

Federal Bureau of Prisons
Health Services Division

Pandemic Influenza Plan

Module 1: Surveillance and Infection Control (October 2009)

What's New in this Document?

Since the May 2008 version of Module 1, the following has been revised to reflect updated recommendations by the Centers for Disease Control and Prevention (CDC) regarding the current pandemic 2009 H1N1 influenza. Throughout the module, changes are highlighted in yellow.

- **The definition of influenza-like illness (ILI) is revised.** The following definition for ILI will be utilized within the BOP: *Fever (temperature of 100° F [37.8° C]) plus either cough or sore throat—in the absence of a known cause other than influenza.*
- **Influenza Outbreak Scenarios and Control Measures** ([Attachment 1.1](#)) have been developed to guide implementation of infection control measures. The scenarios are based on the number and distribution of inmates who are sick with ILI at a given time.
- **New system for ILI data collection is used.** The occurrence of ILI will be tracked within the BOP utilizing the BOP Electronic Medical Record (BEMR). The following should be entered on a daily basis: ILI, complicated ILI, ILI-related hospitalization, and ILI-related death (see [Attachment 1.2](#)).
- [Attachment 1.3](#), *Influenza-Like Illness Screening Form* has been revised.
- **The CDC recommends that 2009 H1N1 influenza testing *not* be routinely performed** on persons presenting with ILI. *Exceptions:* hospitalized patients and atypical clinical presentation.
- Specific recommendations for “**Influenza Isolation Units**” and “**Influenza Quarantine Units**” are included (see [Attachment 1.7](#)).
- **Personal protective equipment (PPE):** An Influenza Isolation Unit sign listing necessary PPE is included ([Attachment 1.10](#)). An N-95 or higher filtering respirator is recommended for entering an Influenza Isolation Unit or transporting an inmate with ILI. Respirators must be fit-tested. Gloves should be worn for direct contact with ill patients or contaminated surfaces. Guidelines for use and disposal of respirators are clarified ([Attachment 1.7](#)).
- **For inmates with ILI, the recommended *duration of isolation* has been updated:**
 - *Inmates in Medical Referral Centers:* seven (7) days after symptom onset or until symptoms have resolved (whichever is longer).
 - *All other inmates:* 24 hours after temperature is normal without fever-reducing medication
- **For employees who are sick with ILI, the recommended *timetable for return to work* is updated:**
 - *General:* 24 hours after temperature is normal without fever-reducing medication
 - *Health care workers:* Can provide direct patient care—7 days after symptom onset or until symptoms resolved (whichever is longer). Can perform non-patient care duties—24 hours after temperature is normal.
- **Health care workers (HCW) who have had an unprotected exposure** to an individual with ILI should report their exposure to their supervisor. The HCW should not be assigned to care for inmates who are at high risk for influenza complications for the 4 days following the exposure unless they receive antiviral prophylaxis.
- **The recommended duration of quarantine has been changed.** Within the BOP, the duration of quarantine (for asymptomatic persons who have been exposed to ILI) is *4 days*.
- **Non-alcohol based hand rub should be considered** for key areas that lack facilities for hand washing, i.e., outside the dining hall, the visitor area, etc.

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The BOP Pandemic Influenza Plan contains the main plan and four separate modules, which cover the unique health-related aspects of pandemic flu emergency response. These include:

- Module 1: Surveillance and Infection Control
- Module 2: Antiviral Medications and Vaccines
- Module 3: Health Care Delivery
- Module 4: Care for the Deceased

Each module contains template Standard Operating Procedures that are provided as separate, modifiable, WordPerfect® files. The Standard Operating Procedures correlate with the Action Steps listed for the Preparation Stage. They are designed to standardize, guide, and simplify each facility's planning process.

The Bureau of Prisons has based its Pandemic Influenza Plan on the federal government response stages. The BOP plan combines the federal stages to organize action steps into three different stages: Preparation, Response, and Recovery.

Federal Stage	Federal Government Response Stages*	Federal Stages	BOP Plan
0	New domestic animal outbreak in at-risk country	0-1	Preparation
1	Suspected human outbreak overseas		
2	Confirmed human outbreak overseas	2-5	Response
3	Widespread human outbreaks in multiple locations overseas		
4	First human case in North America		
5	Spread throughout United States		
6	Recovery & preparation for subsequent waves	6	Recovery
<p>*Note: The Federal Government Response Stages should not be confused with the World Health Organization phases of pandemic influenza, which are different and overlap.</p>			

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Pandemic Influenza Plan

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Overview

Starting now, every BOP institution should creatively and aggressively promote three health habits that interrupt flu transmission: regular hand hygiene, respiratory etiquette (coughing or sneezing into a sleeve or tissue); and avoiding touching one's mouth, nose or eyes).

During the 1918–19 pandemic influenza (“flu”), certain cities fared better than others. Those U.S. cities that both acted promptly to control the flu *and* implemented multiple layers of protective measures had fewer flu cases and lower overall mortality. The procedures for surveillance and infection control outlined in this plan include multiple layers of protection. With the onset of pandemic flu, the BOP Medical Director will guide implementation of infection control measures based on the severity of the flu outbreak. The key to protection of both employees and inmates is swift, decisive, coordinated action based upon advance planning.

The current pandemic 2009 H1N1 influenza usually results in relatively mild illness. The 2009 H1N1 flu has caused greater disease burden in people younger than 25 years of age than among older people. At this time, there are few cases and few deaths reported in people older than 64 years old, which is unusual when compared with seasonal flu. However, pregnancy and other high-risk medical conditions that were previously recognized from seasonal influenza appear to be associated with increased risk of complications from 2009 H1N1. These underlying conditions include asthma, diabetes, suppressed immune systems, heart disease, kidney disease, neurocognitive and neuromuscular disorders, and pregnancy.

How is flu transmitted? It is thought that 2009 H1N1 virus is spread in the same way as seasonal flu. When people who are sick with the flu either cough or sneeze, they release infectious droplets that can enter another person’s body through their eyes, nose, or mouth. Flu germs can spread through the air, up to six feet away from the sick person. Flu virus particles do not remain suspended in the air. However, if a person who is sick with the flu touches surfaces, such as telephones and door knobs, the surface can become contaminated with the flu virus. Other people then can become infected with the virus by touching the surface and then touching their eyes, nose, or mouth.

When can a person transmit flu? For the purposes of this guidance, the *infectious period* for pandemic 2009 H1N1 influenza is generally defined as: one day before fever starts until 24 hours after fever ends. Some people may shed virus for a while longer; however, studies have shown that after fever resolves there is a significant reduction in the ability to transmit infection.

How long does it take for symptoms develop? The estimated *incubation period* (the time between acquiring the pandemic H1N1 flu infection until becoming ill) is unknown and could range from 1–7 days, but is more likely to be between 1–4 days.

Surveillance

Surveillance refers to the process of detecting and tracking diseases. Surveillance for flu involves screening for influenza symptoms (to rapidly identify flu patients and isolate them); and collecting, analyzing, and reporting data on individuals who are diagnosed with influenza-like illness. The BOP will utilize the following definition of influenza-like illness during the current pandemic 2009 H1N1 influenza:

Influenza-like illness (ILI): Fever (temperature of 100° F [37.8° C]) plus either cough or sore throat—in the absence of a known cause other than influenza.

During pandemic 2009 H1N1 influenza, ILI will be tracked utilizing BEMR. On a daily basis, enter into BEMR the occurrence of: ILI, complicated ILI (requiring prescription medication or intravenous fluids), ILI related hospitalization, and ILI related deaths. This will allow local facilities and the central and regional offices to closely track the occurrence of ILI within BOP. See *Attachment 1.2* for specific BEMR codes and definitions.

Infection Control

Infection control consists of practices that interrupt the spread of disease. A variety of measures to interrupt flu transmission are listed below and discussed on the following pages.

