:
    - RECOVERY - Request for outside agency support to assist Recovery Teams. *Note: OCME staff will take on role of Recovery Team Leader (RTL).
    - INVESTIGATIONS - MLI investigates a majority of cases by phone with input from the NYPD representative on scene. For cases requiring an on-scene investigation, the MLI will become part of METT, thereby establishing an RRT.
    - STORAGE - Enhance storage by placing BCPs at additional HCFs as needed.
    - EXAMINATIONS - Establish second OSM with associated RSF at each B-OCME. Continue to process daily caseload and suspected PI cases requiring external exam/autopsy at B-OCME.
    - DEATH CERT REG - Establish DDRP at all new OSMs.

- **2,000-5,000 deaths per day or cumulative PI deaths; +/- surveillance indicators**
  - **Tier V**
  - Key Response Activities:
    - RECOVERY - Continue to request for outside agency support to assist Recovery Teams. OCME staff continues as RTLs.
    - INVESTIGATIONS - MLI investigates a majority of cases by phone with input from NYPD representative on scene. For cases requiring an on-scene investigation, the MLI will become part of METT, thereby establishing an RRT.
    - STORAGE - Enhance storage by placing BCPs at additional HCFs. *Note: families may attempt to bring decedents directly to BCPs, B-OCMEs or OSMs.
    - EXAMINATIONS - Establish third OSM with associated RSF at each B-OCME, based on OCME staffing capability. Continue to process daily caseload and suspected PI cases requiring external exam/autopsy at B-OCME.
    - DEATH CERT REG - Establish DDRP at all new OSMs.

- **>5,000 deaths per day or cumulative PI deaths; +/- surveillance indicators**
  - **Tier VI**
  - Key Response Activities:
    - RECOVERY - Maintain recovery operations.
    - INVESTIGATIONS - MLI investigates a majority of cases by phone with input from NYPD representative on scene. For cases requiring an on-scene investigation, the MLI will become part of METT, thereby establishing an RRT.
    - STORAGE - Maintain BCPs.
    - EXAMINATIONS - Establish Disaster Portable Morgue Unit (DPMU) to handle PI cases that require extensive external exam/autopsy to take burden off B-OCMEs. Maintain OSMs with RSF and B-OCME operations.
    - DEATH CERT REG - Continue DDRP at the DPMU. Maintain DDRP.
### Pandemic Influenza Surge Plan For Managing In- and Out-of-Hospital Deaths

#### IV. Decision-Making Strategies

<table>
<thead>
<tr>
<th>Key Planning Considerations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A PI Event will Affect the Entire Nation and Tax Every Jurisdiction</strong></td>
<td>It is unlikely that professionals from surrounding regions will be able to provide help outside their locale. Local and state authorities throughout the region or the nation will have insufficient personnel, supplies, equipment, and storage to handle the local demand. Thus, the OCME will need to acquire personnel and other resources from within the immediate and nearby jurisdictions.</td>
</tr>
<tr>
<td><strong>Twenty-five to Thirty-five Percent of the Population Will Become Infected</strong></td>
<td>Infection rates will be highest in school-aged children (40%) and decline with age. An average of 20% of working adults will become ill.</td>
</tr>
<tr>
<td><strong>The Case Fatality Rate Will Be Approximately 2.1% of Those Who Become Infected</strong></td>
<td>The OCME anticipates managing approximately 50,000-200,000 additional cases in addition to its usual annual caseload of approximately 25,550 cases per year.</td>
</tr>
<tr>
<td><strong>Pandemic-Like-Illness (PLI) Event Characteristics</strong></td>
<td>A PLI event is not a single incident but an ongoing event occurring in two to three waves, with each wave lasting approximately 2-3 months. During each wave, bodies will need to be recovered throughout NYC and processed at ad hoc morgues until the PI event subsides to the point that normal OCME and funeral industry operations can absorb the additional PI deaths.</td>
</tr>
<tr>
<td><strong>Points of Dispensing (POD)</strong></td>
<td>It is unlikely that PODs for influenza vaccination will be established by the Department of Health and Mental Hygiene (DOHMH) and the Office of Emergency Management (OEM) until after the first or second wave of the PI event, when vaccine is available.</td>
</tr>
<tr>
<td><strong>Limited Staff</strong></td>
<td>OCME personnel will be limited, as they too may become infected with influenza or need to care for their family members. Federal assistance will likely only provide limited supplemental staffing, as Disaster Mortuary Operational Response Team (DMORT) personnel are temporary federalized employees—many of whom operate funeral and mortuary businesses. These team members may need to maintain their primary businesses to support their own community’s increase in PI deaths.</td>
</tr>
<tr>
<td><strong>Limited Resources</strong></td>
<td>Certain types of resources will be more difficult to obtain. The OCME and other death care providers may experience a delay or shortage in obtaining supplies, such as burial caskets.</td>
</tr>
<tr>
<td><strong>Potential for Protracted Response</strong></td>
<td>Even when working to capacity, the OCME and final disposition entities may experience a protracted response due to the magnitude of increased PI deaths.</td>
</tr>
<tr>
<td><strong>Restraints Placed on Public Gathering</strong></td>
<td>City officials may place restraints or prohibitions on community gatherings. This will impact funerals and religious services as well as OCME’s antemortem function, which is typically conducted at the Family Assistance Center (FAC).</td>
</tr>
<tr>
<td><strong>Difficulty Obtaining Signed Death Certificates</strong></td>
<td>Physicians will be inundated with caring for PI patients and will likely be unable or slow to pursue notifications regarding patients who die outside an HCF. Without signed death certificates, funeral directors are not able to process decedents for final disposition.</td>
</tr>
<tr>
<td><strong>Managing the Overflow of Decedents at Several Locations</strong></td>
<td>Funeral directors may not be able to both recover bodies from residential locations and health care sites and continue to conduct other aspects of their service at the same rate as authorities are ready to release remains to their custody.</td>
</tr>
<tr>
<td><strong>Coordinating Final Disposition of Unidentified or Unclaimed Bodies Released to the OCME</strong></td>
<td>Hart Island, the City cemetery managed by the Department of Correction (DOC), has limited burial space. The island may not be able to accommodate a large influx of decedents requiring burial.</td>
</tr>
<tr>
<td><strong>OCME Capacity</strong></td>
<td>OCME processes approximately 25,550 cases annually; it may take more than a year to process, store, track and manage the additional 50,000-200,000 additional fatalities resulting from a PI outbreak.</td>
</tr>
<tr>
<td><strong>Performing Additional Quality Assurance Case Reviews</strong></td>
<td>During disasters, fraudulent cases of death are more likely to occur (e.g., homicide by poisoning being passed off as a PI death); thus the OCME must perform a quality control (QC) check of all OCME cases before decedents are released for final disposition.</td>
</tr>
<tr>
<td><strong>The NYC OCME Uses a Just-in-Time (JIT) Inventory System</strong></td>
<td>This inventory method, which only stocks enough supplies for a short period, will not sufficiently provide the needed resources during a PI event when multiple jurisdictions make the same requests of manufacturers. One specific concern is a shortage of human remains pouches (HRPs).</td>
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<tr>
<td><strong>Unattended Deaths</strong></td>
<td>Management of unattended deaths becomes more challenging during a PI event, as they require the OCME to locate NOK, which is complicated when NOK may be ill, hospitalized, or deceased. This challenge then creates the demand for establishing a means of storing bodies for a longer period of time.</td>
</tr>
<tr>
<td><strong>Family Influence Over Elected Officials</strong></td>
<td>Families will complain to politicians should the OCME not release their loved ones within a traditional time frame. NOK will likely leverage their need to manage the decedent’s estate, which in turn results in City officials applying pressure on the OCME to process bodies more quickly.</td>
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Integrated Decision-Making Strategy

When NYC establishes a Unified Command (UC), the NYC OCME will integrate its decision-making process with those established by DOHMH and OEM. The OCME recognizes that specific actions taken by NYC agencies are necessary to mitigate the effects of a PI event. These actions include: City pre-incident actions, notifications and emergency and disaster declarations to mitigate the effects of a PI event.

New York City (NYC) Pre-incident Actions

During the World Health Organization’s (WHO’s) Interpandemic Period (see text box below), which encompasses Phases 1 and 2, the DOHMH’s primary focus is to ensure that a citywide pandemic plan is developed; to identify crucial gaps in infrastructure, resources, laws or statutes; to develop a strategy to inform key government officials, legislators, health care providers, the public and various stakeholders to address and resolve identified gaps; and to coordinate planning activities with bordering jurisdictions.

World Health Organization Pandemic Influenza Phases

<table>
<thead>
<tr>
<th>Interpandemic Period</th>
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<tbody>
<tr>
<td><strong>Phase 1:</strong> No new influenza virus subtypes have been detected in humans. An influenza virus subtype causing human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.</td>
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<tr>
<td><strong>Phase 2:</strong> No new influenza virus subtypes have been detected in humans; however, a circulating animal influenza virus subtype poses a substantial risk of human disease.</td>
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<tr>
<th>Pandemic Alert Period</th>
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<tr>
<td><strong>Phase 3:</strong> Human infection(s) with a new subtype but no human-to-human spread, or at most, rare instances of spread to a close contact.</td>
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<tr>
<td><strong>Phase 4:</strong> Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting the virus is not well adapted to humans.</td>
</tr>
<tr>
<td><strong>Phase 5:</strong> Larger cluster(s) but human-to-human spread still localized, suggesting the virus is becoming increasingly better adapted to humans but may not yet be fully transmissible; possesses substantial pandemic risk.</td>
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<tr>
<th>Pandemic Period</th>
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<tr>
<td><strong>Phase 6:</strong> Pandemic increased and sustains transmission in general population.</td>
</tr>
</tbody>
</table>
NYC Pre-Incident Actions During the WHO’s Pandemic Alert Period

During the WHO’s Pandemic Alert Period, which encompasses Phases 3, 4 and 5, DOHMH, with support from OEM, will meet with appropriate NYC agencies; modify the plan based on information about the specific pandemic strain; institute enhanced surveillance; communicate to health care providers the need to remain alert for potential travel-related cases of the pandemic strain; prepare plans for vaccine and antiviral distribution as available and as indicated; and notify government officials regarding specific information related to the outbreak. The OEM will ensure that all appropriate agencies are in attendance and have access to any plan modifications as well as additional information related to the outbreak.

Particularly during Phase 5, DOHMH may implement all or part of its response plan, based on the magnitude of the potential PI threat. Coordinating its activities with OEM, the DOHMH will interface with appropriate counterparts at the local, state and federal levels. Specifically, DOHMH will activate and conduct surveillance and epidemiological activities.

During this period, DOHMH may request that the OCME perform autopsies on fatal cases of influenza, unexplained pneumonia or several types of respiratory disease occurring among travelers returning from affected areas overseas. As part of this request, the OCME may need to gather sufficient decedent blood and tissue samples for viral and immuno-histochemical staining and testing.

Incident Actions During the WHO’s Pandemic Period—Surveillance

DOHMH Syndromic Surveillance Response

During the WHO Pandemic Period Phase VI, the DOHMH will rely on traditional and syndromic surveillance techniques to identify the first PI cases. Where traditional surveillance focuses on diagnostic data, syndromic surveillance looks for trends in presenting symptoms before potential cases are diagnostically confirmed through laboratory testing. Syndromic surveillance includes identifying an increase in emergency department (ED) visits, monitoring Emergency Medical Services (EMS) run reports for influenza-like-illness (ILI) and monitoring hospital admissions for specific PI-related signs and symptoms. Syndromic surveillance may also include compiling morbidity reports and laboratory reports and monitoring death certificates, via the Office of Vital Records, for influenza-related mortality.

OCME Surveillance Response

During the WHO’s Pandemic Period, the OCME will help identify sentinel PI cases through autopsy of suspected cases, or DOHMH-identified cases. Such cases will include decedents who die from ILI or febrile respiratory illness without a known etiology and which meet specific clinical and/or epidemiological criteria, such as cases with a known epidemiological link to a confirmed PI case. These initial sentinel cases will require laboratory testing for Influenza A and, if positive, serotyping to identify the influenza strain.

The OCME will also identify and notify the DOHMH of, suspected pediatric influenza mortality cases, particularly during the first wave of the outbreak.

Once pandemic is established in NYC, the DOHMH may request that the OCME investigate unusual PI-related deaths, such as suspected cases of vaccine failure.
Notifications

DOHMH Notification

Once a pandemic is confirmed anywhere in the world, DOHMH will enhance its surveillance practice to detect the arrival of the PI strain in NYC. DOHMH will notify all appropriate NYC agencies and the health care community as soon as the first case of PI is confirmed.

OCME Notifications

Based on the information provided by DOHMH, the OCME will notify appropriate personnel, including key staff personnel assigned to the Area Command (AC)-OCME and B-OCMEs and determine the appropriate Mobilization Level.

Emergency & Disaster Declarations

DOHMH Public Health Emergency Declaration

The DOHMH Commissioner of Health (COH) may declare a Public Health Emergency (PHE) during a PI event. Typical PHE Declarations made by the COH do not require deviation from existing laws and do not require detention of individuals pursuant to NYC Health Code Section 11.5. In instances when the COH believes it may be necessary to extend jurisdiction to secure the public’s health, the COH will coordinate closely with the NYC Office of Corporation Counsel and Office of the Mayor.

Mayoral Disaster Declaration

During PI events, it is likely the Mayor will make a Mayoral Disaster Declaration. Such declarations allow City agencies faster access to resources and funding.

With input from the Primary City Agencies—FDNY, NYPD and DOHMH—a Mayoral Disaster Declaration may include quarantining buildings or jurisdictions or isolating or detaining individuals in their homes in attempts to curb the spread of the disease. Mayoral Disaster Declarations, in addition to Public Health Emergency Declarations, provide greater emphasis of the magnitude of the event and serve to publicly validate the COH’s suspension of specific provisions of the health code or local laws necessary for mitigating the effects of the outbreak.

Gubernatorial Disaster Declaration

Gubernatorial Disaster Declarations are required when state law provisions need to be suspended or activated during a PI event. One example is the need to suspend/alter state credentialing and/or licensing requirements to authorize use of out-of-state personnel. Gubernatorial Disaster Declarations allow local agencies quicker access to state resources and funding.

