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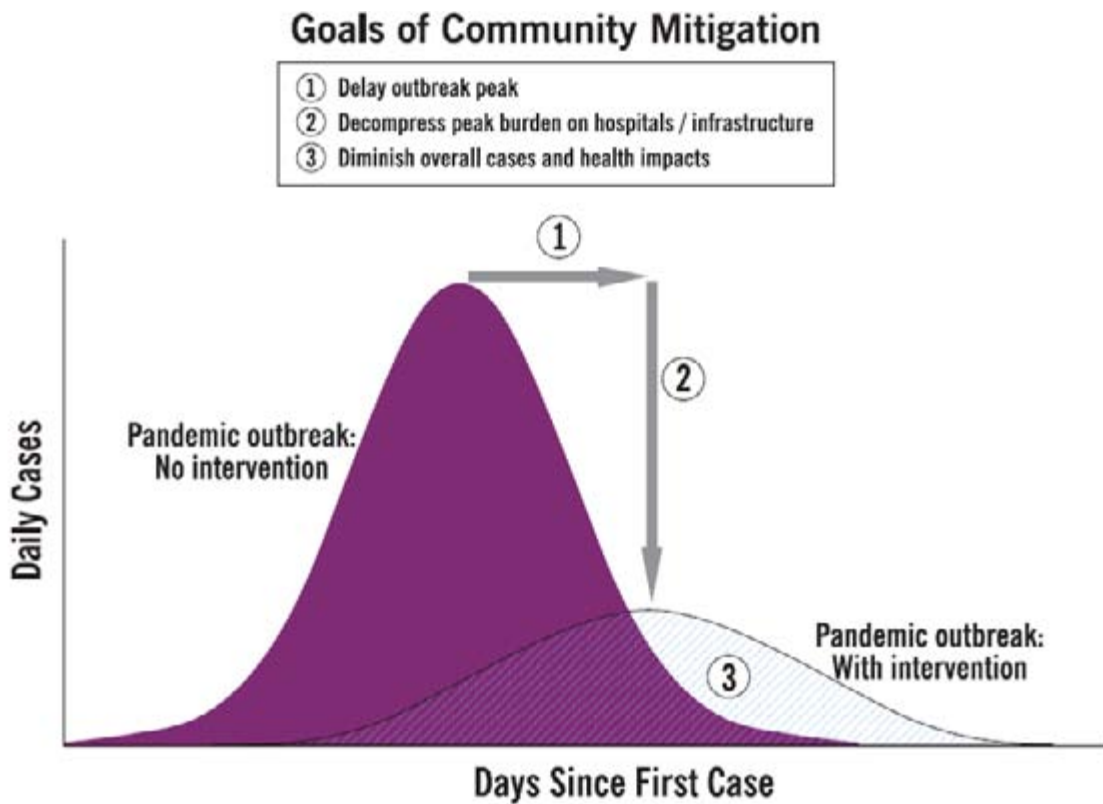
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I. Overview

This section describes the recommendations for the early, targeted, layered use of non-pharmaceutical interventions (NPIs) to mitigate an influenza pandemic. These NPIs serve as one component of a comprehensive community mitigation strategy that includes both pharmaceutical (discussed elsewhere) and non-pharmaceutical measures.

Community containment has three primary goals:

- 1) to delay the spread of a pandemic and allow time for vaccine production,
- 2) to lessen the demand for and preserve scarce healthcare resources, and
- 3) to reduce the overall number of people who become sick and ultimately, reduce suffering, illness and death.



We estimated the potential impact of pandemic influenza on New York State using the CDC FluAid and FluSurge software programs. The results are as follows:

NYS pop = 19.28 million (2005 census estimates)	Moderate (1957/68-like)	Severe (1918-like)
Illness	6.75 M (35% of population)	6.75 M (35% of population)
Outpatient Visits	3.60 M (53.3% of those ill)	3.22 M (47.7% of those ill)
Total Hospital Admissions	93,753 (0.5% of total pop, 1.4% of those ill)	770,640 (4.0% of total pop, 11.4% of those ill)
Deaths	18,650 (0.28% of those ill)	153,301 (2.3% of those ill)

The initial response to a novel strain of influenza will aim at containing the virus at its source. Travel restrictions to and from areas of viral transmission may help slow viral spread to other parts of the world. Thorough case isolation and quarantine of contacts in the area where the novel strain emerges may slow the spread of a pandemic. When the virus moves beyond its initial range and is introduced into the United States, early efforts will likely include aggressive isolation and quarantine of newly arrived cases and all their contacts. But as transmission becomes more widespread in the United States, large scale contact tracing becomes difficult and quarantine becomes less effective and may not be used as a primary public health intervention. However, voluntary quarantine of household members of ill persons may be beneficial. Slowing viral spread through various social-distancing strategies and community-based infection control will allow greater time to manufacture and distribute influenza antiviral medications and to develop, manufacture, distribute, and administer influenza vaccine. Epidemiologic investigation of early influenza cases may reveal features of the novel strain that will be relevant to what efforts have the greatest potential in slowing viral spread.

II. Objectives

The objectives of the Community Containment Section address:

- Travel-related considerations and strategies that include distribution of travel health alert notices and restriction or cancellation of non-essential travel.
- Voluntary isolation of ill persons and voluntary quarantine of household members
- Social distancing measures to prevent or decrease transmission targeting specific population age groups (children, teenagers, and adults) and layered throughout the various environments, school, home, workplace, and community.
- Community-based infection control practices including respiratory hygiene/cough etiquette, hand hygiene, environmental cleaning and mask use.
- Public information, legal implications, and local community resources needed to support persons caring for themselves and family members at home or in special isolation and quarantine facilities.

III. Key Components of Community Containment

A. Travel-Related Strategies

The overall travel-related strategy aims at protecting travelers and decreasing entry of pandemic influenza into New York State. International health and travel organizations will be expected to implement exit screening for ill persons and to identify persons with influenza-like illness during transit and implementing protocols to limit potential transmission to other passengers.

In-state activity will include:

- Promoting awareness of CDC and WHO travel advisories and information on how travelers can reduce their risk of acquiring pandemic influenza when traveling outside New York State;
- Implementing point-of-entry interventions to rapidly identify persons who may have or have been exposed to pandemic influenza;
- Isolating ill travelers and identifying and quarantining contacts, at home or in isolation and quarantine facilities.

Persons living in areas where a novel influenza strain is circulating and who develop influenza-like illness and their contacts, should defer travel to unaffected areas. Persons experiencing influenza-like symptoms should report their illness to health authorities. Travelers from affected areas should undergo exit screening for influenza symptoms before departing for areas currently free of influenza.