Pandemic Flu Infection Control Measures

1. Promote good health habits among employees and inmates:
 - a. Regular hand hygiene
 - b. Respiratory etiquette (coughing or sneezing into a sleeve or tissue)
 - c. Avoiding touching one's eyes, nose, or mouth
2. Conduct frequent environmental cleaning of "high touch" surfaces.
3. Separate the sick from the well.
 - a. Advise employees to stay home from work if they are sick.
 - b. Promptly identify and contain inmates with influenza-like illness (ILI).
 - c. Isolate or cohort inmates who are sick with pandemic influenza.
 - d. Conduct contact investigations for flu cases and quarantine contacts.
4. Create "social distance" between people.
5. Use personal protective equipment (PPE) for close contact with flu cases.
6. If widespread flu transmission, consider targeted distribution of face masks (only with permission of BOP Medical Director or designee).
7. Provide ongoing infection control education.

1. Promote good health habits among employees and inmates.

Critical to preventing flu transmission is a triad of good health habits, including:

- a. *Regular hand hygiene*
- b. *Respiratory etiquette (coughing or sneezing into a sleeve or tissue)*
- c. *Avoiding touching one's eyes, nose, or mouth.*

Preparing for pandemic flu involves improving compliance with these basic infection control measures, *beginning now*. Each facility should assure that adequate supplies and facilities are available for handwashing for both inmates and employees.

Health care workers should have access to alcohol-based hand rub provided in accordance with fire and safety rules. CDC has made no recommendations regarding the use of non-alcohol based hand rub, but use of these products is presumably better than no hand hygiene at all. Provision of non-alcohol based hand rub via dispensers should be considered in key areas that lack facilities for hand washing, i.e., outside the dining hall, in the visitor area, etc.

Provisions should be made for employees and visitors to wash their hands before and after they enter the facility. The triad of good health habits should be promoted in various ways, i.e., educational programs, posters, campaigns, assessing adherence with hand hygiene, etc. Relevant educational tools are available on Sallyport on the Health Services Division page.

2. Conduct frequent environmental cleaning of “high-touch” surfaces.

Another general infection control measure is to routinely clean surfaces that are frequently touched and therefore can become contaminated with germs. These can include door knobs, keys, hand rails, telephones, computer keyboards, elevator buttons, inmate cell bars, etc. Increasing the frequency of environmental cleaning of these surfaces is something that also can be started now, thereby preventing transmission of infections such as the common cold, seasonal flu and MRSA. Some facilities have increased environmental cleaning of high-touch surfaces by increasing the number of inmate workers assigned to this duty. With the widespread occurrence of pandemic H1N1 influenza, there should be increased emphasis on frequent environmental cleaning of “high-touch” surfaces.

3. Separate the sick from the well.

Transmission of pandemic flu can be prevented by separating those who are ill from those who have not been infected. In the event of pandemic flu, several measures should be implemented to separate the sick from the well. Below are definitions of two important terms related to separating the sick from the well and that are frequently confused with each other.

Definitions of Isolation and Quarantine

Isolation: Confining individuals who are **sick with influenza** (ILI cases) either to single rooms or by cohorting them with other influenza patients.

Quarantine: Confining **asymptomatic** persons who are **contacts of influenza cases**, while they are in the incubation period (**4 days** after exposure ended).

The following measures are recommended to separate the sick from the well.

a. **Advise employees to stay home from work if they are sick.**

The most likely way that pandemic flu will gain entrance to a facility is via infected employees. In the event of pandemic flu, staff should be educated to stay home if they have influenza symptoms. If employees become sick at work, they should be advised to promptly report this to their supervisor and go home. For persons with ILI, the recommended duration of isolation and the recommended timetable for return to work has been updated during pandemic H1N1 flu.

Timetable for Return to Work Following ILI

- **General:** BOP employees can return to work 24 hours after temperature is normal without fever-reducing medication (e.g., acetaminophen or ibuprofen)
- **Health care workers:** BOP health care workers can return to work and provide direct patient care 7 days after symptom onset or until symptoms have resolved (whichever is longer). Health care workers may return to work 24 hours after temperature is normal, but should perform non-patient care duties until the 7-day period has elapsed.

Health care workers (HCW)—who have been exposed (either at work or at home) to a person with influenza-like illness—pose a potential risk to inmate patients who are at high risk for influenza complications (in the event that the HCW develops ILI). The following guideline should be followed for asymptomatic health care workers who have had unprotected exposure to an individual with ILI.

Management of Health Care Workers With Unprotected Exposure to ILI

- HCWs should report the exposure to the supervisor.
- HCWs with unprotected close contact with an individual with ILI should not be assigned to care for inmates who are at high risk for influenza complications for the 4-day period following the exposure*. The following inmates are at high risk for complications:
 - pregnant; age 65 or older; chronic pulmonary disorders (including asthma); cardiovascular disorders (except hypertension); renal disorders; hepatic disorders; hematological disorders (including sickle cell anemia); neurologic disorders; neuromuscular disorders; metabolic disorders (including diabetes mellitus); and immunosuppression, including that caused by medications or HIV.
- If significant health care staffing shortages occur, consider offering the health care worker antiviral prophylaxis so that they can provide care to inmates at high risk for complications.

* A person is considered “exposed” for the time period up to 24 hours after fever last occurred in the contact(s) with ILI.

b. **Promptly identify and contain inmates with influenza-like illness (ILI).**

Prompt identification and isolation of inmates with ILI is critical. During the course of pandemic H1N1 influenza, all inmates should be screened at intake. If ILI is circulating within the institution, inmates should be screened at triage/sick-call and prior to transfer or daily transport. In addition, all staff should be advised to report if any inmates are symptomatic.

Immediately place a face mask on all individuals who are identified as having ILI symptoms (if it can be tolerated). They should be isolated or cohorted with other sick inmates (see below).

Screening at intake: The screening of inmates upon arrival should be adapted to the particular situation at each facility, with the goal of keeping new arrivals segregated from other inmates, until the screening process has been completed. Screening should be conducted utilizing the revised *Influenza-Like Illness Screening Form (Attachment 1.3)*.

Screening at triage/sick-call: If ILI is circulating within the institution, inmates at sick-call should be asked about ILI symptoms; if symptoms are present, these inmates should be asked to wear a face mask and be physically separated from inmates presenting to sick-call for other reasons.

Screening of transfers and daily transports: If ILI is circulating within the facility, inmates should be screened for ILI prior to transport. If ILI is identified in an inmate, in general, their transfer or transport should be postponed until the inmate has been fever-free for 24 hours (without fever-reducing medication).

c. Isolate or cohort inmates who are sick with pandemic influenza.

A critical infection control measure for pandemic influenza is to promptly separate inmates who are sick with flu symptoms away from other inmates in the general population. Inmates can be *isolated* in private rooms. Alternatively, groups of sick inmates can be *cohorted* together in a separate unit.

Rooms where inmates with ILI are either housed alone or cohorted should be designated “Influenza Isolation Units” (see *Attachment 1.7*). In general, no special air handling is needed. Depending on how ill the inmates are, bunk beds may or may not be suitable. Ideally, the unit should have a bathroom attached. If not, inmates will have to wear a surgical mask to go to the bathroom outside the room. The door to the Influenza Isolation Unit should remain closed. A sign should be placed on the door of the room indicating that it is an Influenza Isolation Unit and listing recommended personal protective equipment (PPE)—see *Attachment 1.10*.

Within Influenza Isolation Units, Standard Precautions should be followed and a NIOSH-approved N-95 (or better) respirator should be utilized. Healthcare personnel caring for patients should wear gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment. A respirator (preferably fluid resistant), eye protection (goggles or face shield) and a gown should be worn during patient care activities that are likely to generate splashes and sprays of blood, body fluids, secretions, or excretions, e.g., suctioning or nebulizer treatments.

If the inmate with ILI must be taken out of isolation, a face mask should be placed on the sick inmate to reduce the risk of spray through cough or sneeze.

If the inmate with ILI must undergo a procedure that is likely to generate aerosols (e.g., suctioning, administering nebulized medications), then an airborne infection isolation (AII) room with negative pressure and 6 to 12 air changes per hour, is indicated.

In large dorm settings or camps, isolation may not be a possibility. If isolation is not feasible, attempt to place the beds of sick inmates at a distance of at least 6 feet from other inmates. It is recognized that if there is widespread flu transmission within a facility, isolation as a strategy may not be feasible.

See *Attachment 1.7* for more information about infection control procedures for Influenza Isolation Units. Personal protective equipment in isolation units is discussed on the next page.

d. Conduct contact investigations for flu cases and quarantine contacts.