Presidential Disaster Declarations

Presidential Disaster Declarations allow local and state governments access to federal money and other federal resources.
This segment of the document provides a decision-maker checklist for New York City agency senior leaders to use, should a pandemic influenza event result in numerous decedents.
Executive Level Checklist

The following checklist is intended to guide senior leaders in their agency’s response, should a Pandemic Influenza (PI) event result in numerous in- and out-of-hospital deaths and require their agency’s support to manage decedents.
<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible Party</th>
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<tbody>
<tr>
<td>Notify OCME of possible PI Event having potential to result in numerous fatalities.</td>
<td>DOHMH/OEM/NYPD/FDNY</td>
</tr>
<tr>
<td>Dispatch staff to Incident Command Post (ICP), DOHMH Operation Center (OC) and OEM Emergency Operations Center (EOC).</td>
<td>OCME</td>
</tr>
<tr>
<td>Characterize the incident based on Trigger Point Mobilization Level.</td>
<td>OCME</td>
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<tr>
<td>Establish OCME Area Command Post (ACP) Operations and assign personnel to OCME Area Command (AC) staff positions.</td>
<td>OCME</td>
</tr>
<tr>
<td>Activate/mobilize Borough-OCME (B-OCMEs) Command Posts (CP).</td>
<td>OCME</td>
</tr>
<tr>
<td>Develop Mass Fatality Management (MFM) Operational Plan and Annex to the Incident Action Plan (IAP).</td>
<td>NYPD/DOHMH/OCME</td>
</tr>
<tr>
<td>Determine locations for establishing Body Collection Points (BCP) at various health care facilities (HCF).</td>
<td>OCME/HCFs/OEM Health &amp; Medical ESF</td>
</tr>
<tr>
<td>Approve location for BCP.</td>
<td>Incident Commander</td>
</tr>
<tr>
<td>Expand B-OCME operations as necessary to include establishment of Off-Site Morgues (OSM) and Remains Storage Facilities (RSF).</td>
<td>OCME</td>
</tr>
<tr>
<td>Determine most appropriate means of recovering bodies from residential locations.</td>
<td>OCME</td>
</tr>
<tr>
<td>Determine most appropriate means of coordinating residential recovery of decedents with NYPD when citizens call 911.</td>
<td>NYPD/911/OCME</td>
</tr>
<tr>
<td>Submit resource request to OEM for logistics support.</td>
<td>OCME/OEM</td>
</tr>
<tr>
<td>Determine most appropriate means to temporarily store remains.</td>
<td>OCME</td>
</tr>
<tr>
<td>Determine most appropriate means to temporarily inter remains.</td>
<td>OCME/DOC/Private Sector Entities</td>
</tr>
<tr>
<td>Disseminate health and safety plans (HASP) for personnel handling human remains.</td>
<td>OCME/DOHMH/New York Committee for Occupational Safety and Health (COSH)</td>
</tr>
<tr>
<td>Establish Distributive Death Registration System (DDRS) at appropriate OCME locations.</td>
<td>OCME/DOHMH- Office of Vital Statistics</td>
</tr>
<tr>
<td>Determine most appropriate means of establishing a virtual or physical Family Assistance Center (FAC) location and service.</td>
<td>OCME</td>
</tr>
<tr>
<td>Coordinate establishment of a FAC with NYPD and 311 Missing Persons.</td>
<td>OEM/OCME/NYPD/DoITT/911</td>
</tr>
<tr>
<td>Establish processes, policies and procedures regarding decedent identification for both antemortem and postmortem data collection.</td>
<td>OCME</td>
</tr>
<tr>
<td>Coordinate with funeral directors and religious entities regarding new standards or recommendations regarding decedent management.</td>
<td>OCME</td>
</tr>
<tr>
<td>Provide staff access to anti-viral medications in coordination with DOHMH.</td>
<td>OCME/DOHMH/OEM</td>
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</tbody>
</table>
VI. Operational Strategies

This segment of the document identifies key Office of Chief Medical Examiner operational response strategies and the agencies responsible to implement them to manage numerous decedents during a Pandemic Influenza event.
VI. Operational Strategies

Operational Strategy: Command and Control

Agencies

- New York City Police Department (NYPD)
- Fire Department of the City of New York (FDNY)
- Department of Health and Mental Hygiene (DOHMH)
- Office of Chief Medical Examiner (OCME)
- Office of Emergency Management (OEM)

Overview: During a PI Event

During a Pandemic Influenza (PI) event, NYC’s Primary Agencies—NYPD, FDNY and DOHMH (to include OCME as a DOHMH entity with “Potential Primary Agency” having “legal jurisdiction”)—will establish a Unified Command (UC), to coordinate the City’s response to the PI event. The Primary Agencies will establish Citywide Incident Action Plans (IAPs), which are intended to direct NYC agencies’ responses during each Operational Period (Op Period).

DOHMH will provide subject matter expertise on the following topics: disease surveillance findings, clinical management of influenza cases, guidance on use of vaccinations and antiviral medications, community control measures, laboratory testing, animal-related surveillance and mental health needs assessment/service. DOHMH (OCME) will provide subject matter expertise regarding fatality management operations.

The Incident Command Post (ICP) will be established at a location to be determined and will include representatives from all external agencies involved in mitigating the event.

NYC Emergency Operations Center

OEM, which serves as NYC’s coordinating agency, will assist with obtaining resources, disseminating information to key agencies and establishing the Emergency Operation Center (EOC) Op Period for each phase of the outbreak. OEM has four activation levels with Level 1 being the largest. At the time of activation, the Mayor, OEM Commissioner, or their designees will determine which activation level will be used.
DOHMH Operation Center

If the outbreak reaches World Health Organization (WHO) Pandemic Period stage, DOHMH will fully activate its agency’s command structure to coordinate and organize activities via the DOHMH Operation Center (OC). The DOHMH OC will: establish the agency’s incident objectives, coordinate and control DOHMH activities and develop a decision-making strategy regarding how to contain the outbreak in NYC. Additionally, DOHMH will provide representatives to the NYC EOC and the NYC Incident Command Post (ICP), to facilitate communication between agencies and to mitigate the effects of the outbreak.

The DOHMH will also establish the Unified Health Command (UHC) to coordinate NYC’s health care system’s response. Agencies represented in this committee include, but are not limited to, Greater New York Hospital Association (GNYHA), New York City Health and Hospital Corporation (HHC), New York State Department of Health (NYS DOH), New York City Department of Health and Mental Hygiene (NYC DOHMH) and New York City Regional Emergency Medical System Council (REMSCO). The UHC is likely to become a virtual network composed of senior staff from each agency represented. As a group, the UHC will develop policy and procedure recommendations for the City and State Health Commissioners.

*Note: the UHC is separate from the City EOC Emergency Support Function (ESF) 8 Health and Medical Desk, but it is likely to direct many health and medical activities during biological incidents.

OCME Agency Operations Center

The OCME will activate its OCME Area Command (AC) structure based on information gathered at the DOHMH Operation Center (OC) and will use the AC management structure to coordinate its agency’s activities, resources and personnel. The OCME will establish its Area Command Post (ACP) at 520 First Avenue, which will be termed the Area Command (AC)-OCME (see command diagram on next page). The OCME will use this management structure for a PI event, since deaths will occur throughout NYC, warranting a broader command and control structure than a single incident command structure.

Borough (B)-OCME Commanders will have direct input into the OCME AC structure and will maintain control of all decedent operations in their respective borough. The AC-OCME will centralize planning, logistics, finance and other support services, to ensure that B-OCME operations do not duplicate OCME functions best centralized during a biological outbreak having distributive characteristics. The OCME also will provide representatives to the DOHMH OC during a PI event, to gather and relay information between OCME and DOHMH regarding OCME-processed fatalities. In addition, the OCME will provide a representative to the NYC EOC to: obtain health care facility (HCF) requests for BCPs; gather other relevant information related to the PI event; inform Office of Emergency Management (OEM) of the status of OCME’s response activities; and request additional resources supporting fatality management operations.
VI. Operational Strategies

OCME Area Command Structure
Operational Strategy: Trigger Point — Mobilization Level — Response Activity Strategy

Agencies

• OCME

Overview

To manage the additional thousands of deaths, the OCME has developed a general response strategy based on hazard trigger points (see OCME Decision-Making Strategy for further details pg. 19). Each hazard trigger point is associated with an asset mobilization level and specific response activities, to enhance the OCME’s overall response. The various mobilization levels guide the OCME response, in order to modularly increase its capabilities in anticipation of increased PI-related deaths. The key response activities will reveal how usual processing methods will change to accommodate an increased caseload. These key activities include: recovering decedents from health care facilities (HCFs) and residences, conducting scene investigations, facility storage, morgue operations, death certificate registration, the burial/cremation permit application process and temporary interment.

Operational Strategy: PI Decedent Recovery Strategy for HCFs

Agencies

• OCME
• HCFs

Overview

The OCME will arrange to have Body Collection Points (BCPs) placed at eligible HCFs, to temporarily increase their storage capacity. These refrigerated units can hold approximately 9-44 bodies. The BCPs placed at HCFs should be used for all decedents having died from natural causes, including both PI and non-PI related deaths. It is likely a significant number of decedents will not have a known identity; although these deaths would normally be categorized as a medical examiner (ME) case, the OCME has determined they should be placed in the BCP. The BCP should not, however, be used for any other cases requiring ME investigation (e.g., therapeutic complications, violent deaths including homicides, suicides and accidents and all custody deaths).

The OCME recommends HCFs use their regular morgue to store all cases requiring ME investigation (with the exception of decedents having clearly died from PI related or natural causes). HCFs must provide appropriate facility infrastructure and staff to oversee bodies being placed into the BCPs, to load bodies into the BCPs and to perform security and maintenance. The OCME will coordinate through the EOC to obtain, deliver and move BCPs (both full and empty); to provide basic supplies such as human remains pouches (HRPs); and to arrange for contract support to refuel and provide maintenance on BCP units. Increasing HCFs’ refrigerated storage capacity will help to decrease the number of overall time-critical tasks associated with managing human remains. In addition, coordinating fatality management assets centrally will help NYC agencies avoid competing for limited resources during a disaster event.
VI. Operational Strategies

Operational Strategy: PI Decedent Recovery Strategy for Residential Locations

Agencies

- NYPD
- FDNY
- OCME

Overview

The OCME will recover decedents from residential locations should the normal process of managing non-medical/legal deaths become overwhelmed. It is probable that funeral directors, cemeteries and crematoria may be unable to process remains at the same rate as the OCME, due to the large influx of deaths during a PI outbreak. In such instances, the OCME will: enhance its normal Medical Examiner Transport Teams (METT), establish Residential Recovery Teams (RRT) and sort PI cases requiring scene investigations by phone, based on NYPD findings. These teams will primarily recover decedents from residential locations, but can also be used to recover decedents from HCFs when BCPs are not full, or recover decedents from smaller HCFs (e.g., assisted living facilities that lack facility infrastructure to accommodate placement of BCP).

Operational Strategy: OCME PI Morgue Operations Surge Response Strategy

Agencies

- OCME
- OEM

Overview

The OCME will expand its morgue operations by decentralizing its management approach, giving Borough (B)-OCMEs command and control of decedent operations in their area. B-OCMEs will enhance their current operations by increasing existing storage space, modifying staff schedules and expanding their capability with off-site morgues (OSM). These OSMs will be established in association with B-OCME morgues experiencing an increase in decedents. Primarily, OSMs will be used to process PI cases that require identification and PI evaluation. This will allow B-OCME facilities to process both PI and non-PI cases that require an extensive evaluation and/or autopsy.
Operational Strategy: PI Virtual Family Assistance Center Strategy

Agencies

- OCME
- Department of Information Technology and Telecommunications (DoITT)

Overview

(To be developed)

Operational Strategy: PI Decedent Tracking Strategy

Agencies

- OCME

Overview

The NYC OCME has developed a method of tracking decedents using the Unified Victim Identification System (UVIS). During a PI event, the OCME will use UVIS to track the decedent’s physical location as they move from residential or HCF locations through B-OCMEs, OSMs, Remains Storage Facilities (RSF) and temporary interment sites. UVIS will allow the OCME to track decedents from the time they recover the body through its release from OCME.

One added component of UVIS includes a HCF self-reporting module which will enable HCFs to track decedents. HCFs will be asked to “self-report” decedents requiring the OCME to hold a body for claim and/or process decedents for identification or City-directed burial. Additionally, HCFs will be able to communicate their needs to obtain a BCP, exchange a BCP, refuel or obtain maintenance support via the UVIS application as well as through the Emergency Support Function (ESF) #8 Health and Medical Desk at the NYC EOC.

*Note: The OCME anticipates the UVIS HCF self-reporting module will become available in late 2008.

This is a screenshot of the case in-take screen for the Health Care Facility Self-Reporting Module of UVIS.
VI. Operational Strategies

Operational Strategy: Distributive Death Registration Strategy

Agencies

- OCME
- DOHMH Office of Vital Records

Overview

During a PI event, the Office of Vital Records will coordinate with OCME to establish a Distributed Death Registration Process (DDRP) at each B-OCME and OSM. This method entails the use of the Electronic Death Registration System (EDRS) to facilitate the registering of death certificates and the issuance of burial/cremation/transport permits at remote locations. Funeral directors will be able to retrieve the registered death certificate and associated permits in the same location as the body. This will avoid overwhelming the City’s Central Burial Desk.

Operational Strategy: Temporary Interment Strategy

Agencies

- OCME
- OEM
- NYC Department of Correction (DOC)
- NYC Department of Environmental Protection (DEP)
- Private sector funeral directors, cemetery owners, crematoria owners

Overview

The OCME will implement a tiered approach to storing decedents during a PI event resulting in numerous fatalities.

The first tier requires the use of refrigerated RSFs, placed at B-OCME locations. These RSFs can be organized to facilitate easy storage and retrieval of bodies, since most PI cases will have known identities, as well as medically established cause and manner of death identified on signed death certificates. These cases can be fast tracked, since they are only being held until the private sector can manage final disposition. In the worst circumstances, these cases would be the last ones assigned to temporary in-the-ground interment. Cases where decedent identity is known, but the next of kin (NOK) has not claimed the body, will be held, potentially in different RSFs as long as possible. This group may be considered the second group for temporary in-the-ground interment. Cases with no known identity will be held as long as possible in a separate RSF and may be the first group assigned to temporary in-the-ground interment.
Tier one may also require increasing NYC’s cremation capacity. The OEM, working with the OCME and the DEP, may request modifying existing restrictions, through a Mayoral Emergency Order, to accommodate a large influx of voluntary cremation requests.

When RSFs are at or near capacity and NYC does not have access to additional cold storage units, the OCME will direct temporary interment at the Hart Island Cemetery, managed by the Department of Correction (DOC), as its second tier approach. As of 2007, the DOC reported that Hart Island has two prepared sites able to accommodate 19,200 decedents and an additional undeveloped site to support future interments. Until that site is cleared, however, the DOC cannot estimate its capacity.

The third tier requires the City, coordinating with the OCME, to establish contracts with public and/or private cemeteries capable of accommodating temporary interment for numerous decedents. Contracts must specify the cemetery’s services, including in-the-ground interment, tracking, case record management and the ability to disinter. Contracts may also recommend that cemeteries utilize the Department of Defense’s (DOD’s) temporary mass interment method. This method avoids stacking decedents and minimizes hand digging as part of initial interment and disinterment. (Ten bodies in caskets are placed lengthwise in a long narrow section in the ground. The foot end of one casket is placed in close proximity to the head end of the next casket.)
VII. Interagency Coordination: Office of Emergency Management Operations

This segment of the document identifies a list of tasks and decisions that the Office of Emergency Management may be required to coordinate among New York City agencies to support fatality management during a pandemic influenza event resulting in numerous decedents.
VII. Interagency Coordination: Office of Emergency Management Operations

General

Emergencies in New York City require a coordinated response. The Office of Emergency Management (OEM) works to ensure effective and efficient information gathering, decision making and resource allocation. Operations requiring interagency cooperation will be coordinated through the NYC Emergency Operations Center (EOC), if activated. All fatality management intra-agency operations will be managed from the OCME’s Operations Center (OC).