Non-essential travel to areas where a novel influenza strain is circulating should be postponed. Travelers can learn where a novel influenza strain is present from CDC's Travel Health Precautions and Warnings web site (<http://www.cdc.gov/travel>) and WHO's Disease Outbreak News web site (<http://www.who.int/csr/don/en/>).

Effective management of travelers will require public health resources at entry points. Persons traveling from an affected area who become ill in transit should be separated from fellow travelers (if possible) on board. Illness among travelers should be reported to health authorities in the countries of embarkation, destination, and transit (if any). Upon arrival, newly ill persons should be referred for medical care and influenza testing, as appropriate, according to Section 2: Surveillance and Laboratory Testing). Ill travelers arriving in an area where influenza has not begun to circulate should be isolated for a minimum of 5 days, and contacts to the ill traveler should be quarantined for 10 days. Isolation and quarantine facilities (and staffing) for non-resident travelers should be identified in advance and will be needed during the late pandemic alert period and early in the pandemic phase. Local and state health department personnel may be needed to support federal quarantine station personnel at land, water, and air ports of entry but will depend on the federal plan which is currently under development. An assessment

checklist for isolation or quarantine in the home or community-based facility is contained in Appendix 8-A.

Aggressive contact tracing and quarantine of all contacts can be justified for a limited range of situations. Quarantine is appropriate:

- In the area where the novel virus first emerges;
- When the novel virus first arrives in a new area;
- When the number of cases is limited and when all local cases are either imported or have clear epidemiologic links to other cases;
- Intervention is likely to either significantly slow the spread of infection or to decrease the overall magnitude of an outbreak in the community.

Detailed guidance for the identification and management of contacts, including quarantine, appears in Appendix 8-B, along with a contact record form (Appendix 8-C) and daily log of temperature and symptoms (Appendix 8-D). A tracking form for following up with contacts is provided in Appendix 8-E. Quarantine should be coupled with monitoring of exposed persons for symptoms and provision of medical care (Sections 3 and 5) and infection control precautions (Section 4) as soon as symptoms are detected. Enforcement of isolation and quarantine orders may require assistance from law enforcement and the courts.

B. Voluntary Isolation of Ill Persons

The purpose of isolation is to reduce influenza transmission by separating infected persons from uninfected persons. Case isolation will be valuable during all intervals of pandemic influenza. Isolation of cases when the novel virus first emerges can slow the initial spread of the pandemic. During later pandemic intervals, isolation will reduce the risk of exposing uninfected persons.

Rapid identification of all persons with confirmed or probable pandemic influenza is recommended throughout the pandemic (case definitions for presumptive/definitive diagnosis per Section 2: Surveillance and Laboratory Testing) so that isolation and treatment (as appropriate) with influenza antiviral medications (discussed in Section 7: Antivirals) can occur. Isolation may occur in the home or healthcare setting, depending on the severity of an individual's illness and /or the current capacity of the healthcare infrastructure.

Ill individuals not requiring hospitalization will be asked to remain at home voluntarily for the infectious period, approximately 7-10 days after symptom onset. This would usually be in their homes, but could be in the home of a friend or relative. Voluntary isolation of ill children and adults at home is predicated on the assumption that many ill individuals who are not critically ill can and will need to be cared for in the home. Communication and education to the general public as to how to determine when to stay at home or seek care from a health care provider will need to be distributed.

Requirements for success include prompt recognition of illness, appropriate use of hygiene and infection control practices in the home setting; measures to promote voluntary compliance (e.g., timely and effective risk communications); commitment of employers to support the recommendation that ill employees stay home; and support for the financial, social, physical, and mental health needs of patients and caregivers. In addition, ill individuals and their household members need clear, concise information about how to care for an ill individual in the home and when and where to seek medical care. Special consideration should be made for persons who live alone, as many of these individuals may be unable to care for themselves when ill.

Guidance for the care of an ill person who does not require hospitalization and is isolated at home, including infection control, can be found in Section 4: Infection Control, and Section 5: Clinical Guidelines. Additional, specific federal guidance is forthcoming. In addition, treatment with influenza antiviral medications should occur as appropriate (discussed in Section 7: Antivirals).

The home is generally the preferred setting for isolation (and quarantine, discussed below) but alternative sites may be necessary in certain situations. For example, persons who do not have a home suitable for this purpose (i.e. homeless), do not have a primary caregiver to care for them, or who require isolation away from home (e.g., during travel) will need to be housed in an alternative location. Special isolation facilities and staffing should be identified in advance and be available to operate beginning in the late pandemic alert period (WHO Phase 5) and throughout the pandemic phase (WHO Phase 6).

A home/facility checklist to assess the suitability of a home or facility for isolation and quarantine is in Appendix 8-A. Necessary support services for those in isolation are described below in Part G 3. – Community Support.

Monitoring/follow-up of cases isolated at home or in a special facility will be needed during the late pandemic alert period and early in the pandemic phase. When the pandemic becomes widespread, public health monitoring of individuals will no longer be justified, nor feasible. NYSDOH, in consultation with federal health authorities, will advise LHDs regarding when individual case management of persons is warranted.

C. Voluntary Quarantine of Household Members of Ill Persons

Contacts of influenza patients can be managed by various interventions designed to facilitate early recognition of illness in persons at greatest risk of becoming infected and thereby prevent transmission to others. Measures applied to individuals may not be feasible or effective during the Pandemic Period, when tracing and quarantining of all close contacts may not be possible. The range of interventions is more fully described in Appendix 8-F.

Two features of influenza will limit the usefulness of aggressive contact tracing and quarantine during an influenza pandemic:

- Influenza's short incubation period makes it difficult to identify and quarantine contacts of infected persons before they also become ill and have spread infection to others.
- A high rate of asymptomatic illness means infected persons will not be identified and their contacts not known and quarantined.

Because of the uncertainty of the benefits of quarantine for pandemic influenza, the effectiveness and compliance with such measures and the resources necessary to initiate and enforce compliance should be continually evaluated.

Detailed guidance for the identification and management of contacts, including quarantine, appears in Appendix 8-B, along with a contact record form (Appendix 8-C) and daily log of temperature and symptoms (Appendix 8-D). A tracking form for following up with contacts is provided in Appendix 8-E. Quarantine should be coupled with monitoring of exposed persons for symptoms and provision of medical care and infection control precautions as soon as symptoms are detected.

The goal of voluntary quarantine of household members of ill persons is to reduce community transmission from members of households in which there is a person ill with pandemic influenza. Members of households in which there is an ill person may be at increased risk of becoming infected with a pandemic influenza virus. As determined on the basis of known characteristics of influenza, a significant proportion of these persons may shed virus and present a risk of infecting others in the community despite having asymptomatic or only minimally symptomatic illness that is not recognized as pandemic influenza disease. Thus, it is recommended that members of households with ill individuals stay home for an incubation period of 7 days following the time of symptom onset in the household member. If other family members become ill during this period, the recommendation is to extend the time of voluntary home quarantine for another incubation period, i.e., 7 days from the time that the last family member becomes ill.