It may be appropriate to identify close contacts to pandemic flu cases and quarantine them in a separate unit. The purpose of quarantine is to assure that inmates who are known to have been exposed to the flu virus are kept separate from other inmates to assess whether they develop flu symptoms. For the purposes of this document, exposure is defined as having been in a setting where there was a high likelihood of contact with respiratory droplets and/or body fluids of a person with ILI. Examples of close contact include sharing eating or drinking utensils, or any other contact between persons likely to result in exposure to respiratory droplets. Close contact typically does not include activities such as walking by an infected person or sitting across from a symptomatic patient in a waiting room or office.

Within the BOP, the duration of quarantine during pandemic H1N1 influenza is 4 days. As feasible, the beds/cots of quarantined inmates should be placed at least 3-6 feet apart. Quarantined inmates should be restricted from being transferred, having visits, or mixing with the general population. See [Attachments 1.8 and 1.9](#) for procedures and forms related to contact investigation and quarantine. A face mask is recommended for staff who are in direct, close contact (within 6 feet) of quarantined inmates. (A respirator is not required because these inmates should not be coughing.)

Note: Once multiple flu cases occur within multiple housing units, a decision may be made to abandon contact investigation and the subsequent quarantine of contacts. In this case, everyone in the facility has become a “contact,” and contact investigation and quarantine are no longer useful or appropriate control strategies.

4. Create “social distance” between people.

In the general community, an important method for preventing pandemic flu transmission will be to increase the distance between people by instituting various “social distancing” measures, e.g., closing schools, theaters, and churches; staggering work schedules; discouraging use of public transportation, etc. While “social distancing” is more difficult to accomplish in a correctional setting, there are possible interventions.

Social distancing measures in BOP facilities could include: limiting gatherings (group meals, religious services, work, classes, recreation, common areas); ending visitation; halting entrance to volunteers and contractors; discouraging shaking of hands, etc. Individual units can be taken separately to recreation and the dining hall with thorough environmental cleaning in between. Each local pandemic flu planning committee should identify ways to accomplish social distancing within their facility.

With the occurrence of multiple cases of flu, lock-down-of individual dormitories, buildings, and entire institutions—should be considered on a case-by-case basis, in consultation with the Regional Office.

5. Use personal protective equipment for close contact with flu cases.

Anyone who is working in close contact with pandemic flu cases should be provided personal protective equipment.

Updated Definitions of *Face Masks* and *Respirators* (CDC-2009)

- **Face masks** are disposable FDA-approved masks, which come in various shapes and types (e.g., flat with nose bridge and ties, duck billed, flat and pleated, pre-molded with elastic bands). They include the following categories of masks: surgical, dental, medical procedure, and laser.
- **Respirators** are N-95 or higher filtering, face-piece respirators that are certified by CDC/NIOSH.

- a. **Respirators:** An N-95 or higher filtering respirator is the minimum recommended respiratory protection for entering an Influenza Isolation Unit. When N-95 respirators are used, it should be in the context of an OSHA-compatible respiratory protection program, including employee training, fit-testing of the respirators, and medical evaluation of employees. Guidance for use and disposal of respirators is provided in *Attachment 1.7*.

Face masks (not respirators) are recommended for use with *seasonal* flu patients because the primary mode of flu transmission is droplet spread (not airborne). Respirators are generally utilized to protect against small airborne particles, e.g., with tuberculosis patients. However, in the absence of sufficient data about pandemic 2009 H1N1 influenza, the CDC is recommending that respirators (rather than face masks) be used when in close contact with patients with ILI.

However, if there is a shortage of respirators, CDC indicates that face masks may be considered an alternative to respirators. If respirators are in short supply, they should be prioritized for situations in which the virus may be aerosolized, including aerosol-generating procedures (such as endotracheal intubation, nebulizer treatments), resuscitation of a patient, or when providing direct care to a patient with confirmed or suspected influenza-related pneumonia.

- b. **Gloves.** Healthcare personnel caring for patients should wear gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment. If gloves are worn, perform hand hygiene before donning and after removing gloves.
- c. **Eye protection and gowns** should be worn by health care personnel when spray or splash or body fluids, secretions, or excretions is anticipated, e.g., suctioning, administering nebulized medication. Eye glasses are *not* sufficient for eye protection. Appropriately fitted, indirectly-vented goggles with a manufacturer's anti-fog coating provide the most reliable, practical eye protection from respiratory droplets, and they come in styles that can be fitted over eye glasses. Face shields can be used as an infection control alternative to goggles.
- d. **Face masks** are the recommended personal protective equipment when in close contact (within 6 feet) of quarantined inmates (housing of asymptomatic contacts who have been exposed to ILI). Face masks do not require fit-testing. Face masks also should be placed on persons with ILI to prevent droplet spread, i.e., during transport.

6. If widespread flu transmission, consider targeted distribution of face masks.

It is unknown whether the targeted distribution and use of face masks during a pandemic flu outbreak will interrupt the spread of flu. Because of the close contact between people in BOP facilities, face masks have been stockpiled for distribution to employees and inmates in the event of pandemic influenza. Permission must be obtained from the BOP medical director prior to targeted distribution of face masks.

7. Provide ongoing infection control education.

Successful response to pandemic flu will depend greatly on strong education efforts prior to and during an actual event. The education for pandemic flu infection control is closely related to other important infection control education for BOP facilities. Education about hand hygiene, respiratory etiquette, and environmental cleaning provides benefits to inmates and employees with regard to a variety of infectious diseases. Infection control education should be ongoing—the more the better. Using a variety of media (posters, newsletters, video) increases the likelihood that employees and inmates will comply with infection control recommendations. The Central Office Health Services Division provides educational tools on Sallyport and will offer periodic Centra programs related to pandemic flu.

Influenza Outbreak Scenarios and Control Measures

Three influenza outbreak scenarios and associated infection control measures have been developed, based on the number of ILI cases occurring and their distribution within a facility (see [Attachment 1.1](#)).

The three scenarios include:

- ***Isolation Scenario*** – single cases of ILI with minimal to no transmission
- ***Quarantine Scenario*** – ILI confined to single housing unit(s) or building
- ***Widespread Transmission Scenario*** – ILI occurring throughout the institution

For each scenario, general recommendations are made about the appropriate infection control measures to implement. The control measures listed for each scenario are provided for general reference only. Consult the Regional Office for guidance on management of specific outbreak situations.

Action Steps by Pandemic Stage

Preparation (Federal Response Stages 0–1)

(See [Standard Operating Procedures](#) which are provided for the Preparation stage only.)

1. Identify a staff person to be responsible for influenza surveillance and infection control.
2. Increase emphasis on good health habits to stop flu transmission, especially handwashing, respiratory etiquette, and avoiding touching the eyes, nose, and mouth.
 - a. Make soap dispensers or hand soap available in all employee and inmate restrooms.
 - b. Institute a plan to assure that soap dispensers are refilled regularly .
 - c. Assure that inmates have an adequate supply of bar soap.
 - d. Provide education to employees and inmates on hand hygiene, respiratory etiquette, and avoiding touching the eyes, nose, and mouth.
 - e. Maximize access to alcohol-based hand rub dispensers in the Medical Unit (only if authorized by the warden).
 - f. Regularly assess the hand hygiene practices of employees and inmates, and design measures to improve hand hygiene.
 - g. Assure that employees and visitors can wash their hands when entering and leaving the facility.
3. Emphasize frequent cleaning and disinfection of high-touch areas, i.e., door knobs, keys, telephones.
4. Identify resources for influenza surveillance and control.
 - a. Track international, national, regional, and local influenza trends.
 - b. Identify public health department contacts for influenza (including 24/7 contact information).
 - c. Communicate with your local health department and discuss collaboration on pandemic influenza preparedness.
 - d. Identify any local or state reporting requirements for influenza/pandemic influenza.
 - e. Identify laboratories capable of processing influenza cultures and cultures for novel (pandemic) influenza.
5. Begin tracking influenza trends by conducting surveillance for *seasonal* flu.
6. Establish procedures for influenza screening to be utilized with pandemic flu.
7. Identify administrative measures to accomplish “social distancing.”
8. Identify areas within the facility that can be used for isolation and quarantine.
9. Develop plans for stockpiling and distributing infection-control supplies.
10. Provide routine training about flu transmission and prevention and control measures.
11. Conduct mock exercises related to surveillance and infection control in pandemic flu.