OEM Planning

The OEM Planning Section is assigned primary responsibility for information management and incident documentation. Citywide planning will be conducted at the EOC or situation room, if activated.

Geographic Information Systems (GIS)

The responsibilities of OEM’s GIS division include:

- Providing maps of emergency routes.
- PI maps should include the following locations:
  - HCFs having Body Collection Points (BCPs)
  - Borough (B)-OCME locations
  - Off-site Morgue (OSM) locations
  - Remains Storage Facility (RSF) locations
  - Temporary Interment locations

The BCP location identified in this document is presented as an example and does not portray a chosen BCP location.
OEM Logistics

The OCME may require OEM Logistics support to enhance their facilities and obtain additional supplies, equipment and personnel. The following list identifies the major facility, equipment and supply requirements associated with specific OCME capabilities as well as skilled personnel capable of supporting OCME operations:

• **B-OCMEs**
  - Equipment—Storage enhancement devices such as three-tier racks
  - Supplies—Human Remains Pouches (HRPs), coffins, standard disinfectant cleaners specific to the influenza virus
  - Personal Protective Equipment (PPE)—Positive Air Powered Respirators (PAPR) and N95 masks if applicable, BioSafety clothing (i.e., gloves, gowns, face protection)
  - IT Connectivity—Distributed Death Registration Process (DDRP) capability, which requires Internet connectivity
  - IT Equipment—Computers and all associated components

• **OCME Points of Dispensing (POD) (if established)**
  - Equipment—General
  - Facility—Determine number of stations and equipment and supply requirements for each
  - Supplies—Medications (as provided by DOHMH)
  - PPE Equipment—Gloves, gowns, N95 masks if applicable, thermometers, blood pressure cuffs, stethoscopes, ears/eyes/nose/throat (EENT) scopes
  - IT Connectivity—Unknown
  - IT Equipment—Computers, printers
  - Other—Education packet about the disease, medication administration protocol, health/fever watch protocol

• **Residential Recovery Teams (RRT)**
  - Vehicle equipment—Refrigerated vehicles able to accommodate approximately 10-15 bodies
  - PPE—N95 masks if applicable, BioSafety clothing
  - Supplies—HRPs, disinfectant cleaners, tagging material
  - IT Equipment—Handheld remote devices to initiate case report in Unified Victim Identification System (UVIS), digital camera
  - Body handling equipment
VII. Interagency Coordination: Office of Emergency Management Operations

• BCP Recovery Teams
  - Contract—BCP contract support for delivery and movement of units from HCFs to B-OCMEs, OSMs and back to HCFs
  - BCP Equipment—Refrigerated vehicles that can hold between 10-15 bodies
  - PPE—N95 masks if applicable, Biosafety clothing
  - Supplies—HRPs to restock HCFs, tagging materials, disinfectant cleaners
  - IT Equipment—Handheld device to scan bar codes into UVIS
  - Body handling equipment—Remains carriers

• BCPs & RSFs
  - Equipment—Refrigerated reefer units
    - 18-wheeler refrigerated combination powered electrical/diesel units
    - CONEX boxes; electrical units
    - Refrigerated tent structures
  - Equipment—Forklifts for placement at B-OCMEs, OSMs and RSFs; lifting devices
  - Body handling equipment—Remains carriers
  - Facility utilities—Power supply
  - Contracts—Delivery, refueling and maintenance
  - Supplies—Tagging materials
  - IT Equipment—Handheld devices to scan bar codes into UVIS and printer to print receipts and report
  - IT Network—including Internet connectivity
  - Supplies—Disinfectant, HRPs
  - Other—Information sheets for each model

• OSMs
  - IT Network—UVIS connection, Internet connectivity to Distributed Death Registration system
  - IT Equipment—Computers, office printers, faxes, communication devices
  - Facility Utilities—Vacuum Assisted Closure (VAC) system; temperature-controlled setting appropriate for working and external weather climate
  - Facility—Physical building to accommodate several workstations
  - Station Equipment—Fingerprinting, external exam, dental X-ray, body X-ray
  - PPE—PAPRs and N95 masks if applicable, BioSafety clothing
• **B-OCME Command Posts**
  - IT Equipment—Computers, status boards, printers, fax machines, telecommunications, radios
  - IT Network—Connectivity with all B-OCMEs, OSMs, RSFs; UVIS
  - Equipment—including, but not limited to, televisions

• **Personnel**
  The OCME may require OEM Logistics support to enhance existing staff using the City’s Medical Reserve Corp. Types of medical providers capable of performing OCME tasks include:
  - Forensic dentists
  - Forensic pathologists
  - Mortuary technicians
  - DNA specialists
  - Medical students
  - Medicolegal Investigators (MLI)
  - Medical scribes
  - Forensic photographers

• **Other types of personnel the OCME may require include:**
  - Call takers, trained by the OCME to inform family members in an appropriate manner and to provide information to the public
  - Family Assistance Center (FAC) personnel, able to obtain antemortem data in a sensitive and compassionate manner; accustomed to asking delicate questions during a highly emotional time for the NOK
  - Body handlers
  - Vehicle drivers, accustomed to driving larger vehicles and capable of handling bodies
Caskets/Coffins

It is likely during a PI event, casket manufacturers will not be able to produce enough caskets to meet demand, to include simple, flat-topped wooden caskets used for City directed burials. Without appropriate caskets/coffins, burials performed at Hart Island and at other cemeteries may slow or periodically stop. The OCME coordinating with OEM, may need to request support from many entities to build caskets/coffins. If non-traditional caskets/ coffins are used, then the OCME should be prepared to provide contractors’ casket specifications.

Finance/Administration

During a PI event, the OCME is likely to require OEM to help establish contract support services. These might include maintenance and other services, such as:

- Facility maintenance for B-OCMEs, BCPs, OSMs, RSFs and the Disaster Portable Morgue Unit (DPMU), if established
- Vehicles and vehicle maintenance for all Residential and BCP Recovery Teams and for final disposition teams, if applicable
- City-managed final disposition or temporary interment, should the Hart Island cemetery reach capacity
- BCP containers, to include a crane and/or crane operators, flatbed trucks and/or roll-off vehicles needed to transport BCPs to their respective area
- Cold storage unit maintenance contracts for refueling, maintenance and movement of BCPs appropriate for each type of refrigerated storage used
- IT support services
- Body containment equipment including, but is not limited to, HRPs, lifting devices and caskets/coffins
- Caskets for both adult and pediatric decedents
This segment of the document lists potential tasks and decisions organized by Emergency Support Functions (ESF) and related to fatality management operations during a pandemic influenza (PI) event. ESF Coordinators may need to implement some, all or other tasks to effectively support fatality management operations during a PI event.
VIII. Emergency Support Function Coordination

**ESF #2: Communications**

*During a PI Event resulting in numerous decedents, the Communications ESF Coordinator will support fatality management operations in the following manner:*

- Provide telephonic connectivity.
- Provide computer connectivity.
- Link the New York City Intranet, CityNet and the Unified Victim Identification System (UVIS).
- Operate technical components of the 311 Call Center.
- Provide data entry into the UVIS.
- Provide computer server support at OCME locations, to enable the Office of Vital Statistics to establish their Electronic Death Registration System (EDRS).
- Support technical logistical support of UVIS operations at the Family Assistance Center (FAC). Presently, the Department of Information Technology and Telecommunications (DoITT) houses all disaster computer technology for the OCME at 520 First Avenue and can be used to establish 12 to 500 workstations within 2 hours. It can also be used to establish a virtual FAC during a PI event. DoITT supported equipment includes desktop personal computers, bar code scanners, printers, a stand-alone network server and an information technology (IT) trailer to allow network connectivity and phone service.
- Establish information technology infrastructure to set up UVIS at Borough (B)-OCMEs, Off-Site Morgues (OSMs) and Remains Storage Facilities (RSFs), including the use of UVIS by the OCME’s Residential and BCP Recovery Teams.

**ESF #7: Logistics**

*During a PI Event resulting in numerous decedents the Utilities ESF Coordinator will support fatality management operations in the following manner:*

- Establish appropriate utility infrastructure at B-OCME locations to support OSMs and RSFs.
- Establish appropriate utility infrastructure to support OCME’s Disaster Portable Morgue Unit (DPMU) if required.
- Establish appropriate utility infrastructure to support OCME Family Assistance Center (FAC) operations, if required.
- Obtain personnel to fill specific OCME tasks, including, but not limited to:
  - Forensic dentists
  - Pathologists
  - Mortuary technicians
  - DNA specialists
ESF #7: Logistics continued

- Medical students
- Medicolegal Investigators
- Medical scribes
- Call takers, whom the OCME will train to appropriately inform family members and provide information to the public
- FAC personnel, capable of obtaining antemortem data in a sensitive and compassionate manner and who are accustomed to asking delicate questions during a highly emotional time for the next of kin (NOK)
- Body handlers
- Vehicle drivers, accustomed to driving larger vehicles and capable of handling bodies

- Obtain vehicles having refrigerated capability for the Office of Chief Medical Examiner (OCME) to use to retrieve decedents at residential locations.
- Obtain 18-wheeler refrigerated units suitable for the OCME to use as Body Collection Points (BCPs), i.e., clean, no agency or commercial identification marks, preferably white exterior, metal floors.
- Obtain CONEX refrigerated units suitable for the OCME to use as BCPs, i.e., clean, no agency or commercial identification marks, preferably white exterior, metal floors.

ESF #8: Health and Medical

During a PI Event resulting in numerous decedents, the Health & Medical ESF Coordinator will support fatality management operations in the following manner:

- Provide City decision makers with technical information regarding the public health affects of PI event.
- Coordinate with FDNY and Regional Emergency Medical Services Council (REMSCO) to assess how pre-hospital care agencies will manage patients designated as dead-on-arrival (DOA), or to determine what to do when providers pronounce death with the permission of an on-line Medical Control Physician.
- Coordinate with OCME regarding HCF requests for establishing and maintaining BCPs at their location.
- Coordinate HCF requests for additional Human Remains Pouches (HRPs) with OCME.
- Communicate with HCFs to request NYPD investigations of decedents brought directly to HCFs.
- Coordinate with Joint Information Center (JIC), located at the Emergency Operations Center, to make public statements advising NOK against dropping off decedents at HCFs.
- Support decedent management operations by arranging for the recovery; transport; temporary storage; tracking, processing; temporary interment, if warranted and release to final disposition of all decedents during a PI event.
VIII. Emergency Support Function Coordination

**ESF #13: Public Safety and Security**

*During a PI Event resulting in numerous decedents, the Public Safety and Security ESF Coordinator will support fatality management operations in the following manner:*

- Investigate reports of deaths called in to the 911 Center, by responding to residential/business locations and by requesting Emergency Medical Service (EMS) and/or OCME support as appropriate. For decedents, NYPD will continue to secure the body until OCME personnel take custody of the body.
- Identify missing persons utilizing the UVIS initiated at the 311 Call Center with OCME support.
- Staff the FAC, which may be a virtual FAC during a PI event. This staff will assist with NOK notifications of death and missing persons’ interviews for the purpose of gathering relevant information to support investigations.
- Disseminate information from One Police Plaza to precincts citywide, so that officers and detectives are familiar with any changes regarding NYPD’s approach to managing citizen reports of death.
- Secure decedent’s estate, as is customary and contact the County Public Administrator to safeguard possessions until arrangements can be made with the NOK.
- Provide morgue security at specific NYC locations.
- Provide technical resources to OCME operations, such as fingerprinting decedents.
- Respond to the OCME, HCFs and FDNY locations when NOK bring decedents to these locations.

**ESF #14: Long-Term Community Recovery and Mitigation**

*During a PI Event resulting in numerous decedents, Long-Term Community Recovery and Mitigation ESF Coordinator will support fatality management operations in the following manner:*

- Project future impact that management of decedents will have on the community and recommend allocating appropriate financial resources, as management of decedents extends months and potentially years past the PI event.
During a PI Event resulting in numerous decedents, the External Affairs ESF Coordinator will support fatality management operations in the following manner:

- Notify local, state and federal elected officials in the affected areas regarding the number of decedents resulting from the disaster event.
- Notify District Managers of Community Boards, in concert with the Community Assistance Unit representative in the EOC, regarding:
  - Locations and procedures for FACs
  - Residential Recovery Operations
  - BCPs Operations at HCFs
  - OSM Operations
  - RSFs
  - Temporary interment locations and procedures
  - Distributive Death Registration System (DDRS) locations and procedures
- Work with Public Information Officers (PIO) to gather information appropriate for sharing with elected officials.
- Organize conference call(s) with appropriate OEM officials and elected officials regarding management of in- and out-of-hospital deaths.
- Respond to calls from elected officials.
- Liaise with the following private sector agencies to identify impacts:
  - Funeral directors
  - Cemetery owners
  - Crematorium owners
  - Religious entities
  - Casket and urn manufacturers
  - Embalming suppliers
- Work with the private sector to disseminate public information through CorpNet.
IX. Agency Operations

This segment of the document identifies a list of potential tasks and decisions that New York City agencies may need to execute in support of fatality management operations during a Pandemic Influenza event.
IX. Agency Operations

City of New York Office of Chief Medical Examiner

The OCME will direct and oversee the processes associated with management of human remains during a PI event. Accordingly, the OCME has developed several strategies to relieve HCFs and the funeral industry of the burden associated with managing numerous decedents. The OCME will arrange for the recovery, transport, storage, tracking and processing of decedents, in order to ascertain decedent identification, as well as cause and manner of death. The primary responsibilities of the OCME during the PI event will include the following:

- Assist HCFs with storage of bodies when their morgue capacity is exceeded, by establishing BCPs at their location.
- Hold decedents until funeral directors, cemeteries and crematoria are able to execute final disposition of the remains.
- Arrange City burial/final disposition of unclaimed and unidentified bodies released to the OCME.
- Coordinate temporary interment if necessary.
- Identify decedents utilizing scientific methods, including fingerprints, DNA and dental X-rays, when decedents cannot be otherwise identified, (e.g., during advanced stages of decomposition).
- Create a means of identifying decedents that is sensitive to family members (e.g., not overwhelming NOK by showing pictures of multiple decedents to establish identification).
- Process and maintain the daily OCME caseload.
- Perform quality control case review to identify case reports requiring additional data and/or detect fraudulent cases, which may or may not be related to the influenza outbreak. (Cases of fraud are more apt to occur during disaster events.)
- Conduct medicolegal investigations to determine cause and manner of death for all suspected PI cases by phone/scene investigation, external exam and autopsy if indicated.
- Assist DOHMH by performing relevant examination and/or autopsy of sentinel PI cases, provide OCME statistics and obtain blood samples and other tissue samples for laboratory analysis to determine virus strain, type and subtype.
New York City Department of Health and Mental Hygiene

During biological outbreaks, the New York City Department of Health and Mental Hygiene (DOHMH) is considered a “Primary Agency” under the Citywide Incident Management System (CIMS), responsible for managing the disaster event.