Requirements for success of this intervention include the prompt and accurate identification of an ill person in the household, voluntary compliance with quarantine by household members, commitment of employers to support the recommendation that employees living in a household with an ill individual stay home, the ability to provide needed support to households with inadequate resources that are under voluntary quarantine, and guidance for infection control in the home. Additionally, adherence to ethical principles in use of quarantine during pandemics, along with proactive anti-stigma measures, should be assured.

Pandemic influenza may involve a second and third wave of infection. It may be appropriate to resume aggressive contact tracing and quarantining of all contacts at the beginning of new waves of infection.

D. Social Distancing

Later in a pandemic, when disease transmission is occurring in communities throughout New York State, efforts directed at individuals and groups of exposed persons are much less likely to slow viral spread and many would not be feasible to implement because of the large number of ill persons and their contacts. Social distancing strategies directed at the entire community that decrease social contact (e.g., self-shielding, closing schools, restricting/cancellation of public events/gatherings, snow days) early in the pandemic may be more effective disease control tools. In particular, persons at high risk for complications of influenza should avoid going to public areas (e.g., food stores, pharmacies); the use of other persons for shopping or home delivery service is encouraged.

Mathematical models predict effectiveness of non-pharmaceutical interventions that are implemented rapidly after the arrival of pandemic influenza in a community, including a synergistic effect when multiple interventions are implemented simultaneously.

Guided by epidemiologic data, state and local authorities will implement the most appropriate measures to maximize impact on disease transmission and minimize impact on individual freedom of movement.

Possible measures include:

- Self-shielding: voluntary “self-shielding” behavior may occur where people elect to stay home or limit their activity even in the absence of a formal request to do so.
- Implementation of “snow days” - asking everyone to stay home - can effectively reduce transmission by limiting the normal levels of interaction between persons. Snow days can be accomplished through targeted closures/cancellations including education settings, retail establishments, entertainment and recreation venues, non-essential business activity, faith-based gatherings and public transportation. Each of these possibilities (discussed in more detail below) will have a significant impact on the community and workforce, and careful consideration should be focused on their potential to slow person-to-person spread of influenza. Given most of these measures are voluntary, broad community involvement will be needed for effective implementation, while at the same time maintaining essential community services. Recommendations should be made available to the public to acquire and store necessary provisions and supplies needed during snow days.

1. Children and Teenagers: School and Community

Anecdotal and limited observational reports suggest that community influenza outbreaks may be limited by closing schools, especially when schools are closed early in the outbreak. In addition, the risk of infection and illness among children is likely to be decreased, which would be particularly important if the novel strain causes significant morbidity and mortality among children. Children are known to be efficient transmitters of seasonal influenza and other respiratory illnesses.

The goal of these interventions is to protect children and to decrease transmission among children in dense classroom and non-school settings and, thus, to decrease infection in households and the community at large.

In a severe (Category 4 or 5 pandemic), New York State will recommend the dismissal of students from school (including public and private schools as well as colleges and universities) and school-based activities and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing. These interventions will be considered in a Category 2 or 3 pandemic.

Childcare facilities and schools represent an important point of epidemic amplification, while the children themselves are thought to be efficient transmitters of disease in any setting. The common sense desire of parents to protect their children by limiting their contacts with others during a severe pandemic is congruent with public health priorities, and parents should be advised that they could protect their children by reducing their social contacts as much as possible.

However, it is acknowledged that maintaining the strict confinement of children during a pandemic would raise significant problems for many families and may cause psychosocial stress to children and adolescents. These considerations must be weighed against the severity of a given pandemic virus to the community at large and to children in particular. Risk of introducing infection into a group and subsequent transmission among group members is directly related to the functional number of individuals in the group. Although the available evidence currently does not permit the specification of a “safe” group size, activities that recreate the typical density and numbers of children in school classrooms are clearly to be avoided. Gatherings of children that are comparable to family-size units may be acceptable and could be important in facilitating social interaction and play behaviors for children and promoting emotional and psychosocial stability.

If a recommendation for social distancing of children is advised during a pandemic and families must nevertheless group their children for pragmatic reasons, studies indicate that group sizes be held to a minimum (fewer than 6 children) and that mixing between such groups be minimized (e.g., children should not move from group to group or have extended social contacts outside the designated group).

Requirements for success of these interventions include consistent implementation among all schools in a region being affected by an outbreak of pandemic influenza, community and parental commitment to keeping children from congregating out of school, alternative options for the education and social interaction of the children, clear legal authorities for decisions to dismiss students from classes and identification of the decision-makers, and support for parents and adolescents who need to stay home from work.

Colleges and universities present unique challenges in terms of pre-pandemic planning because many aspects of student life and activity encompass factors that are common to both the child school environment (e.g., classroom/dormitory density) and the adult sphere (e.g., commuting longer distances for university attendance and participating in activities and behaviors associated with an older student population). Questions remain with regard to the optimal strategy for managing this population during the early stages of an influenza pandemic.

At the onset of a pandemic, many parents may want their children who are attending college or university to return home from school. Immediately following the announcement of an outbreak, colleges and universities should prepare to manage or assist large numbers of students departing school and returning home within a short time span. Where possible, policies should be explored that are aligned with the travel of large numbers of students to reunite with family and the significant motivations behind this behavior. Pre-pandemic planning to identify those students likely to return home and those who may require assistance for imminent travel may allow more effective management of the situation. In addition, planning should be considered for those students who may be unable to return home during a pandemic.

NYSDOH maintains active relationships, including participating in drills and exercises, with our education partners including the NYS Office of Children and Family Services (childcare), the NYS Education Department (public and non-public K-12), State University of New York (public higher education) and the Commission on Independent Colleges and Universities (CICU) to inform policy decisions and further develop operational plans.

Specific resources include a “Planning and Preparedness Packet” targeting K-12 School Districts and Colleges and Universities separately, as well as a “Pandemic Flu Action Kit for Schools in New York State” distributed to all K-12 school districts and local health departments that includes specific communication materials for parents and students/families.