Response (Federal Response Stages 2-5)

Begin when there are confirmed human outbreaks of pandemic flu anywhere in the world:

1. Reinforce education regarding influenza infection control. Emphasize the triad of good health habits: hand hygiene, respiratory etiquette, and not touching the eyes, nose, and mouth.
2. Consider placement of dispensers of non-alcohol hand rub in key areas that lack facilities for hand washing, i.e., outside the dining hall, in the visitor area, etc.
3. Increase environmental cleaning of “high-touch” surfaces, e.g., door knobs, keys, telephones.
4. Educate employees and visitors not to come to the facility if they have flu symptoms.
5. Assess adequacy of infection-control supplies (including respirators and gloves) and review distribution plan.
6. Provide respirator fit-testing, medical evaluation, and training to any employees who may be assigned to have contact with inmates with flu—in Influenza Isolation Units or for transport.
7. Initiate screening for influenza-like illness at intake and in triage/sick-call according to those outlined in the Standard Operating Procedures (see revised screening form, Attachment 1.3).
8. Conduct active surveillance to look for influenza cases (i.e., review temperature logs, triage/sick call, hospitalizations, staff absences, unexplained deaths, etc.).
9. On a daily basis, enter into BEMR: cases of ILI, complicated ILI, ILI-related hospitalizations, and ILI-related deaths. Produce regular reports on the status of ILI within the institution for institution leadership.
10. Review possible measures to increase “social distancing.”
11. Review/revise the list of designated influenza isolation and quarantine units, and develop options for expanding bed-space as needed.
12. Advise health care workers to report any unprotected close contact with persons with ILI (either at work or at home).

Begin after a suspected pandemic influenza case is diagnosed in the facility:

13. Immediately isolate (or cohort) inmates with influenza-like illness in “Influenza Isolation Units”, using the influenza precautions outlined in Attachment 1.7.
 - a. Reinforce education of staff on infection control procedures to follow when caring for flu patients.
 - b. Assure that adequate infection-control supplies and personal protective equipment, i.e., respirators and gloves, are available.
 - c. Place precaution signs (Appendix 1.10) on the doors of Influenza Isolation Units.
14. If there is flu transmission in the facility, begin screening all transfers and daily transports for ILI (use revised form, Attachment 1.3).
15. Perform triage at sick-call to rapidly identify inmates with flu symptoms and implement procedures for separating the sick from the well.
16. Conduct contact investigations of the initial flu cases that have been identified, and quarantine contacts according to procedures outlined in Attachment 1.8. Place quarantine precaution sign (Attachment 1.10) on the doors and assure an adequate supply of face masks. Implement daily temperature and signs and symptoms check. Immediately isolate any inmates that develop ILI symptoms. *Note: If there are multiple pandemic flu cases in multiple housing units, implementing contact investigations and quarantine may be inappropriate and abandoned as a strategy.*

17. Implement measures to increase social distancing.
18. Review Influenza Outbreak Scenarios and Control Measures (*Attachment 1.1*) to assess the current status of an outbreak in the institution and identify appropriate control measures.
19. Continue staff and inmate training on infection control.
20. Monitor adherence to infection control guidelines.
21. Monitor daily use of infection control supplies and conduct daily inventory control.

Recovery (Federal Response Stage 6)

Previous flu pandemics have been associated with subsequent “waves” of flu after an initial wave resolves. After an initial pandemic flu outbreak, subsequent outbreaks are likely. The recovery period will involve both recovering from the pandemic emergency, evaluating the BOP response to it, and preparing for subsequent waves of pandemic flu.

1. Maintain surveillance for influenza (to detect subsequent waves of pandemic influenza).
2. Evaluate the effectiveness of surveillance and infection-control measures during the pandemic flu and summarize observations.
3. Evaluate the adequacy of infection control supplies and the need for restocking.
4. Restock infection control supplies.

Module 1: Surveillance and Infection Control Standard Operating Procedures - Preparation Stage (Federal Response Stages 0–1)	
During the Preparation stage, adapt this Standard Operating Procedure template to the unique circumstances of your facility. A modifiable WordPerfect version is posted on: www.bop.gov/news/medresources.jsp .	
1. Identify a staff person to be responsible for influenza surveillance and infection control.	
In this facility, the following individual is assigned responsibility:	
2. Increase emphasis on the triad of good health habits to stop flu transmission: handwashing, respiratory etiquette, and not touching the eyes, nose and mouth.	
a. Make soap dispensers or hand soap available in all employee and inmate restrooms, as follows:	
b. Institute a plan to assure that soap dispensers are refilled regularly, as follows:	
c. Assure that inmates have an adequate supply of bar soap, as follows:	
d. Provide education to employees and inmates on hand hygiene, respiratory etiquette, and avoiding touching the eyes, nose, and mouth.	
Employees will be provided regular education as follows:	
Inmates will be provided regular education as follows:	
Posters on hand hygiene and respiratory etiquette will be placed in the following locations:	
e. Maximize access to alcohol-based hand rub dispensers in the Medical Unit (only if authorized by the warden) as follows:	
f. Regularly assess the hand hygiene practices of employees and inmates, and design measures to improve hand hygiene. Implement systems for assessing adherence to hand hygiene as follows:	
For health care workers:	
For other correctional workers:	
For inmates:	
g. Assure that employees and visitors can wash their hands when entering and leaving the facility, as follows:	

3. Emphasize frequent cleaning and disinfection of high touch areas		
<p>a. Identify “high-touch” surfaces in this facility (i.e., door knobs, keys, telephones):</p> <p>b. The following plan will be implemented to increase frequency and the extent of cleaning and disinfection of high-touch surfaces in this facility:</p>		
4. Identify resources for influenza surveillance.		
<p>a. Track international, national, regional, and local influenza trends, utilizing the following resources. Increase frequency of monitoring when pandemic flu is reported outside North America.</p> <p>Federal Bureau of Prisons Intranet: http://sallyport.bop.gov Federal Web sites on pandemic H1N1 influenza: http://www.cdc.gov/H1N1FLU/ Centers for Disease Control and Prevention: www.cdc.gov/flu/weekly/fluactivity.htm</p>		
<p>b. Identify public health department contacts for influenza (include 24/7 contact info.)</p>		
Local County/Community Public Health Contact:		
Address:		
Phone/email:		
State Health Department Contact:		
Address:		
Phone/email:		
<p>c. Communicate with your local health department and discuss collaboration on pandemic influenza preparedness. Document the plans discussed.</p>		
<p>d. Identify any local or state reporting requirements for influenza/pandemic influenza.</p> <p><input type="checkbox"/> No reporting requirements</p> <p><input type="checkbox"/> Influenza reporting requirements for _____ <jurisdiction> are: (Also attach required reporting forms.)</p>		
<p>e. Identify laboratories capable of processing influenza cultures and cultures for novel (pandemic) influenza.</p>		
<p><input type="checkbox"/> Attach copy of procedures for obtaining influenza specimens for your lab.</p>		
	Reference Lab	State Lab
Laboratory name		
Contact person		
Address		
Telephone		
FAX		
email		