During a PI event, the DOHMH will activate its Incident Command System (ICS) in order to coordinate and sustain its agency’s response to the event; facilitate communications and information dissemination to other key agencies, meaning the health care community and the public; and provide technical information needed for City agency decision making. The DOHMH response will be integrated with other City agencies through a Unified Command (UC), as mandated by CIMS for a public health emergency. The DOHMH will provide subject matter expertise to manage the biological outbreak in support of the other City Primary Agencies, NYPD and FDNY.


**Surveillance and Epidemiology:** DOHMH will conduct surveillance during the World Health Organization’s (WHO) Pandemic Alert and Pandemic Period, to monitor for the introduction and impact of potential or confirmed pandemic strains in the City. This will help guide clinical and public health decisions, including how best to use limited medical resources such as antiviral drugs and ventilators.

- During the Pandemic Alert Period: DOHMH will enhance surveillance of the potential PI strain to ensure swift detection of its arrival in NYC, so that initial cases can be detected.
- During the Pandemic Period: DOHMH will monitor trends in influenza-related hospitalizations and deaths and will conduct investigations to describe the epidemiologic and clinical features of the outbreak (e.g., age-related morbidity and mortality trends, transmission factors, predictors of survival, antiviral resistance and vaccine failures and unexpected complications). After the first pandemic wave, surveillance will continue to monitor for second and subsequent waves.

**Laboratory Testing:** The Public Health Laboratory (PHL), which has virus isolation capabilities, is licensed to perform rapid antigen testing. PHL will provide reference laboratory services to confirm the initial cases of PI in NYC and will facilitate collaboration between the NYS DOH and the CDC, to monitor changes in PI strain characteristics, including antiviral susceptibility.

**Community Control Measures:** Based on the epidemiologic, clinical and behavioral characteristics of the pandemic strain, the DOHMH will recommend containment measures to limit the spread, morbidity and mortality of the outbreak, while minimizing social disruption and cost. School closures, cancellation of large public gatherings and hygiene advisories (e.g., hand washing, wearing of masks) are examples of measures that might be taken.

**Health Care Planning and Emergency Response:** DOHMH will work with the Greater New York Hospital Association (GNYHA), the NYC Health and Hospitals Corporation (HHC) and other key partners to monitor and address staffing, supply and equipment resource needs of HCFs during a PI event. In addition, DOHMH will provide guidance to HCFs for managing patient surge and implementing screening and isolation protocols, to ensure efficient use limited resources. In close coordination with New York State Department of Health (NYS DOH), when indicated, the DOHMH will also provide guidance on altering standards of care to help maximize the ability of the health care system to provide care to those most likely to benefit. Finally, DOHMH will assist in implementing screening and isolation protocols.
IX. Agency Operations

**Antiviral Prophylaxis:** NYC will request antiviral drugs from both the Strategic National Stockpile (SNS) and NYS DOH, for distribution to HCFs treating PI patients. If supplies are limited, antiviral drugs will be used only for treatment, not for prophylaxis and will be distributed based on prioritization guidelines adapted from the federal government.

**Vaccination:** It is unlikely that a vaccine effective for the PI strain will be available until 6-9 months after the pandemic is detected. It is expected that initial supplies will be limited in quantity and will be under the control of the federal government. The DOHMH will distribute vaccine to HCFs through established distribution systems, private physicians’ offices and employee health programs for those agencies providing essential services (e.g., first responders).

**Mental Health Needs Assessment and Service Coordination:** A PI event is anticipated to have far-reaching psychosocial consequences for a large proportion of the population. Interventions will be directly targeted to affected communities; to physicians and other front-line health care workers; and to populations such as children, the homeless and the homebound and those who may be especially vulnerable to mental health consequences of a PI event.

**Communications:** Given the many unique issues associated with a PI event (e.g., the shortage of vaccines or medicines to prevent or treat people and the need to prioritize hospital care for those most likely to benefit), communications activities will focus on educating the public and guiding the health care community. During all PI phases, communications will be accurate, consistent and frequent and will utilize the media, the City’s 311 Call Center, educational tools and the DOHMH Web site. DOHMH will define and test communications, prepare communication tools in advance, train key staff in crisis and risk communication and maintain relationships with critical community partners. Language needs for materials have been identified and messages will be developed to meet the needs of special and vulnerable populations.

**DOHMH Office of Vital Records:** Within DOHMH’s Division of Epidemiology, the Bureau of Vital Statistics carries out the registration, processing and analysis of all vital events in NYC, including births, deaths and spontaneous and induced terminations of pregnancy.

**During a PI event, the Office of Vital Records will coordinate with the OCME to ensure accurate and complete tracking of PI related deaths. Specific responsibilities may include:**

- Providing certified copies, corrections, analysis and dissemination of vital record data
- Maintaining 24-hour, 7-days-a-week tracking of all deaths
- Providing mortality statistics to determine populations at risk
- Registering death certificates, which typically must be accomplished within 72 hours of the death unless that requirement is suspended by Mayoral Order
- Issuing burial/cremation/transport permits
- Establishing a DDR function at each B-OCME office and OSM; and overseeing implementation of the Electronic Death Registration System (EDRS) to facilitate the registering of death certificates and the issuance of burial/cremation/transport permits at remote locations, in coordination with OCME and funeral directors.
New York City Office of Emergency Management

The Office of Emergency Management (OEM) acts as NYC’s coordinating agency during disaster events. The OEM ensures that CIMS command structure is in place for all incidents; coordinates resources for response and recovery agencies; and relays situational information and emergency response activities via the EOC and to elected officials. The OEM supports logistics and communication needs; locates subject matter experts, as needed; facilitates transition of command; and resolves interagency conflict.

During disaster events, OEM coordinates with all appropriate local agencies to obtain needed resources for mitigating the event. For all declared disasters, OEM will also notify, inform and coordinate its actions with the New York State Emergency Management Office (SEMO), to obtain resources not located within the city. Should the City require resources that are unavailable in NYC, the surrounding area or NYS, OEM works with SEMO to obtain federal assets.

During a PI event, OEM:

• **Coordinate Local, State and Federal Disaster Response** — by activating the City’s EOC and by helping political entities determine if the incident warrants an Emergency Proclamation. Under state and federal law, disaster declarations open the possibility of additional resource allocations, cost sharing and both emergency and long-term disaster relief measures.

• **Provide Situational Assessments and Awareness** — by collecting, processing and sharing information required by agencies in the EOC. This may take the form of consolidating agency/jurisdictional situation reports, obtaining supplemental information and preparing maps and status boards.

• **Establish Coordination with Agency/Political Entities** — by working with elected and appointed officials at all levels of government. Allocation of scarce resources may require immediate and close coordination with elected officials.

• **Convene a Joint Information Center** — by working with the Mayor’s Press Office and the Primary Public Information Officer (PIO). OEM will convene a Joint Information Center (JIC), staffed by appropriate Supporting Agency spokespersons. The JIC is responsible for ensuring information given to the media and the public is accurate and consistent. The lead JIC spokesperson will be selected from the Primary Agency or agencies if a Unified Command (UC) is established. Often the Primary Agencies will jointly select a lead PIO, unless superseded by the Mayor’s Press Office.

• **Facilitate the Execution of the Point of Dispensing (POD) Plan with DOHMH** — by coordinating logistical support when a POD is appropriate and citizens require mass prophylaxis.

• **Identify and Allocate Critical Resources** — by determining which critical resources can be acquired from NYC or external agencies. Procedures for acquiring outside resources will vary depending upon the agencies involved, pre-existing agreements and the involvement of state and federal agencies.
IX. Agency Operations

New York City Police Department

The mission of the New York City Police Department (NYPD) is to enhance the quality of life in the City by working in partnership with the community and in accordance with constitutional rights to enforce the law, preserve the peace, reduce fear and provide a safe environment. During emergency management incidents, NYPD retains several core competencies. Specific to decedents, NYPD’s core competencies include law enforcement; investigation and crime scene processing/evidence preservation; and site management, including site security and force protection.

When the mayor declares an emergency under Article 2B of the Executive Law during a PI event, NYPD is responsible for investigating all deaths reported to 911, in order to rule out criminal activity. The NYPD is also responsible for notifying the NOK and guarding decedents until they are transferred to either a licensed funeral director or the OCME.

NYPD will continue to respond to all reports of possible death in the usual manner. This includes responding to all possible DOA calls made to 911, going to the incident sites and ensuring that remains of all confirmed decedents are released appropriately. Since NYPD cannot pronounce a patient’s death, they must wait until an appropriate provider, such as an Emergency Medical Technician (EMT), paramedic, nurse or physician arrive on-scene to make this pronouncement.

With regard to decedents, NYPD will:

- Become a Primary Agency, along with DOHMH (OCME) and FDNY under CIMS, for managing the outbreak.
- Investigate reports of deaths that citizens call in to the 911 Call Center, by responding to residential/business locations and requesting EMS and/or OCME support as appropriate. For decedents, NYPD will continue to secure the body until OCME personnel conduct its investigation and take custody of the body.
- Staff the FAC, which may be a virtual FAC during a PI event, to assist with NOK notification of death and missing persons’ interviews, for the purpose of gathering relevant information to support investigations.
- Disseminate information from One Police Plaza to the precincts citywide, so that officers and detectives are familiar with any changes regarding NYPD’s approach to managing citizen reports of death.
- Secure decedent’s estate, as is customary and contact the County Public Administrator to safeguard possessions until arrangements can be made with the NOK.
- Provide morgue security at specific City locations, as requested by OCME.
- Provide technical resources, such as fingerprinting decedents, to OCME.
- Respond to the OCME, HCFs and FDNY locations when NOK bring decedents directly to these locations.

Unified Victim Identification System

There are several modules to the Unified Victim Identification System (UVIS) that facilitate the NYPD and OCME Missing Persons Operation, other than the 311 information gathering and prioritization. They include the following:

- Management of Antemortem Data—Antemortem data gathered by NYPD and/or OCME personnel is entered into UVIS. UVIS will be set up at the FAC during a disaster in order to facilitate gathering antemortem data.
- Management of Postmortem Data—Postmortem data following external exam or autopsy is entered as part of OCME’s case management process.
- Management of Decedent Identification—A Disaster Victim Identification Module (DV) automatically compares antemortem and postmortem data to assist with positively identifying decedents.
New York City Department of Information Technology and Telecommunications

NYC’s Department of Information Technology and Telecommunications (DoITT) oversees the City’s use of existing and emerging information technologies, both in government operations and in the City’s delivery of services to the public. DoITT’s mission is to improve governmental efficiency through technology and to make communication with government straightforward and clear.

During a PI event, DoITT will:

- Provide telephonic connectivity.
- Provide computer connectivity.
- Link the NYC Intranet, CityNet and the UVIS system.
- Operate technical components of the 311 Call Center.
- Provide data entry into the UVIS.
- Provide computer server support at OCME locations for the Office of Vital Statistics, to establish their DDR System.
- Offer technical and logistics support for UVIS operations at the Family Assistance Center (FAC). Presently, DoITT houses all OCME disaster computer technology at 520 First Avenue, where 12 to 500 workstations can be set up within 2 hours. This same set up can be used to establish a virtual FAC during a PI event. DoITT-supported equipment includes desktop personal computers, bar code scanners, printers, a stand-alone network server and an IT trailer which allows network connectivity and phone service.
- Establish IT infrastructure to set up UVIS at B-OCMEs, OSMs and RSFs, including the use of UVIS by the OCME’s Residential and BCP Recovery Teams.

City of New York 311 Call Center

The 311 Call Center is the general call number for NYC visitors and residents to use to report and/or gather information about various aspects of the City. During disasters, it is the call number to report missing persons. As part of its missing persons service, 311 utilizes the Unified Victim Identification System (UVIS) developed jointly by the NYPD and OCME in order to facilitate missing persons investigations. Operators gather specific caller information and enter it into UVIS to develop a list of missing persons. The system is able to compare and delete duplicate records, which typically occur when several family members and/or friends report the same missing person. It is also able to prioritize its lists by those most likely to be missing, based on specific parameters related to the disaster event. The NYPD will follow up on all reports of missing persons.

During a PI event, the 311 Call Center will:

- Initiate all missing person reports using the UVIS system.
- Transfer all calls reporting a death to the NYPD 911 Center.

Unified Victim Identification System (continued)

- Decedent Tracking-UVIS electronically tracks decedent’s physical remains from the time OCME takes possession/responsibility until decedents are released for final disposition or City burial. This is very helpful when: remains must pass through several different physical locations; multiple specimens are sent to various labs; and/or body portions and/or personal effects (PE) must be reassociated before the body is released.
- Management of BCP Requests-HCFs will be able to communicate their needs to obtain, exchange, refuel or obtain maintenance support of a BCP via the UVIS application to the ESF 8 Health and Medical Desk at the NYC EOC.
IX. Agency Operations

New York City Health Care Facilities

During a PI event, NYC’s health care facilities (HCFs) will focus on caring for the living, but will also need to manage those who die under their care. To avoid competing for mortuary resources, the OCME will coordinate with City HCFs to manage decedents.

Specifically, HCF’s will:

- Submit requests for decedent support through their representative at the City’s EOC ESF #8 Health and Medical Desk.
- Request a Body Collection Point (BCP) via the Health and Medical Desk or UVIS to store decedents of natural causes, both PI and non-PI related.
- Report cases requiring Medical Examiner (ME) investigation to OCME as usual (e.g., homicides, suicides, therapeutic complications and meningitis cases).
- Report PI event-related deaths to the OCME, until BCPs are established at HCFs. Once this occurs, HCFs must report PI deaths to their representative at the City EOC at designated times, in accordance with the EOC Op Period established by OEM and other key agencies.
- Ensure the necessary infrastructure is in place to support a BCP.
- Maintain resources to support a BCP via the OCME representative at the City’s EOC ESF #8 Health and Medical Desk.
- Direct physicians to sign death certificates and file death certificates as normal, until BCPs are established at their HCF, which is an indication that the normal process must be altered to keep up with the surge in decedents. At that point, HCF personnel will direct physicians to sign death certificates as usual, but not to file death certificates unless they have access to the DOHMH EDRS. The OCME will do this in coordination with the Office of Vital Records, located at each B-OCME and OSM location.
- Direct physicians to identify PI as primary or secondary cause of death on death certificates, if appropriate, to facilitate tracking of PI-related deaths by DOHMH.
- Maintain and return decedent personal effects (PE) and property, as usual, until reclaimed/returned to the NOK.
- Document and track PI and non-PI bodies until they are transferred to the OCME.
- Secure bodies until OCME collects them using HCF security personnel or an appropriately assigned substitute.
- Relinquish possession of the body to the OCME or funeral director for all PI and non-PI cases as appropriate.
OCME’s Management of In-Hospital Deaths Using Body Collection Points

What Healthcare Facilities Need to Know

Predicted Issues for Health Care Facilities (HCF) During a PI Event

• HCFs will be overwhelmed by providing medical care for PI casualties and managing in-hospital deaths, in addition to their usual caseload.
• HCFs do not have significant decedent storage space and will require additional space and support.
• During a PI event, HCFs will look to the OCME to assist with their storage needs, as they do routinely.