2. Adults: Workplace and Community

Social distancing measures for adults include provisions for both workplaces and the community and may play an important role in slowing or limiting community transmission. The goals of workplace measures are to reduce transmission within the workplace and thus into the community at large, to ensure a safe working environment and promote confidence in the workplace, and to maintain business continuity, especially for critical infrastructure (e.g., law enforcement personnel, transportation workers, utility workers involved with electricity, water, gas, telephone, and sanitation). Workplace measures such as encouragement of telework and other alternatives to in-person meetings may be important in reducing social contacts and the accompanying increased risk of transmission. Similarly, modifications to work schedules, such as staggered shifts, may also reduce transmission risk. Employers should identify the critical activities that must continue in a pandemic and the staffing levels required to maintain these essential

functions. All other staff should be encouraged to stay home and if feasible, provided work to be completed at home.

Employers should anticipate that 25 to 30% of persons will become ill during a 6 to 8 week outbreak. In addition, about 10% of the workforce will be absent due to illness of a family member. Others may stay home due to a fear of becoming infected.

Within the community, the goals of these interventions are to reduce community transmission pressures and thus slow or limit transmission. New York State will recommend the cancellation or postponement of large gatherings, such as concerts, sporting events or theatre showings, to reduce transmission risk in a severe (Category 4 or 5 pandemic) and consider these interventions in a Category 2 or 3 pandemic).

Faith-based organizations will be essential partners in protecting the public's health and safety when an influenza pandemic occurs. Faith-based gatherings at places of worship—such as churches, synagogues, mosques, and temples—resulting in large congregations of people in close proximity to each other will be discouraged. Innovative solutions to maintaining services while decreasing density will need to be developed at the local level in collaboration with faith-based leaders. This may include increasing the frequency of services to decrease the numbers attending each service, physically spacing attendees at greater distances, and modifying service practices, rituals, and/or traditions to maintain good infection control (limiting hand shaking, hugging, and other close-proximity forms of greeting, or communal sharing of cups or other utensils). In addition, services related to a person's death should remain private until the pandemic threat has passed and a larger scale memorial service can be held.

Although not likely to be completely shut down, modifications to mass transit policies/ridership to decrease passenger density may also reduce transmission risk, but such changes may require running additional trains and buses, which may be challenging due to transit employee absenteeism, equipment availability, and the transit authority's financial ability to operate nearly empty train cars or buses. If public transportation is cancelled, other modes of transportation must be provided for essential staff and persons needing medical evaluation.

Requirements for success of these various measures include the commitment of employers to providing options and making changes in work environments to reduce contacts while maintaining operations; whereas, within communities, the support of political and business leaders as well as public support is critical.

Workplace closure may result in loss of income for affected workers. Such workers will be referred for available public and private assistance.

Worksites identified as part of the State's critical infrastructure have a higher ranking to receive vaccine and antivirals. Critical infrastructure groups are those that have an impact on maintaining health (e.g., public safety, transportation of medical supplies and food); implementing the pandemic response plan; and maintaining societal functions. See Sections 6 and 7 on vaccine and antiviral medications for additional details.

E. Community-based Infection Control

In addition to community-based social distancing strategies, promotion of community-wide infection control measures including respiratory hygiene/cough etiquette, hand hygiene, and environmental cleanliness will emphasize what individuals can do to reduce their risk of infection.

Respiratory hygiene/cough etiquette includes covering the mouth/nose when sneezing or coughing with a tissue and disposing of the tissue appropriately. If no tissue is available, using the inside of the elbow to cover the nose/mouth is preferable to using the hands.

Hand hygiene includes traditional hand washing (with soap and warm water, lathering for a minimum of 20 seconds) or the use of alcohol based hand sanitizers.

Environmental cleanliness involves the household disinfection of potentially contaminated surfaces. Widespread environmental and air disinfection, including clothing, shoes, or other personal objects, is not recommended for public health purposes.

Masks are recommended for those at risk for complications of influenza and those caring for persons who are ill. The benefit of wearing masks by well persons in public settings has not been established. Nevertheless, persons may choose to wear a mask as part of an individual protection strategy that includes respiratory hygiene/cough etiquette, hand hygiene, and social distancing.

Public education should be provided on how to use and dispose of masks appropriately. In addition, this education should emphasize that mask use is not a substitute for social distance or other personal protection measures. Supply issues should be considered so that mask use in communities does not limit availability for healthcare settings where the importance and effectiveness of mask use has been well documented.

Our well developed risk communication campaign for community based infection control is more fully described in Section 9: Communications.

F. Triggers/Activation and Duration

The trigger for statewide activation of appropriate non-pharmaceutical interventions is laboratory-evidence of a human cluster of infection with a novel influenza virus and community transmission (i.e., epidemiologically linked cases from more than one household) in New York State.

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The use and duration of specific non-pharmaceutical interventions depends on the Pandemic Severity Index (PSI, described in the table below):

Characteristics	Pandemic Severity Index (PSI)				
	Category 1	Category 2	Category 3	Category 4	Category 5
Case Fatality Ratio (percentage)	<0.1	0.1-<0.5	0.5-<1.0	1.0-<2.0	>=2.0
Excess Death Rate (per 100,000)	<30	30-<150	150-<300	300-<600	>=600
Illness Rate (percentage of the population)	20-40	20-40	20-40	20-40	20-40
Potential Number of Deaths (based on 2006 U.S. population)	<90,000	90,000-<450,000	450,000-<900,000	900,000-<1.8 Million	>= 1.8 Million
Potential Number of Deaths in New York State (6.5% of U.S. Population)	<5,850	5,850-29,250	29,250-58,500	58,500-<117,000	>=117,000
20th Century U.S. Experience	Seasonal Influenza (Illness Rate 5-20%)	1957, 1968	None	None	1918

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New York State guidance aligns with the comprehensive community mitigation strategy released by the Federal government regarding the use of specific interventions in various settings based on the PSI:

Pandemic Severity Index			
Interventions* by Setting	1	2 and 3	4 and 5
Home Voluntary isolation of ill at home (adults and children); combine with use of antiviral treatment as available and indicated	Recommend†§	Recommend†§	Recommend†§
Voluntary quarantine of household members in homes with ill persons¶ (adults and children); consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient	Generally not recommended	Consider**	Recommend**
School Child social distancing -dismissal of students from schools and school based activities, and closure of child care programs -reduce out-of-school social contacts and community mixing	Generally not recommended	Consider: <4 weeks††	Recommend: <12 weeks§§
Workplace / Community Adult social distancing -decrease number of social contacts (e.g., encourage teleconferences, alternatives to face-to-face meetings) -increase distance between persons (e.g., reduce density in public transit, workplace) -modify postpone, or cancel selected public gatherings to promote social distance (e.g., postpone indoor stadium events, theatre performances) -modify work place schedules and practices (e.g., telework, staggered shifts)	Generally not recommended	Consider	Recommend

Generally Not Recommended = Unless there is a compelling rationale for specific populations or jurisdictions, measures are generally not recommended for entire populations as the consequences may outweigh the benefits.