<p>5. Begin tracking influenza trends by conducting surveillance for seasonal flu.</p> <p>a. Initiate routine data collection on inmates with identified influenza-like illness (ILI). Enter data on occurrence of ILI in the BOP Electronic Medical Record. Influenza-like illness (ILI) is defined as: "Fever (temperature of 100° F [37.8° C]) plus either cough or sore throat—in the absence of a known cause other than influenza".</p> <p>In this facility, surveillance for influenza-like illness (ILI) will be accomplished as follows:</p>
<p>b. Obtain influenza cultures when there is atypical clinical presentation of flu or when an individual is hospitalized for severe respiratory illness during flu season. <i>Note: There is no need to collect cultures during an ongoing influenza outbreak.</i></p>
<p>c. Compile annual summary reports on seasonal influenza cases (Oct. 1 – Apr. 30). Review annual ILI statistics with the Infection Control Committee. Information on seasonal flu cases should <i>not</i> be forwarded to the Regional and Central Offices.</p>
<p>6. Establish procedures for influenza screening to be utilized with pandemic flu.</p> <p>a. New Inmate Arrivals: Employees shall be assigned to screen all new arrivals, using the <i>Influenza-Like Illness Screening Form (Attachment 1.3)</i>. This screening will include taking the inmate's temperature and asking questions about symptoms. If the inmate's condition meets the clinical definition of influenza-like illness, then further questions shall be asked to identify risk factors for pandemic influenza. Ideally, screening will take place individually as the inmates are departing the bus, prior to entering the holding area. Depending on weather conditions and physical layout, this may not be feasible. Plans for screening should be adapted to the particular situation at each facility, with the goal of keeping the new arrivals segregated from other inmates, until the screening process has been completed.</p> <p>The plan for screening new inmate arrivals in this facility is:</p> <p>If ILI is identified in an arriving inmate the following should occur:</p> <ul style="list-style-type: none">• Place a surgical mask on the inmate.• Walk the inmate to the designated influenza isolation area.• Quarantine all inmates arriving on the same bus in one area of the facility, for 4 days.
<p>b. Triage/Sick-Call: During the Response stage, inmates who come to sick-call/triage will be screened for flu symptoms as follows:</p> <p>Any inmate who has flu-like symptoms will be asked to wear a mask and will be separated from other waiting inmates. If there is any evidence of epidemiologic risk for flu, the inmate should be isolated. (For more detail on infection control, isolation, and quarantine, see <i>Attachment 1.7</i>.)</p>
<p>c. General Inmate Screening: After cases of pandemic flu are reported, more intensive screening of the general population may be warranted. This may include obtaining screening temperatures and conducting symptom screens, as well as advising correctional officers to report any symptomatic inmates. Strategies for general screening for flu symptoms will include:</p>

d. Employee Screening: Employees will be asked to stay home from work if they become sick with flu symptoms and to voluntarily report flu symptoms if they occur on the job.

The following system will be utilized to track and report employee illness during a pandemic flu outbreak:

7. Identify administrative measures to accomplish “social distancing.”

Discuss use of various administrative measures to accomplish social distancing to prevent pandemic flu transmission in this facility.

- a. Identify general “social distancing” measures.** The following are possible measures:
- limit gatherings (group meals, religious services, work, classes, recreation, common areas)
 - no handshaking
 - stop visitation, volunteers, contractors
 - limit contact between the well and the ill
 - lock-downs
 - providing recreation and dining separately by unit (with disinfection in-between)

The following additional social distancing measures could be utilized in this facility:

- b. Separate the sick from the well in triage/sick-call.** During pandemic flu, the following methods will be used to separate inmates with the flu from inmates with other health problems:

8. Identify areas within the facility that can be used for isolation and quarantine.

In collaboration with the group working on *Module 3: Health Care Delivery*, identify places within your facility where inmates who have pandemic flu, or who have been in contact with flu patients, can be appropriately housed, e.g., wards, gymnasium, cafeteria.

Definitions:

- **Isolation:** Confining *influenza cases* (either to a single room or by cohorting them with other influenza patients) to decrease the likelihood of influenza transmission.
- **Quarantine:** Confining persons who are *contacts* of influenza cases, while they are in the incubation period (usually **4 days** after exposure ended).

Depending on how ill the inmates are, bunk beds may not be suitable. Isolation and quarantine **units** do not require special air handling. Ideally, these **units** have an attached bathroom. (If not, inmates must wear a mask while outside the isolation or quarantine **unit**.) **If feasible**, beds/cots in *quarantine* units **should** be placed at **3-6** feet apart to decrease the likelihood of flu transmission. List possible locations for isolation and quarantine in the chart below.

Type of Room	Location(s)	Capacity (# of inmates)
Isolation (Single)		
Isolation (Cohort)		
Quarantine (Contacts)		
<input type="checkbox"/> Review procedures for pandemic influenza precautions in Attachment 1.7 and 1.8 and be prepared to implement them. <input type="checkbox"/> Review procedures and forms for contact investigation and quarantine in Attachment 1.8 and 1.9 and be prepared to implement them.		
9. Develop plans for stockpiling and distributing infection control supplies.		
<p>a. Assure that stockpiling of hand hygiene supplies and masks is consistent with guidance from the Central Office. Develop plans for storage of supplies. <i>For security reasons, do not record the storage location in this document.</i></p>		
<p>b. Indicate the quota for supplies based on Central Office guidance:</p> <ul style="list-style-type: none"> • Liquid or foam hand soap Quota: ___ • Alcohol based hand rub Quota: ___ • Standard surgical masks Quota: ___ • Fluid-resistant surgical masks Quota: ___ • Bar soap Quota: ___ • N-95 respirators Quota: ___ • Gloves Quota: ___ 		
<p>c. The general plan for overseeing and managing stockpiled supplies is outlined below.</p> <ul style="list-style-type: none"> • The plan for rotating stock of supplies is: • The plan for securing supplies is: • The plan for distributing hand hygiene supplies during pandemic flu is: 		
<ul style="list-style-type: none"> • The plan for distributing and replacing surgical masks to inmates and employees during pandemic flu is: 		
<p>d. Develop plans for conducting respirator fit-testing for staff who will be assigned responsibility for caring for pandemic flu patients.</p>		
10. Provide routine training about flu transmission, and prevention and control measures.		
<p>The plan for providing ongoing training about flu transmission, and prevention and control in this facility is:</p>		
11. Conduct mock exercises related to surveillance and infection control in pandemic flu.		
<p>Mock exercises will be conducted as follows:</p>		

Attachment 1.1. BOP Influenza Outbreak Scenarios and Control Measures

The following chart outlines recommendations for infection control measures based on the outbreak scenario, i.e., the number and distribution of cases of ILI in an institution. These recommendations are provided for general reference only. Each outbreak situation is unique. Consult with the Regional Office regarding management of specific outbreaks.

Outbreak Scenario ▶	Isolation	Quarantine	Widespread Transmission
Control Measure ▼	Single case(s) of ILI with minimal to no transmission	ILI confined to single housing unit(s) or building	Multiple cases of ILI throughout institution
Containment Goal	Prevent spread <i>into institution.</i>	Prevent spread throughout <i>institution/complex.</i>	Prevent spread <i>throughout BOP.</i>
Isolation of ILI cases	Isolate inmates with ILI in Influenza Isolation Units.	Isolate/cohort inmates with ILI, as feasible.	Cohort inmates with ILI (may not be possible).
Quarantine of flu contacts	Not applicable.	Quarantine asymptomatic contacts of flu cases, as feasible.	Quarantine not indicated. Entire institution is, in effect, "quarantined."
Respirators/ Masks	Respirators in Influenza Isolation Units	<ul style="list-style-type: none"> Respirators in Influenza Isolation Units. Face mask for direct, close contact (within 6 feet) with quarantined inmates 	<ul style="list-style-type: none"> Use respirators when in close contact with symptomatic inmates. Consider strategic distribution of face masks.*
Screening	Screen intakes.	<ul style="list-style-type: none"> Screen intakes. Screen inmates before transfer. Screen contacts daily. ILI case-finding throughout facility. 	ILI case-finding throughout facility.
Visitors: Visitors with ILI symptoms restricted	No visitor restrictions except for flu case(s).	Visitor restrictions for quarantined units/buildings.	No visitors.
Antiviral Treatment	For high-risk.	For high-risk.	For high-risk.
Care for Sick	<ul style="list-style-type: none"> Push fluids. Observe closely. 	<ul style="list-style-type: none"> Push fluids. Observe closely. 	<ul style="list-style-type: none"> Push fluids. Observe closely.
Antiviral Prophylaxis	<ul style="list-style-type: none"> Pregnant close contacts Consider for high-risk close contacts. 	<ul style="list-style-type: none"> Pregnant close contacts Consider for high-risk close contacts. 	<ul style="list-style-type: none"> Pregnant close contacts. Consider for high-risk close contacts. Consider for staff if severe staff shortages.*
Transfers	No transfers of flu cases.	No transfers into or out of quarantined units.	No transfers into or out of institution.

* Only with the permission of the BOP Medical Director or designee.

Attachment 1.2. Use of BEMR to Track Influenza-Like Illness (ILI)

The BOP Electronic Medical Record (BEMR) will permit real-time tracking of the occurrence of influenza-like illness (ILI) during the course of pandemic H1N1 influenza. On a daily basis, information about the occurrence of ILI and associated events should be entered into BEMR.