Numbers of HCFs Likely to Need Support

• Hospitals (68), which includes Veteran Administration, Pediatric and Acute Care Facility Hospitals
• Prison Health Care facilities (11)
• Assisted living/nursing homes (approximately 200)

OCME’s Use of Body Collection Points (BCPs)

Types of BCPs

• BCPs are refrigerated reefers or cold storage units that can hold approximately 9-44 bodies. With shelving units, BCP can hold approximately twice as many. Shelving units should not typically exceed waist level, as bodies become too difficult to manage at greater heights. It is unlikely that initial BCPs will have shelving units.
• BCPs typically have metal floors; the OCME will avoid obtaining reefers with porous wooden floors for sanitary and health reasons.
  – Trailer BCPs are typically 52-ft.-long by 9-ft-wide, with the trailer floor sitting high off the ground. HCFs should place these types of units at a loading dock, or be prepared to place bodies on a pallet and lift them into the trailer with a forklift. In some instances, trailer BCPs may come with a built-in tailgate lift. Delivery of this unit requires an 18-wheel front-end vehicle.
  – Most trailer BCPs will be dual powered by electric (230 volts, 3-phase, 50 amps circuit) and diesel fuel, but some BCPs may be powered by either electric or diesel fuel.
  – Diesel-fueled units are not preferred, as they require maintenance every six months, are loud and their 50-gallon tank must be refueled once a week. Additionally, these units must be monitored, as the external environment affects their ability to regulate internal temperature.
• CONEX refrigerated BCPs, are electric powered and come in two sizes: 20 ft. by 8 ft. or 40 ft. by 8 ft., but the floor sits at ground level. Delivery of these units requires a roll-off vehicle or crane.
  – Electric energy requirements include 380/460 volts, 3-phase, 50/60 Hz, 50 amp power supply and maintenance of the unit is required once every 6 months.
• Refrigerated Tents — It is unlikely the OCME will utilize this type of unit; however, if necessary the OCME will make every attempt to use refrigerated tents only at its own facilities.

HCFs Eligible to Receive a BCP

• BCPs can be placed at hospitals, assisted living residences/nursing home living facilities, prisons and other areas where the rate of death is predicted to be higher than can otherwise be managed.
• BCPs will be placed only at HCFs having the appropriate personnel and infrastructure to support managing a BCP.
• HCFs must work with their OEM representative at the EOC ESF Health Medical Desk to obtain a BCP, and must notify the Desk when a small number of remains must be removed, when they need to exchange a full BCP, or when they need to request service for a BCP.
• The UVIS Application will allow HCFs to communicate their needs to obtain, exchange, refuel or obtain maintenance support of a BCP to the ESF 8 Health and Medical Desk at the NYC EOC.
HCF Infrastructure Requirements

- **Determine Location of BCP on hospital grounds** — HCFs must determine where they will place a BCP. There must be sufficient room to locate two BCPs, in order to accommodate exchange/replacement of the units.

- **Provision of basic utility infrastructure** —
  - For trailer BCP Type: diesel, electrical or dual capacity
    - Operating Range: 37 degrees Fahrenheit
    - Fuel: 50-gallon tank; refuel every 7 days
    - Electric requirements: 230 volts, 3-phase, 50 amps circuit
    - Maintenance: once every 6 months
  - For the CONEX BCP Type: electric only.
    - Operating Range: 37 degrees Fahrenheit
    - Electric requirements: 380/460 volts, 3-phase, 50/60 Hz, 50 amp power supply
    - Maintenance: once every 6 months

- **Provision of Loading Dock or Access to Fork Lift Recommended** — Depending on the type of BCP the OCME can provide, HCFs must have the ability to load decedents into the BCP by wheeling them directly in via a loading dock, or by placing bodies on a pallet and using a forklift to place them in the unit. The OCME may not be able to control which type of BCP a HCF will receive, and recommends HCFs request support from OEM via the EOC ESF Health Medical Desk to obtain a forklift and operator where necessary.

- **Maintenance** — Although the OCME will arrange through the EOC to acquire a contract to refuel and provide maintenance on BCPs, HCFs should be prepared to provide basic support to keep their units running. OCME highly recommends that HCFs stock enough fuel for one to two fill-ups for a 50-gallon tank.

- **Supplies** — HCFs should initially procure enough HRPs to accommodate the first few weeks of a PI event (approximately 100-200). This stock will need to be rotated as most HRPs only have a 1-2 year shelf life. HRPs made of heavier material and having handles are recommended.

- **Tracking Manifest** — HCFs must develop and provide the OCME BCP Recovery Team with a copy of the manifest for each BCP unit. The manifest must identify decedents by name and a hospital identifier. HCFs may opt to print out a manifest report identifying decedents relinquished to the OCME using the UVIS application. UVIS identifies pertinent information for the OCME that HCFs may also find necessary to track.

- **Management of PE** — HCFs routinely manage decedent PE; during a PI event, HCFs will continue to manage decedent PE (including returning PE to NOK).

- **Physician Signage of Death Certificate** — HCFs will maintain the responsibility of physicians signing death certificates. The OCME will register death certificates with the Office of Vital Records for those HCFs that do not have the EDRS in place. During a PI event, the Office of Vital Records will establish a DDR, in coordination with the OCME, and will provide staff at B-OCME and OSM locations with the ability to register death certificates and issue burial/cremation permits. The OCME recommends HCFs create a batch processing method to manage physician signage of death certificates, to minimize the number of physicians required per day to review medical charts and sign the certificates. In some instances, the assigned physician may need to discuss atypical cases with decedent’s attending physician before signing the death certificate.

- **Tracking Mechanism** — HCFs must maintain their own method of tracking bodies, both individually and within the BCP. OCME recommends using tags and an electronic means that tracks bodies by unique identifiers. The same unique identifier should be used for decedent PE.
HCF Personnel Requirements

- **Person to oversee bodies being placed into the BCP** — This person will initially track/tag the body; develop and manage a roster/manifest of those placed in each of the BCPs; notify their OEM representative at EOC ESF Health Medical Desk regarding the number of bodies in the BCP requiring pick up, and if there is a need for total exchange of the unit. This person will also need to provide the OCME with as much information about the decedents as possible, regarding the decedent and NOK identification, and determination of cause and manner of death. This person should specifically highlight/identify which decedents are non-PI cases, as the BCP Recovery Team will deliver non-PI cases to the B-OCME and not the OSM.

- **Staff to load bodies into the BCP** — HCFs must utilize their own personnel to place decedents in the BCP.

- **Security staffing** — HCFs must provide their own security to guard BCPs, which are on HCF property. Although BCPs can be locked (with the hospital obtained locks), general surveillance of the unit and surrounding area is highly recommended.

- **Maintenance Staff** — HCFs should have staff on hand to take care of initial BCP maintenance issues until contract service providers arrive.

Using BCPs for All Decedents

- HCFs may use BCPs to store all decedents having died of natural causes, including both PI and non PI related.

- It is likely that a significant number of decedents will not have a known identity. Although, these deaths would normally be categorized as a medical examiner (ME) case, requiring investigation, the OCME has determined they should be placed in the BCP.

- The OCME recommends using the HCFs regular morgue to store all other cases requiring ME investigation.

- HCFs must identify and track, using their manifests, PI cases, and any other cases requiring the OCME to hold a body or perform an investigation.

Maximizing BCP Space

- Bodies must never be stacked.

- Bodies are to be lined up, parallel with the long side of the BCP and placed along each side of the BCP, leaving a center aisle space for staff to walk in and out of the unit.

- The first body is to be placed on the floor parallel to the long wall of the unit, at the farthest end of the BCP; the head of the second body is placed on the abdomen of the first body with the legs placed along side the first body. The third body’s head will be placed on the abdomen of the second body with the legs placed along side the first body. This fishbone positioning will accommodate approximately 9-22 bodies on each side of the BCP (see pictures below).

- Initial BCPs will not have shelving. If the OCME determines shelving is needed, they will work with OEM to obtain a contract to retrofit the BCPs. Replacement BCPs will arrive with one shelving unit on each side to accommodate twice the number of bodies.
Other Issues

- **Direct Drop-off of Decedents at HCFs** — HCFs should be prepared for family members to drop off decedents at their location. This may occur for a multitude of reasons including, but not limited to: NOK is unaware of the City’s decedent plan; the system is overwhelmed; NOK did not want to wait for NYPD and OCME to recover the body; and/or the OCME’s capability has reached maximum capacity and is not able to recover bodies within an appropriate period of time. In this situation, HCFs should:
  - Treat decedents as patients and pronounce death as appropriate.
  - Obtain information about the decedent.
  - Obtain information about the person dropping off the decedent.
  - Notify NYPD of decedent dropped off at HCF, so as to initiate a scene investigation.
  - Notify hospital PIO of this occurrence so that he/she can coordinate with the OEM ESF Health and Medical Coordinator, who will provide the information to the JIC and issue statements regarding appropriate decedent management.

**HCFs Should Know What the OCME Will Provide**

- **Distribution** — The OCME will obtain and distribute BCPs to requesting HCFs having the infrastructure to manage them.
- **Coordination** — The OCME will coordinate through the EOC to obtain BCPs. These BCPs will be delivered to specific locations to include HCFs, B-OCMEs and OSMs, and this coordination will include movement of BCPs from HCFs to B-OCMEs or OSMs and back to HCFs as appropriate.
- **Supplies** — The OCME will provide fully equipped BCPs, HRPs for adult and pediatric decedents, handling devices to make it easier to move and cleaning supplies/disinfectant. (*Note: HRPs may not be provided immediately.*)
- **Maintenance** — The OCME will coordinate through the EOC to obtain service contracts for maintenance and refueling of BCPs, as required with external vendors. Initially, the OCME will work with DCAS to establish emergency fuel deliveries to BCPs and establish contract requirements (e.g., quantity and type of fuel, frequency of deliveries, number of locations requiring deliveries and payment of contract service).
- **Shelving** — The OCME will coordinate through the EOC for contract services to provide shelving for BCPs if required. Initial BCPs will not have shelving, but if the OCME determines the need, then they will work with a vendor to obtain this resource and retrofit BCPs accordingly.
- **Personnel** — The OCME will provide a BCP Recovery Team to retrieve the entire BCP, or to gather individual decedents if the BCP is not full.
- **Tracking** — the BCP Recovery Team will track bodies using UVIS and handheld bar code readers, which scan decedent tracking numbers. The BCPs themselves will also be tracked. As part of decedent tracking, the recovery team will also enter the decedent’s HCF identifier. A receipt of the bodies retrieved by the OCME BCP Recovery Team will be given to the HCF BCP representative.
- **Public Information** — The OCME’s PIO will work with OEM’s PIO to develop public messages concerning the management of decedents. One aspect of the message will address what NOK should do when their family member dies. Specifically, it will stress that decedents should not be brought to HCFs, the OCME or other government locations directly.
Section I: Citywide Plan For Managing Fatalities During a PI Event

City of New York Department of Correction

The Department of Correction (DOC) houses approximately 13,000 to 18,000 inmates in its 15 facilities, which is more than most state correctional systems. Additionally, DOC maintains secure facilities at two City hospitals: Elmhurst Hospital Prison Ward, in Queens, for female inmates requiring acute psychiatric care or medical treatment; and Bellevue Hospital Prison Ward, in Manhattan, for male inmates requiring psychiatric or medical treatment.

The DOC also manages the City cemetery on Hart Island, located off City Island in the Bronx. City-sentenced inmates are transported to this 101-acre area from Rikers Island to clear fields or bury remains sent to the City cemetery. Typically, DOC buries 20-25 bodies per week, since approximately 30 percent of all deaths occurring in the City become City directed burials.

During a PI event, DOC:

- Identifies and provides appropriate personnel to the OCME to enhance METT and Residential and BCP Recovery Teams. This type of support is dependent on both staffing availability and staff receiving the appropriate training and PPE, if required.
- Establishes BCPs at the Riker’s Island HCF to manage inmate deaths, if warranted and coordinates their requests for pick up and removal of BCPs with the OCME via the EOC ESF Health Medical Desk.
- Manages City directed burials at Hart Island as necessary.

New York City 911 Call Center

In the US, 911 is the universal number to report emergencies. NYC has an enhanced 911 system that can identify the phone number and location of the caller in most instances. Operators screen all calls to determine the type of support by NYPD, FDNY and/or EMS required and subsequently transfer the call to the specific operator and maintain connectivity until appropriate units are dispatched. Reports of death are directed to the NYPD 911 Call Center.

During a PI event, the 911 Call Center:

- Transfers all reports of deaths to NYPD.
- Dispatches NYPD resources as appropriate.
- Relays information from the officer on-scene to the NYPD liaison at the appropriate OCME regarding confirmed deaths to initiate OCME investigation and response to the incident location. If possible, officers note whether the decedent died of influenza, as the OCME may establish separate teams to manage suspected PI deaths and other deaths.
IX. Agency Operations

Regional Emergency Medical Services Council of New York City

Regional Emergency Medical Services Council of New York City (REMSCO) represents all 73 EMS agencies within NYC, which includes FDNY EMS and 36 volunteer, 21 hospital-based and 15 private agencies. The REMSCO oversees regional operational issues, including the current regional mutual aid mobilization plan. Within REMSCO is the subcommittee, Regional Emergency Medical Advisory Committee (REMAC), responsible for developing EMS pre-hospital care, treatment and transportation protocols. These protocols are based on meeting the minimum requirements put forth by the NYS DOH and regional needs. The REMAC also has the authority to conduct quality assurance reviews of regional EMS programs/agencies and defines the minimum standards of care and staffing standards for the City.

Current protocol mandates that EMS providers may pronounce death only under certain circumstances. Routinely, EMS providers perform this task only when patients present with indisputable signs of death, such as decapitation, extensive decomposition and/or the presence of lividity. In other apparent situations, EMS providers, with the permission of an on-line Medical Control Physician, may pronounce death.

After pronouncements of death in the field, EMS personnel generally remain on scene until NYPD or OCME arrives. During a PI event, this may be difficult to do, as numerous medical patients will require EMS support and it may take the OCME several hours to arrive, based on increased workload and responsibilities.

During a PI event, REMSCO will:

- Distribute guidance to EMS providers regarding appropriate infectious control measures, as determined by the NYS DOH or NYC DOHMH. For example, during Severe Acute Respiratory Syndrome (SARS) Outbreaks, EMS personnel are instructed to avoid intubating SARS patients and to wear N95 Masks when in contact with such patients.
- Distribute guidance to EMS providers regarding appropriate management of decedents, either potentially influenza or non-influenza related, in keeping with established protocols and City ordinance.
- Enhance EMS’s role by authorizing practices such as leaving the run report for NYPD and OCME personnel and writing a thorough history of present illness on the run report.
New York City Fire Department

New York City Fire Department (FDNY) provides fire safety and protection for the City. EMS is a division of FDNY, providing both Basic Life Support (BLS) and Advanced Life Support (ALS). Not only does FDNY handle approximately 50-60% of all EMS calls for the City, but it also manages the Emergency Medical Dispatch Center for all 911 calls requiring EMS assistance. During disaster incidents, FDNY retains the core competency for Pre-hospital Emergency Medical Care, among many other core competencies. It is through this core competency that FDNY is most likely to coordinate City activities regarding decedents with the OCME.