Consider = Important to consider these alternatives as part of a prudent planning strategy, considering characteristics of the pandemic, such as age-specific illness rate, geographic distribution, and the magnitude of adverse consequences. These factors may vary globally, nationally, and locally.

Recommended = Generally recommended as an important component of the planning strategy.

*All these interventions should be used in combination with other infection control measures, including hand hygiene, cough etiquette, and personal protective equipment such as face masks. Additional information on infection control measures is available at www.pandemicflu.gov.

†This intervention may be combined with the treatment of sick individuals using antiviral medications and with vaccine campaigns, if supplies are available

‡Many sick individuals who are not critically ill may be managed safely at home

¶The contribution made by contact with asymptotically infected individuals to

disease transmission is unclear. Household members in homes with ill persons may be at increased risk of contracting pandemic disease from an ill household member. These household members may have asymptomatic illness and may be able to shed influenza virus that promotes community disease transmission. Therefore, household members of homes with sick individuals would be advised to stay home.

**To facilitate compliance and decrease risk of household transmission, this intervention may be combined with provision of antiviral medications to household contacts, depending on drug availability, feasibility of distribution, and effectiveness; policy recommendations for antiviral prophylaxis are addressed in a separate guidance document.

††Consider short-term implementation of this measure—that is, less than 4 weeks.

§§Plan for prolonged implementation of this measure—that is, 1 to 3 months; actual duration may vary depending on transmission in the community as the pandemic wave is expected to last 6-8 weeks.

A 3-tiered strategy for planning with respect to the duration of dismissal of children from schools, colleges and universities, and childcare programs includes:

- No dismissal of students from schools or closure of childcare facilities in a Category 1 pandemic
- Short-term (up to 4 weeks) dismissal of students and closure of childcare facilities **CONSIDERED** during a Category 2 or Category 3 pandemic
- Prolonged (up to 12 weeks) dismissal of students and closure of childcare facilities **RECOMMENDED** during a severe influenza pandemic (Category 4 or Category 5 pandemic)

This planning strategy acknowledges the uncertainty around the length of time a pandemic virus will circulate in a given community.

The decision to discontinue community-level measures must balance the need to lift individual movement restrictions against community health and safety. Premature removal of containment strategies can increase the risk of additional transmission. Decisions should be based on evidence of improving local/regional control, such as:

- Consistent decrease in the number of confirmed cases;
- Reduction in the number of probable and known cases; and
- Effective protective countermeasures being in place (e.g., high coverage with a pandemic influenza vaccine)

A general recommendation is to withdraw the most stringent or disruptive measures first. However, it is important not to employ an on-again, off-again strategy to prevent “intervention fatigue” and resulting poor compliance by the public.

G. Additional Considerations

1. Public Information and Understanding of Disease Containment Measures

The success of community containment activities described above relies on a coordinated public information campaign targeted at improving public understanding of pandemic influenza and the benefits of individual and community wide disease control practices, including social-distancing measures that reduce disease transmission and prevent illness and death. The success of disease control will be facilitated by clear communication of the rationale for and duration of containment measures. The public information campaign developed for New York State is described in Section 9: Communications and includes ‘hotlines’ informational materials, collaboration with community partners, and public engagement activities.

2. Legal Implications

A general guide to New York State laws governing public health emergency preparedness and response (including reference to isolation and quarantine) is included in Section 1: Command and Control.

A review of pertinent legal authorities, laws and procedures for isolation and quarantine, closing businesses or schools, and suspending public meetings during a declared state of emergency is necessary. The New York State Department of Health (NYSDOH), Division of Legal Affairs, has developed a Model Voluntary Home Isolation Agreement and a Model Voluntary Home Quarantine Agreement (Appendix 8-H) for LHD use when asking a suspect or probable influenza patient or contact to submit to voluntary isolation or quarantine. The LHD should provide the appropriate agreement to patients with influenza symptoms or contacts as a means to instruct them on the necessary infection control precautions to be taken to prevent transmission to family members, friends, and other outside contacts. These agreements are not legally binding contracts with the patient or contact, but they clearly spell out what the LHD expects of the patient or contact and his/her family. These agreements may also be useful as evidence for the LHD in any subsequent court proceeding seeking involuntary isolation or quarantine, as it would show what was expected of the patient or contact and that the patient or contact was informed of these expectations, and that the LHD tried voluntary measures prior to seeking assistance from the court. These models may be used as is or the LHD may choose to modify them as necessary to meet the needs of the particular situation, especially with regard to quarantine. We encourage LHDs to add or remove provisions or change the language of the agreements as necessary to make them more patient-specific.

Section 1, Command and Control, contains appendices on the NYSDOH General Counsel's opinion regarding the quarantine powers of local health officers and boards of health, and the NYS Education Law regarding school closure during an emergency.

3. Community Support and Special Populations

Soliciting active community support and involvement in strategic planning decisions, and assisting individuals and families in identifying their own preparedness needs are critical community factors in achieving success.

Community support for provision of food, medical supplies (including delivery of prescription medications), mental health services, and other essentials may be required by ill persons who are isolated or quarantined at home or in special isolation and quarantine facilities. Providing a range of services will be especially important if isolation and quarantine are implemented as strategies to decrease the transmission of infection. Local community resources must be identified to support persons caring for themselves and family members at home, and for those in a specialized isolation and/or quarantine facility. Plans should be developed at the local level by public health and emergency managers along with groups that can provide community support services. Community support strategies may already have been developed as part of preparedness planning for other public health emergencies – either natural or as a result of a bioterrorist attack. Local communities are encouraged to identify civic organizations and other volunteers to meet these needs (e.g., American Red Cross). Local agencies already engaged in providing services to the homebound (e.g., Meals-on-Wheels) may become the nucleus

for voluntary efforts to provide services to people confined to their homes or specialized facilities. Additional volunteers may be needed to assist with community support activities.

Guidance for community- and workplace-specific use of personal protective equipment is required, as are policies and planning to support their use. Clear and consistent guidance is required for planning for home care of ill individuals, such as when and where to seek medical care, how to safely care for an ill individual at home, and how to minimize disease transmission in the household. In addition, guidance is required for appropriate use of community resources, such as home healthcare services, telephone care, the 9-1-1 emergency telephone system, emergency medical services, and triage services (nurse-advice lines, self-care guidance, and at-home monitoring systems) that could be deployed to provide resources for home care.

Certain groups in the community are more vulnerable or at risk than others, may be disproportionately affected, and may need assistance (i.e., people who are homeless or live alone, especially the elderly and/or homebound, persons with disabilities, people with limited skill in speaking English, recent immigrants, low-income families, children, or teens who may lack supervision, institutionalized, or incarcerated). Services may be especially important for older adults who are likely to be most impacted by pandemic influenza. Service providers must be identified who can ensure that information and services are accessible to these hard to reach/special needs groups.