Pandemic H1N1 Influenza BEMR Codes and Definitions

488.1 A	<p>Influenza-Like Illness (ILI)</p> <p><i>Definition:</i> Fever (temperature of 100°F [37.8°C] or greater)—plus cough or sore throat—in the absence of a known cause for these symptoms other than influenza.</p>
488.1 B	<p>Influenza-Like Illness – Complicated</p> <p><i>Definition:</i> Inmates coded as meeting the definition of ILI (BEMR 488.1 A) who require treatment with prescription medication or intravenous fluids.</p>
488.1 C	<p>Influenza-Like Illness Related Hospitalization</p> <p><i>Definition:</i> Inmates coded as meeting the definition of ILI (488.1A) who are hospitalized during the course of ILI.</p>
488.1 D	<p>Influenza-Like Illness Related Death</p> <p><i>Definition:</i> Inmates coded as meeting the definition of ILI (488.1A) who expire during the course of ILI or subsequent complications.</p>

Do not change codes once they have been entered. For example, for a person who has been hospitalized, do not delete the code for hospitalization when the person returns to the facility.

Attachment 1.3. Influenza-Like-Illness (ILI) Screening Form (revised 10/09)

This form is designed to screen inmates for influenza-like illness. If pandemic influenza is circulating outside the facility, then all intakes should be screened. If pandemic influenza has been identified within the facility then screening should occur at triage/sick-call and prior to all transfers/transports.

Date: ___/___/___ Time: ___:___

SUBJECTIVE/OBJECTIVE

1. **Temperature** _____ Date of onset: ___/___/___
2. **Do you have any of the following symptoms:**
 - Cough
 - Sore Throat
 - None of the above
3. **In last 4 days, have you had close contact with anyone with flu symptoms** (fever, cough, sore throat)?
 - No Yes Describe: _____
4. **Level of awareness:** Alert Confused Lethargic
Oriented to: Person Time Place

ASSESSMENT

- Inmate meets criteria for influenza-like illness (ILI).** *ILI is defined as: temperature greater than 100° F (37.8° C) and presence of cough or sore throat.*
- Asymptomatic inmate with history of close contact with someone with ILI**
- Absence of influenza symptoms**
- Other: _____

PLAN

- No influenza-related restrictions
- If clinical criteria for ILI met:***
 - Provide inmate with face mask
 - Transport inmate to Influenza Isolation Unit
 - Educate inmate about: Use of mask Disposal of mask Cover cough/sneezes Handwashing
- If history of recent ILI exposure***
 - Quarantine in Influenza Quarantine Unit (for 4 days)

Date:		Staff Signature & Stamp:	
Institution		Patient identification	

Attachment 1.4. Correctional Standard Precautions – General Population¹

The following precautions should be observed <i>routinely</i> by all correctional workers at all times to prevent spread of disease.		
Component	Indicated (X)	Recommendations
Hand washing	X	Wash hands routinely with soap and running water for at least 15 seconds: before eating, after using the bathroom, when hands are dirty, and after contact with blood or other body fluids.
Respiratory hygiene	X	Cough/sneeze into sleeve or cover mouth/nose with tissue. Dispose of used tissues (in regular trash). Persons who are coughing or sneezing can use a paper mask to prevent spray. Wash hands after coughing or sneezing.
Safe practices	X	Avoid touching eyes, nose, and face. Germs are spread by touching your face.
Personal protective equipment (PPE)	Not routinely	Personal protective equipment is indicated only if contact with blood/body fluids is likely. PPE includes gloves to protect hands from contact; mask, face/eye wear, and gowns to protect from sprays and splashes.
Sharps	X	Dispose in a leak-proof, puncture-resistant container. Never recap, bend, break, or otherwise manipulate used needles.
Single cell	Not routinely	Place potentially infectious inmates in a private room (in consultation with medical staff). Consider single cells for inmates with poor hygiene practices.
Sanitation	X	Routinely clean with an EPA registered disinfectant (see http://www.epa.gov/oppad001/chemregindex.htm). Use according to the manufacturer’s instructions. All washable (non-porous) surfaces should be cleaned <i>during</i> and <i>after</i> (terminal) cell occupancy. Correctional workers should conduct sanitation inspections of living and bathroom areas to identify visibly dirty areas. Emphasize regular cleaning of surfaces that are frequently touched (hand-rails, elevator buttons, door knobs, computer key boards, etc.).
Laundry	X	Collect at bedside or inmate may self-laundry. If wet or soiled, handle as little as possible; bag in a leakproof bag at the location in which it was used, in accordance with local policy on management of linens. Machine wash and dry.
Activities (shared equipment)	X	Weight benches or any other surface exposed to sweat should be <i>disinfected daily</i> , and <i>routinely wiped clean between users</i> with a clean dry towel. Inmates should use barriers to bare skin, such as a towel or clean shirt, while using exercise equipment.
Report possible infections	X	Correctional workers who observe evidence of possible infections should report them promptly to their supervisor. Inmates with possible skin infections should be sent promptly for a medical evaluation.
<p>¹ <i>General Population</i> refers to all correctional settings except health care settings.</p> <p>Adapted from: BOP Clinical Practice Guideline “Management of Methicillin Resistant <i>Staphylococcus Aureus</i>.”</p>		

Attachment 1.5. Correctional Standard Precautions – Health Care Settings

All workers in health care settings should observe the following precautions <i>routinely</i>.	
Components	Recommendations
Hand hygiene	<i>Hand hygiene is the most important measure to reduce transmission of infectious diseases..</i> Perform hand hygiene after touching blood or body fluids, after removing gloves, and between patient contacts. Hand hygiene includes handwashing with either plain or antimicrobial soap and water, as well as use of alcohol-based products (if approved by the warden). If hands are visibly soiled or contaminated, they should be washed with soap and water.
Respiratory etiquette	Educate staff, inmates, and visitors on the importance of containing respiratory secretions. Post signs with instruction on reporting influenza-like illness. Cough/sneeze into sleeve or cover mouth/nose with a tissue, disposing of used tissues in regular trash. Have persons who are coughing or sneezing use a paper mask to prevent spray. Hand hygiene after coughing/sneezing.
Personal protective equipment (PPE)	Gloves: For touching blood, body fluids, secretions, excretions, and contaminated items; for touching mucous membranes and nonintact skin. Gown: During procedures and patient-care activities where there is a possibility of contact of clothing/exposed skin with blood/body fluids, secretions, and excretions. Face/eye protection (e.g., surgical or procedure mask, goggles, or face shield): During patient care activities likely to generate splash/spray of blood, body fluids, secretions, or excretions.
Safe work practices	Avoid touching eyes, nose, mouth, or exposed skin with contaminated hands (gloved or ungloved); avoid touching surfaces that are not directly related to patient care (e.g., door knobs, keys, light switches) with contaminated gloves and other personal protective equipment.
Patient resuscitation	Avoid unnecessary mouth-to-mouth contact. Use mouth piece, resuscitation, or other ventilation device to prevent contact with mouth and oral secretions.
Patient care equipment	Handle in manner that prevents transfer of microorganisms to oneself/others and to environmental surfaces. Wear gloves if visibly contaminated; perform hand hygiene.
Soiled linen & laundry	Handle in a manner that prevents transfer of microorganisms to oneself/others and to environmental surfaces. Wear gloves (and gown, if necessary) when handling and transporting soiled linen and laundry. Perform hand hygiene.
Needles & other sharps	Use devices with safety features when available; do not recap, bend, break, or manipulate used needles. If recapping is necessary, use a one-handed scoop technique; place used sharps in a puncture-resistant container.
Environmental cleaning & disinfection	Use EPA-registered hospital detergent disinfectant. Follow standard facility procedures for cleaning and disinfecting environmental surfaces. Emphasize cleaning/disinfection of frequently touched surfaces (e.g., bed rails, phones, lavatory surfaces). Change solutions regularly and clean the container to prevent contamination. Ensure patient care items and potentially contaminated surfaces are cleaned and disinfected after use. Use barrier-protective coverings, as appropriate, for surfaces that are touched frequently with gloved hands during patient care, that may become contaminated with blood/body fluids, or that are difficult to clean.
Disposal of solid waste	Contain and dispose of solid waste (medical and non-medical) in accordance with facility procedures and/or local or state regulations. Wear gloves when handling waste and when handling waste containers. Perform hand hygiene.