During a PI event, FDNY EMS personnel will likely respond to numerous requests for medical support. While FDNY does not specifically have an active role in supporting the OCME’s management of PI-related fatalities, it is possible the NOK may bring their deceased loved ones to City firehouses, or make 911 calls depicting “a very ill patient” only for EMS personnel to find the patient dead.

During a PI event, FDNY will:

- Become a Primary Agency under CIMS, along with NYPD and DOHMH for managing the biological outbreak.
- Consider implementing REMSCO’s recommendations and/or promulgate its own policy regarding the management of patient’s found DOA.
- Determine the Emergency Medical Dispatch Center policy and procedure to manage deaths during a PI event for all 911 calls requiring EMS assistance.

New York City Hospital-based, Volunteer and Private Ambulances

There are approximately 21 hospital-based ambulance agencies, 36 volunteer ambulances and 15 private ambulances operating within the City region. Hospital-based ambulances cover approximately 50% of the City’s 911 calls requiring EMS. Like their FDNY counterparts, they are dispatched via the FDNY 911 dispatch system and respond based on information received from FDNY. Like all ambulance agencies operating in the City, they operate under the REMAC NYC Pre-hospital Treatment/Transport protocols.

Volunteer ambulances typically do not provide comprehensive 24 hour, 7-day-a-week service, but do provide coverage for their communities. Private ambulance agencies cover contracts with HCFs, performing all levels of inter-facility transport. Both the volunteer and private ambulance sectors participate in the 911 System only when requested by OEM or FDNY via the REMSCO Mutual Aid Mobilization System.

During a PI event, hospital-based and private ambulances will:

- Implement REMSCO’s recommendations regarding the management of PI deaths for calls outside the 911 system.
- Implement FDNY Emergency Medical Dispatch Center’s policy and procedures when assisting 911 calls involving EMS assistance.
IX. Agency Operations

City of New York Department of Sanitation

The Department of Sanitation (DSNY) provides waste removal, recycling and street sweeping services for the City. It has uniformed employees, which the OCME may utilize during an emergency and has access to over 5,700 vehicles that may be able to support specific OCME tasks.

During a PI event, DSNY will:

- Support OCME operations by providing employees to enhance OCME METTs and Residential and BCP Recovery Team operations

City of New York Department of Citywide Administrative Services

The Department of Citywide Administrative Services (DCAS) is made up of more than 1,700 employees, including architects, engineers, carpenters, electricians, plumbers, lawyers, mechanics, procurement specialists, information technology specialists, custodians and managers. The DCAS’s various divisions and offices ensure other City agencies have the critical resources and support they need to provide the best possible services to the public.

The DCAS also has contracts with multiple vendors through which it establishes the cost of goods and services, even during emergencies. The OCME may request support via the City’s EOC to obtain assistance from the following DCAS divisions:

The Division of Facilities Management and Construction—Manages, operates and maintains over 50 City-owned buildings and provides design and construction services for capital projects in DCAS-managed buildings. This division may be able to support OCME operations by:

- Providing construction within BCPs, RSFs, OSMs and B-OCMEs.
- Providing construction of OSM facilities.

The Division of Municipal Supply Services—Purchases and inspects goods valued in excess of $100,000 for use by City agencies and other governmental entities; manages the City’s Central Storehouse in Middle Village, Queens stocked with 2,200 different commodities; transfers, sells and disposes of City agencies surplus materials and equipment; and manages the requisition, maintenance and disposal of the City’s vehicle fleet. This division may be able to support OCME operations by:

- Providing available supplies.
- Making emergency procurements.
- Providing maintenance contracts for B-OCMEs, BCPs, RSF and OSMs.

The Division of Real Estate Services—Leases or purchases privately owned properties for City agency use. This division may be able to support OCME operations by:

- Providing temporary use of City properties to establish DPMU and OSM sites, if necessary.
- Obtaining access to other types of geographical space, if necessary.

The Office of Transportation Services—Supervises the DCAS fleet and provides special transportation services to City agencies. This division may be able to support OCME operations by:

- Establishing OCME vehicle service maintenance contracts.
- Obtaining vehicles for use as Residential Recovery Team vehicles.
**County Public Administrators**

The County Public Administrators for New York (Manhattan), Kings (Brooklyn), Queens, Richmond (Staten Island) and Bronx Counties, among other tasks, are responsible for managing the estate of decedents when NOK cannot be identified or reached.

During a PI event, some residential deaths may only be identified when neighbors or building superintendents notify NYPD of a possible death, in lieu of, or in the absence of, family.

**Specifically, the County Public Administrator will:**

- Manage unclaimed decedent’s finances, residential property and belongings.
- Liquidate decedent assets to pay for final disposition costs.
- Coordinate with the OCME when decedent’s friends wish to manage and cover the costs of final disposition.

**City of New York Laboratories**

Within NYC, many hospitals have the capability to perform different levels of influenza testing. There are 66 hospitals and commercial laboratories licensed to perform influenza testing; 10 NYC laboratories have virus isolation capability, five of which participate in the WHO Collaborating Laboratory Surveillance System and the National Respiratory and Enteric Virus Surveillance System. These labs submit representative or unusual influenza viral isolates during the flu season for strain typing and/or antigenic analysis. Molecular detection/typing/subtyping of Influenza A isolates and patient specimens are then forwarded to Wadsworth Center-Virus Reference and Surveillance Laboratory, for real-time polymerase chain reaction (RT-PCR) and subtyping analysis.

**Specifically, laboratories approved to perform influenza testing:**

- Perform rapid PCR or culture testing to support diagnosis of influenza strain.
- Submit sentinel specimens to reference labs, such as the CDC and/or the NYS DOH laboratory, to determine differences, if any, between influenza strains which cause illness versus death.
IX. Agency Operations

New York State Supporting Agencies:

New York State Department of Health

Among its other responsibilities, NYS DOH regulates all hospitals, nursing homes, EMS agencies, including those in NYC and the Bureau of Funeral Directing.

Specifically, the NYS DOH is responsible for facilitating City HCF requests for support when staffing the City EOC Health Medical ESF Desk. The NYS DOH working with City DOHMH, GNYHA and HHC will facilitate HCF requests with City OEM and other agencies as appropriate, to include the OCME.

During a PI event, the NYS DOH will utilize its Health Emergency Response Data System (HERDS) as a means of tracking key resource availability. HERDS, managed through a Health Provider Network (HPN), provides a secure means for health care systems to exchange pertinent information—such as patient admissions, the number of influenza-like-illness (ILI) cases, bed status, provider status, vaccine supply status and key supply status (e.g., ventilators). HERDS is typically used during emergency events, but can also be used during normal flu seasons or times when a shortage of hospital beds exists. HERDS provides a mechanism for hospitals to report resource needs to NYS DOH and other agencies during an event. Though health care providers must enter data manually, NYS DOH and health care systems are able to monitor key asset availability and City and state planners can review, prioritize and arrange for the transfer of resources to HCFs.

Bureau of EMS is responsible for general oversight of the statewide EMS system. It provides coordination and contracts with relevant agencies to assist in the development of local EMS systems; approves all EMT certification courses and assists in development of curricula; approves county EMS plans supported by state aid; conducts examinations and issues individual EMT certifications. The Bureau also issues agency certifications, conducts periodic inspections of ambulance services and investigates complaints regarding the conduct of certified providers or services.

Bureau of Funeral Directing is responsible for establishing funeral directors licensing requirements, education and continuing education requirements and associated fees to maintain state certification as a funeral director. A funeral director is licensed to engage in the business and practice of funeral directing in New York State. Funeral directors arrange and direct the care and disposition of the body of a deceased person, by preserving, disinfecting, embalming and preparing the body for transportation, funeral services, burial or cremation and final disposition. Funeral directors are responsible for authenticating and verifying that bodies sent to cremation or burial are in fact the individual listed on the death certificate and corresponding cremation/burial permit. Moreover, if bodies are disinterred, funeral directors are responsible for overseeing this process.

During a PI event, NYS DOH will:

- Monitor and share information obtained via HERDS with DOHMH.
- Represent HCFs at the City EOC ESF Health and Medical Desk to coordinate actions between the OCME and HCFs regarding BCPs for pick up and/or replacement, among many other activities. In some instances, an entire BCP may not need to be replaced, as the request may be for the OCME to recover bodies instead of exchanging the entire BCP.
- Provide the NYC REMSCO guidance regarding EMS providers’ responsibility to stay on-scene to secure decedents until NYPD, OCME and/or a licensed funeral director arrives.
- Distribute key information to licensed funeral directors regarding safe practices of managing decedents, via the Bureau of Funeral Directing.
- Distribute key information to families requesting information about funeral practices during a PI event, via the Bureau of Funeral Directing.
New York State Emergency Management Office

The mission of the New York State Emergency Management Office (SEMO) is to protect the lives and property of the citizens of NYS from threats posed by natural or manmade events. SEMO coordinates EMS with other federal and state agencies to support county and local governments. It also routinely assists local governments, volunteer organizations and private industry through a variety of emergency management programs. These programs involve hazard identification, loss prevention, emergency management planning, training, operational response to emergencies, technical support and disaster recovery assistance.

Specific to fatality management, the OCME may request access to public and/or private cemeteries to purchase sizable cemetery space for temporary interment and associated service contracts to support burial, tracking, maintaining records and disinterment, if necessary. The OCME anticipates that many of these resources will not available within the City, although such availability is dependent on the size and magnitude of a PI event.

During a PI event, SEMO will:

• Facilitate providing assistance to the City, to include, but not limited to, cemetery space, through their representative in the EOC.
• Facilitate obtaining Army National Guard support, as all such requests must be coordinated through SEMO regardless of the event being declared a Citywide or statewide disaster.

Division of Cemeteries in the New York Department of State

The Division of Cemeteries, under the supervision of the Cemetery Board, administers New York cemetery law dealing with cemetery corporations. It oversees rules and regulations concerning the sale of burial lots, charges for services, acquisition of lands and other activities by cemeteries. Within the state, the Division of Cemeteries regulates 1,900 cemeteries, oversees 4,000 religious cemeteries and regulates 48 crematoria having 100 retort chambers.

During a PI event, the Division of Cemeteries will:

• Coordinate OCME requests from SEMO for cemetery space, by requesting that cemeteries provide or allocate space for numerous decedents. In most instances, the City OCME will establish a contract with cemetery owners to provide support.
• Disseminate information provided by the OCME, DOHMH and/or NYS DOH concerning potential health and safety issues related to burial or cremation.
New York State Army National Guard

The New York State Army National Guard (NG) is a partner of the federal government’s Total (military) Force, having a federal mission to support and defend the Constitution of the US. It also has the state mission to provide trained and disciplined forces for domestic emergencies, or as otherwise required by state law. The New York Army National Guard maintains 82 armories and is present in 72 communities. During a disaster, the Governor may activate the NG to support local communities, including NYC, should the Mayor request them. The National Guard may be asked to support the OCME, if they have appropriate staff and resources.

**During a PI event, the Army NG will:**

- Provide OCME support by enhancing Residential and BCP Recovery Teams staffing.
Federal Supporting Agencies:

During a PI event, OCME does not anticipate receiving significant federal assistance, as a PI event is likely to affect the entire country and limited federal assets may be allocated to other areas where jurisdictional OCME capabilities do not exist.


The US Department of Homeland Security (US DHS/FEMA) unifies the vast national network of organizations and institutions involved in efforts to secure our nation during a disaster event. During a Presidential Declared Disaster, US DHS/FEMA provides oversight of all federal agencies required to mitigate the effects of the hazard.

US DHS/FEMA’s PI Response Strategy outlines three key national response efforts: preparedness and communication; surveillance and detection; and response and containment.

During a PI event, US DHS/FEMA may support OCME requests for personnel or other assets submitted by OEM through SEMO. Supporting OCME activities may come from resources belonging to the following federal agencies: United States Departments of Health and Human Services, Transportation, Defense Department and State Department.

United States Department of Health and Human Services

US Department of Health and Human Services (DHHS) is the lead federal agency for medical care and mortuary services under ESF 8. During an influenza outbreak, US DHHS will attempt to prevent a PI outbreak or delay its emergence by isolating specific outbreaks. At the core of its strategy, US DHHS will advocate basic public health measures to reduce person-to-person transmission. At the onset of a PI event, US DHHS, in concert with other federal agencies and partners, will work with the pharmaceutical industry to procure vaccine directed against the pandemic strain and to distribute the vaccine to state and local public health departments for distribution based on pre-approved local or state plans. Initially, if supplies are limited, delivery of antiviral drugs from public stockpiles will go to local and state health departments for distribution based on predetermined recommended patient priority groups.

US DHHS is the parent agency of the CDC and DMORT. Whereas CDC will help identify the PI strain and facilitate vaccination and antiviral use of medications, DMORT, part of the National Disaster Medical System (NDMS), acts as a specialized mortuary unit comprised of local and regional volunteers, who are federalized at the time of deployment to a disaster event.

During a PI event:

- US DHHS may establish a mortuary fund, as it did during the Hurricane Katrina event in order to enable NOK to pay for the burial or cremation of their loved one.
- CDC provides guidance regarding health concerns of the disease outbreak.
- DMORT provides specialized personnel capable of performing various morgue operation tasks including, but not limited to, establishing identification of human remains.
IX. Agency Operations

United States Department of Transportation

During a disaster, US Department of Transportation (DOT) provides transportation assets for state and local use.

During a PI event, US DOT may provide:

- Refrigerated reefer units, CONEX refrigerated boxes, trailers and other vehicles the OCME may require

United States Department of Defense

As part of the National Response Plan (NRP), the Department of Defense (DOD) supports most ESFs, including ESF 8 with regard to Mortuary Affairs (MA). Though the DOD does not have a robust MA capability, specific assets may be available for the OCME to use during a PI event. These include:

- The Dover Port Mortuary at the Dover Air Force Base in Dover, Delaware as an alternate location to process remains
- Armed Forces Institute of Pathology/ Armed Forces Medical Examiner (AFIP/AFME) to process identification samples and pathology specimens
- The 54th, 311th and 246th Quartermasters to help recover and track bodies
- General troop support to help recover, track and transport bodies
- United States Army Medical Research Institute for Infectious Diseases (USMARIID) to process laboratory samples and specimens, including those requiring BioSafety Level (BSL) 3 or 4 labs

United States Department of State

During a disaster, US Department of State helps the City manage foreign national decedents by contacting NOK and by facilitating some of the coordination required to transport a body to another country. In most cases, DOS works through embassies to contact NOK.
Non-Governmental Supporting Agencies:

Metropolitan Funeral Directors Association and Funeral Directors in General

Funeral directors, including members of the Metropolitan Funeral Directors Association (MFDA) and others, are associated with private funeral businesses. They support NOK by providing funeral services, which include managing myriad details regarding final disposition of remains. Services often include retrieving the death certificate from the signing physician, filing the death certificate and obtaining the disposition permit from the Office of Vital Records, retrieving the body from the place of death or the OCME, preparing the body for an open casket ceremony such as a wake, placing the body in a casket, transporting the body to the cemetery and recommending crematoria or cemeteries upon request. The funeral director’s role is to provide comprehensive funeral services at the family’s request.