IV. Activities by WHO Pandemic Period and CDC Intervals

Interpandemic and Pandemic Alert Periods

State Health Department:

- Develop plans with state partners on how the state will respond to pandemic influenza, including law enforcement, first responders, healthcare facilities, mental health professionals, local businesses, and the legal community. Address legal, logistic, and social challenges associated with individual and community-based containment measures. Identify procedures at the State-level for issues related to employment compensation and job security. (Investigation, Recognition)
- Identify potential surge capacity for isolation and quarantine as a back-up to LHD capacity. (Investigation, Recognition)
- Advise LHDs when to implement isolation of ill persons and quarantine of contacts arriving from an area where pandemic influenza has emerged. (Investigation, Recognition-Affected state)
- Review pertinent legal authorities and how they apply in a public health emergency, in particular, laws and procedures for closing businesses or schools and suspending public meetings during a declared state of emergency. (Investigation, Recognition)

- Improve readiness to implement travel-related disease containment measures. (Investigation, Recognition)
- Provide public health information to travelers who visit areas countries where pandemic influenza has been reported. (Investigation, Recognition)
- Investigate illness among travelers returning from affected areas and implement isolation and quarantine, as needed. (Investigation, Recognition)
- Determine type and duration of community mitigation strategies to recommend, depending on results of any early epidemiological studies indicating Pandemic Severity Index (PSI) category of the pandemic. (Investigation, Recognition)

Local Health Departments:

- Develop a community response plan for pandemic influenza in collaboration with local partners, including law enforcement, first responders, healthcare facilities, mental health professionals, local businesses, and the legal community. (Investigation)
- Develop plans for isolating ill persons and quarantining of contacts at home and at special isolation and quarantine facilities, including identification of appropriate staff. Conduct training. (Investigation)
- Develop plans to provide community support services for the provision of food, water, medicine and medical consultation, transportation to medical treatment, if required, and other essential supplies/services (e.g., day care or elder care) to those confined at home, hard to reach/special needs groups, children, and persons with disabilities. Conduct training. (Investigation)
- Promote awareness of CDC and WHO travel advisories. (Investigation, Recognition)
- Implement individual-level containment measures (e.g., patient isolation and identification, monitoring, and quarantine of contacts) that may be useful in slowing the spread of pandemic influenza. (Investigation, Recognition)
- Consider community-level containment measures that decrease social contact within groups or whole communities (e.g., quarantine of groups of exposed persons, cancellation of public events, closing recreational facilities, public buildings, snow days, and self-shielding). (Investigation, Recognition)

Businesses and other Employers during Investigation and Recognition:

- Develop a pandemic plan that includes continuity of essential operations and modified operation during “snow days.” Identify critical job functions and plan for their continuity and how to temporarily suspend non-critical activities, cross-train employees to cover critical functions, and cover the most critical functions with fewer staff, especially in the case of prolonged absenteeism.
- Develop guidelines to address business continuity requirements created by jobs that will not allow teleworking (e.g., production or assembly line workers).

- Establish policies for an alternate or flexible worksite (e.g., work via the internet, e-mailed or mailed work assignments) and flexible work hours, where feasible.
- Identify procedures for issues related to employment compensation and job security.
- Plan for staff absences during a pandemic due to personal illness or family member illness.
- Identify employees who might need extra assistance to stay home when they are ill because, for example, they live alone or are disabled.
- Review Federal and State employment laws that identify your employer obligations and options for employees.
- Establish and clearly communicate policies on sick and family leave and employee compensation, especially Federal laws and laws in your State regarding leave of workers who need to care for an ill family member or voluntarily remain home.
- Develop a workplace culture that recognizes and encourages behaviors such as voluntarily staying home when ill in order to get well and to avoid spreading infection to others.
- Develop policies on what to do when a person becomes ill at the workplace.
- Provide employees with information on taking care of ill people at home. Such information will be posted on www.pandemicflu.gov.
- Identify employees who may need to stay home if schools dismiss students and childcare programs close during a severe pandemic.
- Plan for alternative staffing or staffing schedules on the basis of your identification of employees who may need to stay home.
- Establish policies for employees with children to work from home, if possible, and consider flexible work hours and schedules (e.g., staggered shifts).
- Encourage employees who have children in their household to make plans to care for their children if officials recommend dismissal of students from schools, colleges, universities, and childcare programs. Advise employees to plan for an extended period (up to 12 weeks) in case the pandemic is severe.
- Talk with your employees about any benefits, programs, or other assistance they may be eligible for if they have to stay home to mind children for a prolonged period during a pandemic.
- Coordinate with State and local government and faith-based and community-based organizations to assist workers who cannot report to work for a prolonged period.
- Become familiar with social distancing methods that may be used during a pandemic to modify the frequency and type of person-to-person contact (e.g., reducing hand-shaking, limiting face-to-face meetings and shared workstations, promoting teleworking, offering liberal/unscheduled leave policies, staggered shifts).
- Plan to operate businesses and other workplaces using social distancing and other measures to minimize close contact between and among employees and customers. Determine how the work environment may be reconfigured to

allow for more distance between employees and between employees and customers during a pandemic.

- Review guidance from the Occupational Safety and Health Administration (OSHA) to adopt appropriate work practices and precautions to protect employees from occupational exposure to influenza virus during a pandemic. Risk of occupational exposure to influenza virus depends in part on whether or not jobs require close proximity to people potentially infected with the pandemic influenza virus or whether employees are required to have either repeated or extended contact with the public. OSHA will post and periodically update such guidance on www.pandemicflu.gov.
- Encourage good hygiene at the workplace. Provide employees and staff with information about the importance of hand hygiene as well as convenient access to soap and water and/or alcohol-based hand gel in your facility. Educate employees about covering their cough to prevent the spread of germs.
- Disseminate your company's pandemic plan to all employees and stakeholders in advance of a pandemic; include roles/actions expected of employees and other stakeholders during implementation of the plan.
- Provide information to encourage employees (and their families) to prepare for a pandemic by providing preparedness information. Resources are available at www.pandemicflu.gov/plan/individual/checklist.html.
- Coordinate your business' pandemic plans and actions with local health and community planning.
- Find volunteers in your business who want to help people in need, such as elderly neighbors, single parents of small children, or people without the resources to get the medical or other help they will need.
- Think of ways your business can reach out to other businesses and others in your community to help them plan for a pandemic.
- Participate in community-wide exercises to enhance pandemic preparedness.