Attachment 1.6. Influenza Infection Control – General Population*

The following guidelines are generally recommended *at all times* and should be emphasized during an influenza outbreak.

Wash hands regularly and carefully!

- *Handwashing is the most important way to prevent transmission of the flu.*
- Wash hands regularly with soap and water (before meals, after using the toilet, and after contact with blood or body fluids).
- Wash for at least 15 seconds, in between fingers and on both sides of hands.

Cover mouth and nose when sneezing or coughing.

- Cough into sleeve or tissue. Dispose of tissues properly.
- Wash hands after coughing or sneezing.
- Place a surgical mask on an inmate who is repeatedly coughing or sneezing.

Avoid touching eyes, nose, and mouth.

- Surfaces can be contaminated with the flu virus (for example another person's hand or door knob). Touching such surfaces and then touching the eyes, nose, or mouth can lead to infection.

Clean environmental surfaces regularly, especially "high touch" surfaces.

- Use EPA approved disinfectants.
- Emphasize cleaning frequently touched surfaces, such as door knobs, railings, light switches, and phones.
- All washable (nonporous) surfaces should be cleaned during and after (terminal) cell occupancy. Correctional workers should conduct sanitation inspections of living and bathroom areas.

Handle laundry carefully.

- Wear gloves and protective clothing when handling soiled linen.
- Wash hands afterwards.
- Machine wash in hot water and completely dry the laundry.

Wear gloves when touching blood or body fluids.

- Wear gloves whenever contact with blood, body fluids, or contaminated items is likely. Wash hands after removing gloves.

Report symptoms of the flu.

- Flu symptoms include fever, cough, shortness of breath, and sore throat.
- Report to a supervisor if inmates or other employees develop flu symptoms.

Follow these procedures with flu patients.

- Inmates with flu symptoms should be given a surgical mask to wear.
- Flu patients should be housed separately from other inmates.
- **When entering a room with flu patients or transporting a flu patient:**
 - **Wear an N-95 or higher filtering respirator. Prior to wearing a respirator, you must be fit-tested.**
 - **Wear gloves if touching potentially contaminated surfaces, including food trays from ill inmates.**

¹ *General Population* refers to all correctional settings except health care settings.

Attachment 1.7. Pandemic Influenza Precautions – Health Care Settings (Page 1 of 2)

The following precautions should be used in conjunction with <i>Standard Precautions</i> (see <i>Attachment 1.5</i>) when in contact with <i>patients suspected of having pandemic influenza</i> .	
Components	Recommendations
Hand Hygiene	<ul style="list-style-type: none"> • Hand hygiene is the number one defense. Wash hands for 15-20 seconds. • Includes using plain or antimicrobial soap and water, or alcohol-based products. • Perform hand hygiene after touching blood/infectious body fluids, secretions, excretions, and contaminated items; after removing gloves; and in-between patients. • Use soap and water if hands are visibly soiled or have touched respiratory secretions. • Wash hands prior to putting on personal protective equipment (e.g., respirator or gloves), and after removing any protective devices. Avoid touching the outside of a contaminated device.
Safe Work Practices	<ul style="list-style-type: none"> • Avoid touching eyes, nose, mouth, or exposed skin with hands (gloved or ungloved). • Avoid touching surfaces (e.g., door knobs, keys, light switches) with contaminated gloves or other personal protective equipment that is directly related to patient care.
Respiratory Etiquette	<ul style="list-style-type: none"> • Promote coughing or sneezing into one’s sleeve or crook of elbow (rather than hands). • Provide tissues and no-touch (open) trash container.
Patient waiting areas	<ul style="list-style-type: none"> • Implement system to identify/triage inmates with influenza-like illness (ILI). • Spatially separate inmates with ILI from others. Place surgical mask on inmates with ILI.
Patient placement	<ul style="list-style-type: none"> • Influenza Isolation Units <ul style="list-style-type: none"> • Isolate inmates with ILI in a private room or <i>cohort</i> groups of inmates with ILI in a specifically established, multi-bed unit. • No special air handling is required. <i>Exception:</i> If aerosol-generating procedures are performed, an airborne-infection isolation (negative pressure) room is recommended. • Post sign indicating “Influenza Isolation Unit” with appropriate PPE (<i>Attachment 1.10</i>). • Depending upon how ill the inmates are, bunk beds may not be suitable. • Keep the door closed. Ideally, have the bathroom attached to the room. • Wear fit-tested respirator and gloves for touching contaminated surfaces. For additional PPE recommendations—see next page. • If feasible, have ILI patients wear a face mask when in close contact with workers. • Isolation duration: Isolate until 24 hours after fever resolved. In Medical Referral Centers, isolate for 7 days after symptom onset or until symptoms resolved (whichever is longer). • <i>Note:</i> See next page for recommendations about quarantine of inmates who are exposed to ILI.
Staffing	<ul style="list-style-type: none"> • Limit the number of caregivers per inmate. Ideally, staff caring for inmates with ILI are not assigned to take care of inmates with other (non-flu-related) health care problems. • Staff with symptoms of influenza-like illness should not come to work. • Asymptomatic health care workers who have had an unprotected exposure to an individual with ILI (at home or at work) should report their exposure to their supervisor. In general, exposed health care workers should not work with patients at high risk for influenza complications—for the 4 day period after exposure ended—unless they receive post-exposure antiviral prophylaxis.
Visits/Social	<ul style="list-style-type: none"> • No visitation/social gatherings. Create as much distance as possible between people.
Patient transport	<ul style="list-style-type: none"> • Limit patient movement outside of the Influenza Isolation Unit to medically necessary purposes. • Have the patient wear a face mask (without an exhalation valve) when outside the unit. If mask can’t be tolerated, apply most practical measures to contain respiratory secretions, e.g., handkerchief over nose/mouth, etc. • Patients should wash hands before leaving the unit and after a mask is removed.
Transport Vehicles	<ul style="list-style-type: none"> • Transporters should wear a fit-tested respirator. Wash hands afterwards. • Optimize vehicle ventilation to increase the volume of air exchange during transport. • Routinely clean the vehicle with an EPA-disinfectant following the transport.

Attachment 1.7. Pandemic Influenza Precautions – Health Care Settings (Page 2 of 2)

Personal Protective Equipment (PPE) for Influenza Isolation Units	
<p>The guidelines listed directly below apply only to Influenza Isolation Units, not Quarantine Units.</p> <p>Careful placement of PPE <i>before</i> patient contact will avoid the need to make adjustments and risk self-contamination during use.</p>	
Components	Recommendations
Respirators	<p>Respirators (N-95 or higher filtering) should be worn when inside an Influenza Isolation Unit.</p> <ul style="list-style-type: none"> ▪ Respirators must be worn in the context of an OSHA Respiratory Protection Program (29 CFR 1910.034). ▪ Medical evaluation, training, and fit-testing of respirators are required prior to initial use. ▪ Respirators cannot be used with facial hair. ▪ Respirators are provided at no cost to the employee. <ul style="list-style-type: none"> • General guidance regarding respirator use: <ul style="list-style-type: none"> • Wash hands prior to donning and after removing respirator. • To reduce spread of germs, do <i>not</i> leave dangling around the neck. • Respirators are not needed when using “food slot.” ▪ Respirators should be disposed of if: the respirator becomes physically damaged; the integrity of the respirator is impaired; or the respirator becomes potentially contaminated during an aerosol generating procedure (e.g., nebulizer treatment or suctioning) or when in close contact with a patient who fails to cover a cough or sneeze. There is no need to dispose of respirator if merely walking through Influenza Isolation Unit, e.g., for census count. ▪ Respirators should be individually stored in a clean and dry container or plastic bag, stored to prevent damage to the respirator, and labeled with the name of the staff person to whom it is assigned. Otherwise the respirator should be disposed of at the end of a shift. • If respirators are in short supply, they should be prioritized for situations associated with higher risk for transmission, e.g., aerosol-generating procedures (e.g., suctioning, nebulizer treatments); resuscitation of a patient; providing direct care to a patient with confirmed or suspected pneumonia who might produce larger-than-normal amounts of secretions when coughing. • If there is a significant shortage of respirators, CDC indicates that face masks may be considered an alternative to respirators.
Gloves	<p>Gloves should be worn for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment. Gloves should be worn when picking up meal trays used by ill inmates. Wash hands after removing gloves.</p>
Gowns & Eye Protection	<p>Gowns and eye protection should be worn if spray or splash of body fluids (including respiratory secretions) is anticipated, i.e., suctioning or nebulizer treatments. Eye protection consists of appropriately fitted, indirectly vented goggles or a face shield. Eye glasses are <i>not</i> sufficient.</p>
Guidelines for Influenza Quarantine Units	
Quarantine (ILI-exposed inmates with no symptoms)	<ul style="list-style-type: none"> • House inmates exposed to a person with suspected pandemic flu (no ILI symptoms) in a designated Influenza Quarantine Unit, with beds/cots 3-6 feet apart, as feasible. • Restrict contact with non-exposed persons. • If asymptomatic, release after 4 days (unless re-exposure occurs). • A face mask—not a respirator—is recommended when in close contact (within 6 feet). • Monitor for temperature and influenza signs and symptoms at least daily. • Quarantine may be unrealistic if pandemic influenza becomes widespread.