Most funeral directors have little ability to expand their capacity to accommodate a large influx of decedents. Funeral directors should establish their own plans to manage large numbers of decedents, but do so in a manner that does not compete with the OCME for resources. As the OCME has access to many resources and can hold bodies for extended periods, funeral directors will be able to process decedents in a more traditional manner.

During a PI event, funeral directors will maintain their private sector business of arranging and providing funeral services. Additionally, the MFDA will disseminate information to its members in a timely fashion and may be able to provide personnel to support Family Assistance Center (FAC) activities.

During a PI outbreak, the MFDA will:

• Distribute information regarding infection control measures to funeral directors.
• Distribute information regarding the OCME’s current management of remains, so that funeral directors know where to retrieve bodies, file death certificates (if applicable) and obtain burial permits.
• Coordinate funeral director support at the FAC, by gathering antemortem data and/or assisting those grieving the loss of a loved one and by providing timely information regarding the final disposition process.
• During a PI event, funeral directors will be contacted directly by the family to obtain their services, as usual.
• When a decedent dies at a residence and is still there, funeral directors can maintain their normal practice regarding collecting the body.
• When NOK releases the body to the OCME, funeral directors can contact the B-OCME office or the main office at 520 First Avenue to locate the decedent’s remains.
• When a death occurs at an HCF, funeral directors will call the HCF to find out if they still have possession of the body. If HCFs released the body to the OCME, then they will be directed to call the B-OCME office or main office at 520 First Avenue to locate the physical remains of the decedent.
Pandemic Influenza Surge Plan For Managing In- and Out-of-Hospital Deaths

IX. Agency Operations

Private Sector Cemetery Owners

Cemetery and crematorium owners provide burial plots or crematorium services, respectively. They are managed by a municipal entity, are a national cemetery owned by the Veterans Administration, or are privately owned or owned by a religious organization. There are 35 regulated cemeteries within New York City and 100 cemeteries within the greater metropolitan area owned by religious entities.

Typically, cemetery services include in-ground or mausoleum burial, memorializing the burial location with a headstone/footstone, maintaining office records and managing the land.

Cemetery capacity, described as the total amount of land in acres, is identified as sold acres, developed with ready property and as undeveloped acres. If cemetery owners need to expand their capacity, they may need to prepare undeveloped acres, which may take several weeks. There are approximately 1,000 traditional burial plots per acre.

Although not all cemeteries are regulated by the state, owners must file their burial plot pricing with the State Division of Cemeteries.

Families can purchase a burial plot within a day, but obtaining burial rights from the state can take three to four additional days, unless the state regulation is suspended by a Governor’s Emergency Order.

During a PI event, cemetery owners will:

• Provide information to the State Division of Cemeteries regarding space available for use as traditional burial plots.

• Coordinate their efforts with funeral directors to accommodate family member requests.

Private Sector Crematoria Owners

Within the five boroughs, four crematoria exist having a total of 17 retorts. At present, only three retorts function, processing fewer than two bodies per day. Due to restrictions placed on crematoria owners by the NYC Department of Environmental Protection, crematorium owners do not run their operations near capacity; thus it is possible to accommodate large influx of decedents if these regulations were modified. For example, crematoria only operate six days a week and only during specific business hours; one cremation usually takes approximately 3-4 hours.

Twenty-eight percent of decedents in NYC choose cremation as their final disposition option; crematorium owners suspect this practice is likely to remain constant or increase during a PI event.

During a PI event, crematoria owners:

• Coordinate their efforts with funeral directors to accommodate family member requests.

• Coordinate their efforts with the OCME, as any final disposition involving cremation requires the OCME authorization.

• Work with OEM, the OCME and Department of Environmental Protection to modify restrictions, through a Mayoral Emergency Order so as to accommodate a large influx of decedents.

Funeral Directors, the Community, and the City OCME

Many of those who die at home, in a hospital or as part of a hospice program never get reported to 911. Family members simply call/coordinate with the decedent’s physician to report the death and call their local funeral director to manage the body. Often, the patient’s physician is willing to sign the death certificate when the physician is aware of the patient’s condition and has examined the patient within 31 days of death. In such instances, the death need not be investigated by the NYPD and the OCME. The funeral director picks up the signed death certificate from the physician’s office, collects the body at the residential/hospital/hospice location, files the death certificate with the Office of Vital Records, obtains a burial/cremation/transportation permit, and facilitates other aspects of final disposition in accordance with the NOK’s wishes.

The OCME advocates that this practice should remain in effect during a PI event, until funeral directors become overwhelmed and are unable to retrieve bodies in a timely manner. continued
State Funeral Director Association

The New York State Funeral Directors Association frequently answers questions related to arranging and prearranging funerals; cremation/burial options; use of Medicaid; consumer’s rights pertaining to funerals and preplanning; death and funeral statistics; and embalming and viewing decedents.

Additionally, this association provides a searchable membership listing to assist NOK when looking for a funeral home in New York State and lists resources for dealing with grief and bereavement.

During disaster events, the State Funeral Director Association can:

- Provide support in the FAC, as funeral directors are adept at dealing with grief, assisting the NOK and obtaining antemortem data.
- Disseminate information to members regarding the OCME and DOHMH’s recommendations concerning modification of the final disposition process during a PI outbreak.

American Red Cross

The American Red Cross (ARC) focuses on meeting people’s immediate emergency disaster-caused needs, such as shelter, food and health and mental health services. In addition to these services, the core of Red Cross disaster relief is the assistance given to individuals and families affected by a disaster, enabling them to independently resume their normal daily activities.

During a PI event, ARC may support OCME operations in the FAC as well as by:

- Providing food and drinks at the FAC, when available.
- Providing food and drinks to OCME personnel at B-OCMEs and OSMs when available.

The Salvation Army

The Salvation Army is officially recognized as a disaster relief organization by the federal government and provides basic needs to both survivors of and first responders to, a disaster. Specifically, it offers material, physical, emotional and spiritual comfort.

During a PI, the Salvation Army will:

- Provide food service to OCME at B-OCME and OSM locations, when available.
- Provide family counseling at the FAC, if requested.
IX. Agency Operations

New York Disaster Interfaith Services

NY Disaster Interfaith Services (NYDIS) works to address the concerns of faith communities and the needs of present and future disaster victims. Although they do not speak for all religious groups, NYDIS acts on behalf of the faith community to help disaster victims recover through community-based programs, by advocating for the rights of victims; working to ensure victim short- and long-term financial, mental and spiritual stability; and supporting caregivers. The goal of NYDIS is to increase community resilience and promote healthy coping skills. To achieve this NYDIS has organized five specific focus groups.

Advocacy Working Group—Comprised of different faith- and community-based agencies; this group meets on a regular basis to share information, advocate aid for the recovery of disaster victims and address the needs of residents in impacted communities.

Caseworker Support Group—The Caseworker Support Group supports caregivers (e.g., mental health professionals, clergy and caseworkers whose professional lives become dominated by the disaster) by providing them counseling.

Clergy Council—Comprised of spiritual community leaders, this group works to ensure that local religious communities have input into the rebuilding of their disaster-damaged neighborhoods.

Conferences—NYDIS facilitates interagency conferences and workshops to educate faith-based providers on emerging unmet needs and to address the concerns of local clergy, religious leaders and faith-based providers.

Interfaith Discussion Groups—Representatives of different faiths come together to establish common ground and increase mutual understanding and resilience during the aftermath of a disaster.

During a PI outbreak, NYDIS can support OCME operations by:

- Disseminating guidance to faith-based communities regarding City recommendations for decedent final disposition modifications. For example, during a PI event, large gatherings may be limited or prohibited, hindering traditional religious ceremonies. Recommendations may include:
  - Graveside services with limited family members in attendance
  - Virtual memorial ceremonies
  - Closed casket ceremonies
  - Avoidance of embalming, which may preclude having the body present during funeral services
  - Taking part in a religious group council, organized by the OCME, to discuss final disposition options relevant to the PI outbreak
Other Private and Commercial Entities

Private entities include all types of associations and businesses that may support specific OCME operations. In some instances, professional associations may be able to provide specific types of skilled professionals to assist the OCME (e.g., American Society for Forensic Odontology). In other cases, the OCME may require support from private DNA labs to process identification samples or from anthropological groups to assist with identification of decedents. In other instances, private sector businesses may support OCME operations by providing trained call operators and virtual FACs, or providing specific services to include decedent packaging and storing assistance, burial, transportation and PE depot management.

During a PI event, the OCME may require any or all of these types of support or services.
Supporting Technical and Reference Sections
A. Update and Maintenance
PI disaster management involves ongoing reassessment and written plan maintenance.

Plan Reassessment
Plan reassessment encompasses thoroughly reviewing the PI disaster plan, performing a risk and vulnerability assessment and performing a capability assessment every 5-7 years. The OCME will typically coordinate with other relevant agencies, as identified in this document and consult specialists as new information about influenza is known. During the evaluation and reassessment periods, the OCME should identify if there are any new methods or processes they use or the City uses that may modify how large numbers of human remains are managed. For example, in a few years, the OCME may have an EDRS kiosk in each B-OCME location. The OCME should determine whether this new technology modifies how bodies are moved through OCME operations and adjust the plan accordingly.

Maintenance
Any time the OCME PI Surge Plan For Managing In- and Out-of-Hospital Deaths is assessed and reviewed, the written plan will be made current. Specifically, the plan will be modified any time there are changes in agency directives, legislation, procedures, or technology.

Maintenance of this plan is also the responsibility of the OEM’s Plan Manager and Plan Management Unit. The plan will be annually reviewed by the Primary and SMEs designated within the plan. Recommended changes will be coordinated with the Plan Manager and the City agencies included before consolidation and publication as a formal change.

In addition, the plan will be updated as appropriate when a PI event resulting in decedents significantly affects the City. The update will be no later than 3 months following the date the emergency occurs. Routine maintenance and updating of the plan will include contacting the Primary and SME agencies regarding any changes and/or updates.

B. Training and Exercises
Mass Fatality event training and exercises will be conducted on an ongoing basis with major emphasis placed on the operational strategies defined in the plan.

OEM will hold an annual interagency training session to review the plan.

Scenario-Driven Exercise
The OCME will participate in PI event disaster exercises, so as to fine-tune its approach. Disaster exercises related to PI event will likely include Command and Control Post functional tabletop exercises, to synchronize B-OCMEs and the AC-OCME during the event.

Training
Training of existing and new OCME personnel increases the agency’s ability to manage an actual event. Training may also include involving relevant agencies, such as DOHMH and OEM. Educational sessions will be broken down into functional tasks and/or roles and responsibilities personnel are likely to fill. As a PI event will affect large numbers of personnel, the OCME may elect to train key members of their agency to fulfill both primary and secondary roles.
C. Key Contact Information

All inquiries regarding
The City of New York
Pandemic Influenza Surge Concept of Operations
For Managing In- and Out-of-Hospital Deaths
may be addressed to:

City of New York Office of Chief Medical Examiner
Special Operations Division
520 First Avenue
New York, NY 10016
E-Mail: specialoperationsdivision@ocme.nyc.gov

Further information regarding
The City of New York
Pandemic Influenza Surge Plan
To Manage In-Hospital Deaths, Training Course
and
The City of New York
Pandemic Influenza Surge Plan
To Manage In-Hospital Deaths Planning Tool
may be found at:

Supporting Technical and Reference Sections

D. Glossary

311 - 311 is New York City’s (NYC’s) phone number for government information and non-emergency services. Calls are answered 24 hours a day, seven days a week. NYC’s 311 operations provide immediate access to translation services in more than 170 languages, as well as access to a state-of-the-art database of information and services about City government. This database is updated in real-time and can be reviewed quickly to meet demands in an emergency situation. One example of 311 operations is gathering missing persons’ information to support the New York Police Department (NYPD) and the Office of Chief Medical Examiner (OCME) investigations.

911 - 911 is the official emergency number for New York City. Dialing 911 quickly connects the caller with a dispatcher trained to route calls to local emergency medical, fire and law enforcement agencies, as appropriate. All 911 calls are answered by a live operator, 24 hours a day, seven days a week.

Area Command Office of Chief Medical Examiner (AC-OCME) – The AC-OCME would be a pre-established location where OCME agency leaders would meet to review their agency’s Incident Action Plan (IAP) for each of the five borough OCME offices. There, they could also coordinate their agency’s response during the present or upcoming Operational Period (Op Period). During a PI event, the AC-OCME will be located at 520 First Avenue. This location will also serve as the location for the Manhattan Borough OCME, which is responsible for managing daily case investigations and managing PI cases in Manhattan.

Autopsy - An autopsy is a medical procedure consisting of a thorough examination of a corpse to determine the cause and manner of death and to evaluate any disease or injury present. It is usually performed by a specialized medical doctor called a pathologist. Autopsies are performed for legal or medical purposes.

Body Collection Point (BCP) - A BCP is a temporary storage location used to expand HCF morgue capacity. BCPs are intended to provide temporary refrigerated storage of remains until the OCME can recover bodies and process them appropriately. HCFs placing bodies in a BCP are responsible for signing the death certificate, providing the OCME with as much information as appropriate regarding the next of kin (NOK), creating a manifest of those bodies placed in the BCP, monitoring the temperature to ensure it stays at 37° Fahrenheit and securing the site appropriately.

Body Collection Point Recovery Team (BCP RT) – The Body Collection Point Recovery Team (BCP RT) consists of OCME personnel who will pick up bodies at BCPs. The OCME, with the support of the NYC Office of Emergency Management (OEM), will coordinate logistical support through the Emergency Operation Center (EOC), either to arrange to remove and replace the entire BCP, or to empty it by recovering individual bodies. The team transports decedents to the most appropriate Borough OCME (B-OCME) office or Off-Site Morgue (OSM), as appropriate. The Team will tag and track bodies at BCPs, using designated OCME methods.

Borough Office of Chief Medical Examiner (B-OCME) – The B-OCME collectively represents each OCME located in the five NYC boroughs: Bronx-OCME (BX-OCME), Brooklyn-OCME (K-OCME), Queens-OCME (Q-OCME), Manhattan-OCME (M-OCME) and Staten Island-OCME (R-OCME). B-OCMEs will establish command, control and coordination, for all OCME activities in their borough. Specifically, B-OCMEs will manage their daily caseload, plus PI cases requiring further investigation or autopsy. B-OCMEs will report to the AC OCME, to synchronize their actions and obtain direction and resources.
B-OCME Command Post (B-OCME CP) – The Command Post is established at each B-OCME office, where staff will meet to review Incident Action Plans (IAPs) and coordinate response during the current or upcoming Op Period. Each B-OCME is also linked to the OCME Area Command Post located at 520 First Avenue.