Education Community: Childcare Programs and Elementary and Secondary Schools(Investigation, Recognition):

- Review business/other employers list above for pertinent activities.
- Develop a pandemic plan that includes continuity of essential operations and modified operation during "snow days."
- Develop policies on observation for illness and what to do when a child or employee becomes ill.
- Plan for dismissal of students from school and childcare closure, considering the impact on employees and parents.
- Develop a plan for school operations during all levels of pandemic severity. Even if students are dismissed, schools may remain operational.
- If the childcare program is to remain in operation during a Category 1-3 pandemic, provide staff with information about the measures that the program will institute in order to reduce virus transmission among staff and children. These may include
 - Restructuring and keeping groups of staff and children from mixing together to minimize social contacts.

- Asking ill staff to stay home while they are ill.
 - Modifying exclusion policies to include ill children and possibly, based on public health recommendations made at the time of the pandemic, those with ill family members.
 - Implementing staggered shifts.
 - Implementing social distancing practices, including eliminating gatherings of staff and minimizing contact between staff and parents.
- Be prepared to provide parents/families with information on student dismissal from school/program cancellation, the importance of keeping students from congregating with other children/students in out-of-school community settings, and how alternative childcare options may be accessed.
 - Be prepared to provide systematic emergency communications to staff, students, and families during the pandemic. Use a telephone calling tree, an e-mail alert, or call-in voice recording to communicate pandemic status in the community and status of educational program activities. Messages for staff and families should be targeted and provided in the different languages that reflect the languages within the community.
 - Determine if schools must, may, or cannot compensate, continue benefits, and extend leave to employees who are not working during the pandemic. Inform employees of the decision.
 - Work with your State legislatures if modifications to State laws are needed for flexibilities regarding, for example, requirements for the number of instruction days, amount of instruction time, and length of the school day.
 - Develop a plan for continuity of instruction. Inform teachers, students and parents how alternate learning opportunities will be provided. This may include assignments by radio, television, regular mail, e-mail, telephone, and teleconferencing or through the media.
 - Consider potential restructuring of the school calendar.
 - Provide school nurses, counselors, school psychologists, special-needs teachers, and social workers guidance on maintaining needed health, counseling, and social services for students with physical and mental/emotional healthcare needs including possibly establishing supportive long-distance relationships with particularly vulnerable students via the phone, e-mail, or regular mail.
 - Identify and inform parents on how students who need free meals may qualify for other types of nutrition assistance in the community.
 - Plan to adapt school facilities to supplement healthcare delivery if needed by local public health officials.

Education Community: Colleges and Universities (Investigation, Recognition):

- Review business/other employers list above for pertinent activities.
- Develop a pandemic plan that includes continuity of essential operations and modified operation during “snow days.”
- Inform students about plans and procedures for providing and completing course work.

- Provide guidance to students and faculty on continuing student instruction. Such guidance may include assessing the possibility of altering course-work requirements.
- Plan to provide ongoing assignments by regular mail, e-mail, Internet links, telephone, teleconferencing, or calling into a recorded message at the university.
- Gather information in advance that would identify students' mailing addresses, telephone/cell numbers, and e-mail addresses.
- Encourage faculty who teach the same subject to share in the development of distance-learning instructional materials for their students.
- Provide information on accessing college/university healthcare staff (e.g., nurses, nurse practitioners, physicians, physician assistants, counselors, and psychologists) who could be recommended as consultation resources for students with physical and mental/emotional healthcare needs.
- Develop a plan for accommodating students, especially international students, who remain on campus during an influenza pandemic.
- Develop a plan to inform parents/families that students may be dismissed during a Category 4-5 pandemic. Encourage them to plan for that contingency, including plans for relocating students to home or elsewhere. Inform them of school procedures and policies regarding tuition, fees, and contractual obligations.
- Be prepared to provide parents/families with information discussing how dismissal of students will be announced, why students will be dismissed from classes and the importance of keeping students from congregating with others in the community, and how alternate instruction will be provided.
- Be prepared to provide students who soon will be leaving for home with information discussing why students are being dismissed from classes and the importance of keeping students from congregating with other students in the community. Students should understand the differences between seasonal and pandemic influenza, how influenza is spread, and what individuals can do help prevent the spread of influenza.
- Remind students who live in residence halls to take their books and other personal items with them on the last day of classes, if indicated.

Faith-based and Community Organizations (FBCOs) (Investigation, Recognition):

- Review business/other employers list above for pertinent activities.
- Encourage leadership to model staying at home when ill as well as the use of proper cough and sneeze etiquette and hand hygiene.
- Where appropriate, align public health messages and recommendations with your organization's values and beliefs. For example, develop a culture that recognizes the positive behaviors of voluntarily staying home when ill to get well and avoid spreading infection to others.
- Consider potential financial deficits due to emergencies when planning budgets. This is useful for pandemic planning and many other unforeseen emergencies, such as fires and natural disasters.

- Many FBCOs rely on community-giving to support their activities. Develop strategies that will allow people to continue to make donations and contributions via the postal service, the Internet, or other means if they are at home for an extended period.
- Develop a way to communicate with your employee and volunteer staff during an emergency to provide information and updates.
- Meet with other FBCOs to develop collaborative efforts to keep your organizations running, such as large organizations collaborating with small ones or several small organizations working together.
- Develop plans for alternatives to mass gatherings. Examples could range from video messages on the Internet to e-mailed messages, mailed newsletters, pre-recorded messages from trusted leaders on a designated call-in phone number, and daily teaching guides from trusted leaders.
- Identify activities, rituals, and traditions, such as hand shaking, hugging, and other close-proximity forms of greeting, or communal sharing of cups or other utensils that may need to be temporarily suspended or modified during a pandemic.
- Identify people who are vulnerable and may need assistance in your community (i.e., elderly people who live alone, persons with disabilities, people with limited skill in speaking English, low-income families, children, or teens who may lack supervision).
- Determine ways your facility might be used during a pandemic, such as a temporary care facility or a central distribution site for providing meals, supplies, or medicine to those who cannot obtain them.
- Identify and meet with local emergency responders, health departments, and healthcare organizations to learn about their planning and educate them about your organization's planning.
- Identify employee and volunteer staff in advance who would be willing to help others in need during a pandemic and help them to receive training through the local health department, emergency services, or other resources.
- Designate an experienced person who can take calls and organize individuals who call spontaneously to volunteer during an emergency to facilitate the best use of their particular skills and experience.
- Develop or identify an existing mental health or counseling hotline that people in the community can call during a pandemic or other emergency.

Shopping Areas, Theatres, Sports Arenas (Investigation, Recognition):

- Develop a pandemic plan for containment measures that decrease social contact (e.g., cancellation of public events, closing recreational facilities and public buildings, and snow days).