Attachment 1.8. Pandemic Flu Contact Investigation/Quarantine Procedures

When a case of influenza is identified, the following steps should be followed in conducting a contact investigation.

- 1) Determine the infectious period** (from 24 hours before symptom onset until contact with the influenza case ended--usually the date the case was isolated).
- 2) Identify closest contacts (cell mates, work-mates, friends) and other housing unit contacts.**

For the purposes of this document, exposure is defined as having been in a setting where there was a high likelihood of contact with respiratory droplets and/or body fluids of a person with ILI. Examples of close contact include sharing eating or drinking utensils, or any other contact between persons likely to result in exposure to respiratory droplets. Close contact typically does not include activities such as walking by an infected person or sitting across from a symptomatic patient in a waiting room or office.

Use *Attachment 1.9, Pandemic Flu Contact Investigation/Quarantine Line List* to list names of contacts and the outcome of their exposure.

- 3) Screen contacts for temperature and cough or sore throat** recording results on the line-listing. Isolate any contacts who develop ILI symptoms.
- 4) Decide which groups of contacts to quarantine.** There is no simple answer regarding who should be quarantined. Often the simplest measure is to quarantine the entire housing unit. If that is impractical, quarantine the inmates with the closest contact.
- 5) Quarantine of exposed contacts should be maintained for 4 days** after exposure ended (or the case was isolated).
- 6) Screen quarantined contacts daily for temperature and signs and symptoms (S/S), i.e., presence of cough or sore throat,** recording results on the quarantine line list.
- 7) A face mask should be worn in the quarantine room if close contact (within 6 feet) of quarantined inmates is anticipated. Face masks do not require fit-testing.**

Note: If multiple influenza cases occur within multiple housing units, a decision may be made to abandon contact investigations and quarantine as a control strategy. In this case, everyone has become a contact and contact investigation is not a useful strategy.

Attachment 1.9. Pandemic Flu Contact Investigation/Quarantine Line List

Facility: _____ Staff Contact Name: _____ Phone: _____ ILI Case Reg. No. _____

Index Case: Quarters: _____ Work: _____ Education: _____

Recent Travel/Movement: _____ Case Symptom Onset Date: ___/___/___

Date ILI Case Isolated: ___/___/___ + 4 Days = ___/___/___ (date to discontinue quarantine)

#	Bed #	Last Name, First Name		Exposure Site	Date:	Anti-Viral Prophylaxis	Comments	Cleared (C) or Sick (S)	
		Registration Number		Quarantine Date	Time:			Start Date	Date
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			
					Temp:	Y N		C	S
					S/S?	Y N Y N Y N Y N			

Note: This is an optional form that can be used to track the screening of individuals who are identified contacts to influenza case(s). If multiple influenza cases occur within multiple housing units, a decision may be made to abandon contact investigations and quarantine as a control strategy. In this case, everyone has become a contact and contact investigation is not a useful strategy.

S/S = Signs and symptoms of either cough or sore throat

Page ___ of ___

Attachment 1.9. Pandemic Flu Contact Investigation/Quarantine Line List (cont'd.)
Instructions for Completion

Purpose: The purpose of this **optional** *Pandemic Flu Contact Investigation/Quarantine Line List* is to track the outcome for contacts exposed to a case of pandemic influenza. The form provides a record of exposure sites for a given index case with pandemic influenza and provides a place to record names of identified contacts. Space is provided to record daily temperatures and signs and symptom checks, as well as the outcome of the quarantine.

Facility: Facility code.

Staff Contact Name: Infection Control Officer (ICO) or designee and **Phone Number.**

Index Case Reg. No.: Registration number of the inmate who developed pandemic flu.

Quarters: Place(s) where the index case was housed, beginning one day prior to symptom onset until isolated.

Work: Index case's work assignment/group. If none, record "none."

Education: Index case's education classes/name of group. If none, record "none."

Recent travel/movement: Indicate locations if index case traveled or moved during infectious period.

Case Symptom Onset Date: Date flu symptoms started.

Date ILI Case Isolated: Date placed in isolation or cohorted.

+ 4 days: Determine the date that is 4 days after the case was isolated (to calculate the date that healthy contacts can be released from quarantine).

#: Assign each contact a sequential quarantine number.

Bed #: Bed assigned to the contact.

Last Name, First Name: Name of the inmate contact.

Registration Number: Registration number of the inmate contact.

Exposure Site: Use 1–5 to indicate site of exposure as (1)Quarters, (2)Work, (3)Education, (4)Travel, or (5)Other.

Quarantine Date: Date contact was quarantined.

Date and Time: At the top of the chart, record date and time of temperature and signs/symptoms checks.

Temp and S/S?: Temperature and signs/symptoms for each date/time recorded at the top of the chart. Daily, record the inmate's temperature and indicate the presence of any signs or symptoms of **cough or sore throat** by circling Y (yes) or N (no). Use the Comments column to indicate type of flu symptom.

Antiviral Proph?: Antiviral Prophylaxis. Indicate if contact was provided antiviral prophylaxis, circling Y (yes) or N (no). If yes, indicate **Start Date**.

Comments: Record any comments about the quarantined inmate.

Cleared(C) or Sick (S): Indicate whether the patient is cleared after the **4-day** quarantine period or becomes ill, by circling C (cleared) or S (sick). Indicate the **Date** the person was either released from quarantine or was isolated due to illness.

Attachment 1.10. Precaution Signs - Influenza Isolation and Quarantine Units

The signs on the following two pages should be posted when utilizing a room for isolation or quarantine.

- **Influenza Isolation Unit** sign should be used for rooms housing one or more inmates with influenza-like illness.
- **Influenza Quarantine Unit** sign should be used for rooms housing asymptomatic inmates who have been exposed to ILI.

Influenza Isolation Unit

(Housing for inmates with influenza-like illness—
to separate sick inmates from inmates who are well)

PRECAUTIONS

Respirator--

(when entering room)

N-95 or better / Must be fit-tested



Gloves for direct patient contact or contact with contaminated items

Eye Protection / Gowns if splash or spray of body fluids anticipated, e.g., suctioning or nebulizer treatments. Eye protection requires either goggles or face shield.

Perform hand hygiene frequently—

always before entering and when leaving room
and after removing gloves

Isolation can be discontinued: 24 hours after
temperature remains normal (without fever-reducing medication)

Note: **For Medical Referral Centers only:** Discontinue isolation 7 days after onset of symptoms or until symptoms are resolved—whichever is longer.

Influenza Quarantine Unit

(Housing for asymptomatic inmates who have been exposed to influenza-like illness—separating them from inmates who are either sick or have not been exposed)

PRECAUTIONS

Only if anticipated *close contact* with quarantined inmates (within 6 feet) wear a:

Face Mask

(not a respirator)
No fit-testing required



**Perform hand hygiene frequently—
always before entering and when leaving room.**

**Quarantine can be discontinued 4 days
after the exposure to influenza-like illness ended. If
symptoms develop isolate inmate in an Influenza Isolation Unit.**