Casualty – A casualty is an individual who is injured or becomes ill following an incident. This term does not typically include the deceased, who are labeled “fatalities.”

City Burial or City-Directed Burial – This refers to disposition of remains managed by the OCME. The OCME is responsible for managing in-ground burial of unidentified bodies, bodies having been identified but not having been claimed by the next of kin (NOK) and decedents for whom the NOK does not have the resources to administer final disposition.

CityNet – This is the City of New York’s Intranet, which is used by City governmental agencies.

City of New York Counties and Boroughs – Five of New York State’s (NYS) 62 administrative counties—New York, Kings, Queens, Richmond and Bronx—are within NYC. These counties do not have functioning county governments, although they each have a Borough president. They are coextensive with the five boroughs. Two, Queens and Bronx, share the same name as the borough. Richmond County is known as the Borough of Staten Island, Kings County is the Borough of Brooklyn and New York County is the Borough of Manhattan

CONEX Container – These refrigerated units are typically used to transport perishable items by ocean vessel. Under the Citywide Pandemic Influenza Surge Plan to Manage In- and Out-of-Hospital Deaths, these units will be used to store decedents.

Department of Health and Mental Hygiene Operations Center (DOHMH OC) – NYC DOHMH will establish an OC during a disaster event, including a pandemic influenza (PI) event, to coordinate planning and response activities.

Distributed Death Registration Process (DDRP) – This is a decentralized method used by the Office of Vital Records, part of the Department of Health and Mental Hygiene’s (DOHMH’s) Bureau of Vital Statistics, to register death certificates and obtain burial/cremation permits. DDRP may entail either posting Office of Vital Records staff at B-OCMEs and OSMs, or establishing the electronic death registration system (EDRS) at B-OCMEs, OSM and HCFs. EDRS is a secured Internet application enabling hospital and medical examiner staff to electronically submit death certificates to the Office of Vital Records for registration. EDRS can also be used by funeral directors to check on the status of registered death certificates and print burial/cremation/transportation permits at their funeral home location. To establish the EDRS at your facility, contact the DOMHM EDRS Coordinator at (212) 788-4574 or edrs@health.nyc.gov.

Disaster Portable Morgue Unit (DPMU) – The DPMU would be a fully equipped, portable morgue established in a field setting, often at or near an incident site. It comes complete with equipment and supplies needed to perform a full external and internal examination (autopsy) and for assessing decedents’ identification by means of fingerprinting, photographing, obtaining dental and body X-rays and gathering deoxyribonucleic acid (DNA) samples. A DPMU can be used as a whole unit, or can be used in part to support limited morgue operations such as DNA and fingerprinting.

Emergency/Disaster Declarations – These are official emergency declarations made by specified elected officials—at the local, state or federal level—authorizing the use of equipment, supplies, personnel and resources as may be necessary to cope with a disaster or emergency. Formal declarations are made when the event requires more assets and resources than exist within the jurisdiction. A declaration, on the local level, may result in funding, support and access to additional state or federal assets.
**Supporting Technical and Reference Sections**

**Family Assistance Center (FAC)** – A FAC facilitates the exchange of timely and accurate information with family and friends of injured, missing, or deceased disaster victims; the investigative authorities; and the medical examiner/coroner. Types of services generally include: grief counseling; childcare; religious support; facilitation of family needs such as hotel, food and transportation; antemortem data collection; and notification of death to the NOK. Although FACs can differ from one another, the OCME’s role at the FAC includes gathering antemortem data and notifying the NOK regarding the deceased. FACs can be actual or virtually established sites.

**H5N1 Virus** – A specific virus strain of influenza currently causing large outbreaks of disease among poultry outside the United States that has limited transmission to humans. Current H5N1 virus outbreaks among humans have been due to direct or indirect contact with infected birds or their secretions/excretions. Although H5N1 is not easily transmissible between humans, the World Health Organization (WHO) anticipates that this virus strain of influenza will be the next to mutate, resulting in human-to-human transmission.

**Health and Safety Plan (HASP)** – A HASP formally identifies the potential health and safety risks and countermeasures associated with operational unit practices. It addresses practices put in place to help prevent illness or injury. HASPs generally include identification of potentially unsafe environments, the use of personal protective equipment (PPE), health or medical countermeasure practices, ingress and egress practices and method for assessing unsafe situations.

**Health Care Facilities (HCFs)** – HCFs include public and private hospitals, nursing homes, retirement facilities, prison health clinics, public health clinics and mental health hospitals. For the purposes of this planning document, HCFs refer to the 67 hospitals within the five New York City boroughs.

**Incident Action Plans (IAPs)** – IAPs identify agency and/or functional area objectives that personnel must strive to accomplish during the next Op Periods. IAPs must help an agency maintain coordination between all functional areas/tasks being performed simultaneously during an Op Period. They must also support the larger jurisdiction’s IAPs to mitigate the effects of a disaster event, when IAPs are coordinated jurisdiction-wide. IAPs: (1) specify the objectives for the next Op Period; (2) define the work assignments for the next Op Period, including site-specific safety messages; (3) define the resources needed to accomplish the work order; (4) depict how all response personnel are to be organized; (5) list radio and telephone communications for all incident personnel; (6) specify a medical plan to follow in case of a responder emergency; and (7) identify resources at risk.

**Incident Command System (ICS)** – ICS is a method of command, control, coordination and communication that enhances agency operations when responding to a disaster event. Typically, ICS refers to management of people performing specific functions within a leader’s span of control.

**Incident Management System (IMS)** – This is a method of command, control, coordination and communication that enhances one agency’s, or multiple agencies’, response to a disaster event. Typically, IMS refers to more than the ICS, as it also encompasses management of all phases of the disaster: preparedness, response, recovery and mitigation.

**Medical Examiner (ME)** – A medical examiner is a physician who is appointed by the government to oversee and/or perform medicolegal death investigations.

**Medical Examiner Transport Team (METT)** – These teams (two or more individuals) recover bodies from HCFs and residential locations and transport them to the appropriate B-OCME location.

**Medicolegal** – Pertaining to medicine and law.
**Medicolegal Investigation** – The medicolegal investigation includes the collection of data, photographs, evidence, witness interviews, external examination of the body at the scene and other forensic information and analysis that will contribute to the determination of cause and manner of death, reconstruction of the accident or crime scene and support the provision of survivability factors. The medicolegal investigation falls within the exclusive purview of the Medicolegal Authority operating at the scene of an incident.

**Medicolegal Investigator (MLI)** – A medicolegal investigator is an individual with the training and experience to conduct a competent, thorough and independent investigation into the circumstances surrounding a death in accordance with the legal requirements of the jurisdiction.

**Missing & Unidentified Persons** – Missing persons are those persons whose whereabouts are unknown to family or friends following an incident. Unidentified persons include those persons, both injured and deceased, who require the application of scientific methods to verify their identification. Scientific methods for identification include DNA, fingerprints, dental, radiographs, or medical record examination.

**Mortuary Affairs (MA)** – Mortuary Affairs is synonymous with fatality management, which is a general term referring to the provision of necessary care and disposition of missing and deceased persons, including their personal effects (PE). It is a term used by the Department of Defense (DOD) that encompasses the search, recovery, evacuation, tracking, tentative and confirmatory identification, processing and temporary and/or final interment and/or re-interment of human remains.

**Off-Site Morgue (OSM)** – An OSM is a temporary OCME facility where staff can process decedent identification and perform an external examination. In some cases, an OSM may have a full complement of equipment, supplies and personnel to perform all aspects of an internal examination/autopsy. The OCME primarily intends to establish OSMs in association with each B-OCME.

**Operational Period (Op Period)** – The Incident Commander (IC) establishes this length of time during a disaster event, with the Op Period used to execute predetermined incident action plans (IAPs). During each Op Period, which typically lasts 1, 2, 8, 12 or 24 hours, agency commanders identify and execute key objectives. These agency objectives are generally coordinated with other agencies’ objectives, to successfully mitigate the effects of a disaster. Typically, Op Periods are shorter during initial occurrence of a disaster and grow longer as less complex coordination is required.

**Personal Effects (PE)** – This refers to property, including clothing, jewelry, wallets or other items found on a decedent’s body. Such items are often categorized as durable or non-durable and are used to help identify casualties and decedents.

**Point of Dispensing (POD)** – A POD is a specific location where appropriate medical or trained staff dispenses medications to large numbers of people in order to prevent them from contracting a specific infection, illness or disease.

**Prosector** – This is another name for the medical physician performing an autopsy.

**Residential Recovery Team (RRT)** – An OCME RRT consists of a medicolegal death investigator (MLI) and two body handlers or a METT. This RRT will investigate residential deaths, recover decedents and transport bodies to the appropriate B-OCME. The RRT will tag and track bodies as appropriate, using designated OCME methods.
Remains Storage Facility (RSF) – An RSF is a temporary cold storage unit established at B-OCMEs and OSMs that enhances decedent and PE storage capacity. RSFs can be refrigerated CONEX boxes, 18-wheeler trailer units, tents or permanent facilities.

Resource Typing – A uniform means by which to name resources and package them with specific equipment, supplies, personnel, services and facilities so resources have consistent capabilities. Resource typing involves identifying the resource name, category, kind, components, metrics, type and additional information. The United States Department of Homeland Security is currently developing a national resource typing model as part of the National Incident Management System (NIMS).

Standard Precautions – Public health agencies provide this official guidance regarding basic clothing and equipment that health care workers must wear to protect themselves from cross-contamination with a patient’s blood, body fluids and/or respiratory droplets. Standard Precautions involve:

- Performing hand hygiene before and after all patient contact or contact with items potentially contaminated with blood or body fluids
- Wearing gloves, gowns, masks and eye and/or facial protection to prevent contact with mucous membranes, non-intact skin, blood and other moist body substances as determined by the nature and extent of the anticipated exposure
- Removing all PPE and discarding it immediately after completion of a task; and performing hand hygiene

Staging Area – This is a designated location where OCME personnel gather equipment and assignments before responding to an incident. OCME has pre-designated 520 First Avenue (the AC-OCME building) as the location where command staff personnel will report. FDR Drive at East 18th Street is the designated location for field response teams (i.e., MLI, METT and MESORT [Medical Examiner Special Operations Response Team]) to report, before going to an incident site. The OCME will determine alternate staging locations as dependent on disaster operations and environmental constraints.

Unified Command (UC) – UC is a method to coordinate multiple agency responses during a disaster event. The structure promotes command, control, communication and coordination. During a PI event, New York City agencies will utilize a UC to govern their activities.

Incident Command Post (ICP) – The ICP will be an established location where multiple responding agencies can review and coordinate all agencies’ IAPs for the current or upcoming Op Period. During a PI event, the NYPD, FDNY, DOHMH and OEM will jointly determine where an ICP should best be located to coordinate multiple-agency response.

Unified Victim Identification System (UVIS) – A database system used by 311 NYC operators, NYPD and OCME to gather key information to facilitate compiling an accurate list of missing persons thereby enhancing missing persons’ investigation efforts during and after disaster events. UVIS is also used by the OCME to track decedents, collect antemortem information and collect postmortem findings to facilitate the identification process during a disaster event. UVIS will also include a HCF module application so that HCFs may “self-report” decedents requiring the OCME to hold a body for claim and/or process decedents for identification or City-directed burial. The NYC OCME anticipates the UVIS HCF self-reporting module will become available to HCFs in late 2008.

*Note: HCFs will be able to communicate their needs to obtain a BCP, exchange a BCP, or refuel or obtain maintenance support via the UVIS application in addition to reporting their needs through the Emergency Support Function (ESF) #8 Health and Medical Desk at the NYC EOC.
### E. Acronym List

<table>
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<tr>
<th>Acronym</th>
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<td>AAR</td>
<td>After Action Report</td>
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<td>Area Command</td>
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<td>ACP</td>
<td>Area Command Post</td>
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<td>Area Command-Office of Chief Medical Examiner</td>
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<td>ACP SO</td>
<td>Area Command Post Safety Officer</td>
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<td>AI</td>
<td>Avian Influenza</td>
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<td>ALS</td>
<td>Advanced Life Support</td>
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<td>ARC</td>
<td>American Red Cross</td>
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<td>BCP</td>
<td>Body Collection Point</td>
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<td>BLS</td>
<td>Basic Life Support</td>
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<td>B-OCME</td>
<td>NYC Borough Office of Chief Medical Examiner</td>
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<td>BX-OCME</td>
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<td>New York City</td>
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<td>Commissioner of Health</td>
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<td>Comm IT</td>
<td>Communication/Information Technology</td>
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<td>CONOPS</td>
<td>Concept of Operations</td>
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<td>COP</td>
<td>Common Operating Picture</td>
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<td>COSH</td>
<td>New York Committee of Occupational Safety and Health</td>
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<td>CP</td>
<td>Command Post</td>
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<tr>
<td>DCAS</td>
<td>Department of Citywide Administration Services</td>
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<td>DDRP</td>
<td>Distributed Death Registration Process</td>
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<tr>
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<td>DMORT</td>
<td>Disaster Mortuary Operational Response Team</td>
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<td>DNA</td>
<td>Deoxyribonucleic acid</td>
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<tr>
<td>DOA</td>
<td>Dead on Arrival</td>
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<td>DOC</td>
<td>NYC Department of Correction</td>
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### Pandemic Influenza Surge Plan For Managing In- and Out-of-Hospital Deaths

#### Supporting Technical and Reference Sections

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<th>Acronym</th>
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<tr>
<td>D</td>
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<tr>
<td>D</td>
<td>DOD Department of Defense</td>
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<tr>
<td>D</td>
<td>DOHMH NYC Department of Health and Mental Hygiene</td>
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<tr>
<td>D</td>
<td>DoITT NYC Department of Information Technology &amp; Telecommunications</td>
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<tr>
<td>D</td>
<td>DPMU Disaster Portable Morgue Unit</td>
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<tr>
<td>D</td>
<td>DSNY Department of Sanitation, New York City</td>
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<tr>
<td>D</td>
<td>DVI Disaster Victim Identification</td>
</tr>
<tr>
<td>E</td>
<td>EENT Ears, Eyes, Nose, Throat</td>
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<tr>
<td>E</td>
<td>ED Emergency Department</td>
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<tr>
<td>E</td>
<td>EDRS Electronic Death Registration System</td>
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<td>E</td>
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<td>ESF Emergency Support Function</td>
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<td>FAC Family Assistance Center</td>
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<td>FDNY Fire Department for the City of New York</td>
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<td>HPAI High Pathogenic Avian Influenza</td>
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<td>H</td>
<td>HRP Human Remains Pouch</td>
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<td>HRSA Health Resources and Services Administration</td>
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<tr>
<td>I</td>
<td>IAP Incident Action Plan</td>
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<td>IC Incident Commander</td>
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<td>Information Technology</td>
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<td>Joint Information Center</td>
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<td>Low Pathogenic Avian Influenza</td>
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<td>MRC</td>
<td>Medical Reserve Corp</td>
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<tr>
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