Pandemic Period

State Health Department:

- Early in the pandemic period, support federal quarantine station personnel at all land, water, and air ports of entry. (Recognition, Initiation)

- Determine when individual case management and travel-related containment measures are not warranted and advise LHDs.
- Coordinate operation of isolation and quarantine as a back-up to LHD capacity. (Acceleration, Peak, Deceleration)
- Implement procedures at the State-level for issues related to employment compensation and job security. (Initiation, Acceleration, Peak, Deceleration, Resolution)
- Recommend implementation of specific community mitigation strategies based on results of early epidemiological studies indicating Pandemic Severity Index (PSI) category of the pandemic. (Recognition-Affected State, Initiation, Acceleration, Peak, Deceleration, Resolution)
- Recommend the cessation of community mitigation strategies. (Deceleration, Resolution)

Local Health Departments:

- Implement community response plan for pandemic influenza in collaboration with local partners. (Recognition-Affected State, Initiation, Acceleration, Peak, Deceleration, Resolution)
- Isolate ill persons and quarantine contacts to the ill person arriving in an area where influenza has not begun to circulate, as needed. (Recognition-Affected State, Initiation, Acceleration, Peak)
- Conduct assessments of homes and special isolation and quarantine facilities to ensure their suitability for isolation and quarantine. (Initiation)
- Coordinate the monitoring of individuals in isolation and quarantine for as long as individual case management is warranted. (Recognition-Affected State, Initiation)
- Coordinate operation of specialized isolation facilities, as needed. (Recognition-Affected State, Initiation)
- Coordinate community-level containment measures that decrease social contact within groups or whole communities (e.g., quarantine of groups of exposed persons, cancellation of public events, closing recreational facilities, public buildings, snow days, and self-shielding). (Recognition-Affected State, Initiation, Acceleration, Peak, Deceleration, Resolution)
- Early in the pandemic period, support federal quarantine station personnel at all land, water, and air ports of entry. (Recognition, Initiation)
- Activate local plans to coordinate community support services. (Recognition-Affected State, Initiation, Acceleration, Peak, Deceleration, Resolution)

Businesses and other Employers

- Community infrastructure providers, businesses, and other employers should implement pandemic plans. (Initiation- affected state through Deceleration)
- Temporarily suspend non-critical activities if indicated.
- Implement procedures for issues related to employment compensation and job security. (Initiation- affected state through Deceleration)

- Encourage ill persons to stay home during a pandemic and implement return-to-work policies after illness. (Initiation- affected state through Deceleration)
- Implement appropriate procedures when a person becomes ill at the workplace. (Initiation- affected state through Deceleration)
- Provide employees with information on taking care of ill people at home. Such information will be posted on www.pandemicflu.gov. (Initiation- affected state through Peak)
- Implement policies for an alternate or flexible worksite (e.g., work via the internet, e-mailed or mailed work assignments) and flexible work hours, where feasible. (Initiation- affected state through Peak)
- Advise employees not to bring their children to the workplace if schools dismiss students and childcare programs close during a severe pandemic and alternate childcare cannot be arranged. (Initiation- affected state through Peak)
- Implement policies for employees with children to work from home, if possible, and consider flexible work hours and schedules (e.g., staggered shifts). (Initiation- affected state through Peak)
- Remind employees about any benefits, programs, or other assistance they may be eligible for if they have to stay home to mind children for a prolonged period during a pandemic. (Initiation- affected state through Peak)
- Coordinate with State and local government and faith-based and community-based organizations to assist workers who cannot report to work for a prolonged period. (Initiation- affected state through Deceleration)
- Implement social distancing methods to modify the frequency and type of person-to-person contact (e.g., reducing hand-shaking, limiting face-to-face meetings and shared workstations, promoting teleworking, offering liberal/unscheduled leave policies, staggered shifts). (Initiation- affected state through Deceleration)
- Operate businesses and other workplaces using social distancing and other measures to minimize close contact between and among employees and customers. Reconfigure work environment to allow for more distance between employees and between employees and customers. (Initiation- affected state through Deceleration)
- Implement guidance from the Occupational Safety and Health Administration (OSHA) to adopt appropriate work practices and precautions to protect employees from occupational exposure to influenza virus during a pandemic. Risk of occupational exposure to influenza virus depends in part on whether or not jobs require close proximity to people potentially infected with the pandemic influenza virus or whether employees are required to have either repeated or extended contact with the public. OSHA will post and periodically update such guidance on www.pandemicflu.gov. (Initiation- affected state through Deceleration)
- Encourage good hygiene at the workplace. Provide employees and staff with information about the importance of hand hygiene as well as convenient access to soap and water and/or alcohol-based hand gel in your facility. Educate employees about covering their cough to prevent the spread of germs. (Investigation through Resolution)

- Assess criteria that need to be met to resume normal operations and provide notification to employees of activation of the business resumption plan. (Deceleration, Resolution)
- Assess the availability of medical, mental health, and social services for employees after the pandemic. (Resolution)

Education Community - Childcare Programs and Elementary and Secondary Schools:

- Review business/other employers list above for pertinent activities.
- Education systems should implement pandemic plans. (Initiation- affected state through Deceleration)
- Implement procedures for issues related to employment compensation and job security. (Initiation- affected state through Deceleration)
- Implement procedures when a child or employee becomes ill. (Initiation- affected state through Deceleration)
- Implement plan for school operations even if students are dismissed. (Initiation- affected state through Deceleration)
- If the childcare program or school remains in operation, implement measures to reduce virus transmission among staff and children. (Initiation- affected state through Deceleration)
- Provide parents/families with information on student dismissal from school/program cancellation, the importance of keeping students from congregating with other children/students in out-of-school community settings, and how alternative childcare options may be accessed. (Initiation- affected state through Deceleration)
- Provide systematic emergency communications to staff, students, and families during the pandemic. Use a telephone calling tree, an e-mail alert, or call-in voice recording to communicate pandemic status in the community and status of educational program activities. Messages for staff and families should be targeted and provided in the different languages that reflect the languages within the community. (Initiation- affected state through Deceleration)
- Implement plan for continuity of instruction. Inform teachers, students and parents how alternate learning opportunities will be provided. This may include assignments by radio, television, regular mail, e-mail, telephone, and teleconferencing or through the media. (Initiation- affected state through Deceleration)
- Provide school nurses, counselors, school psychologists, special-needs teachers, and social workers guidance on maintaining needed health, counseling, and social services for students with physical and mental/emotional healthcare needs including possibly establishing supportive long-distance relationships with particularly vulnerable students via the phone, e-mail, or regular mail. (Initiation- affected state through Deceleration)
- Inform parents on how students who need free meals may qualify for other types of nutrition assistance in the community. (Initiation through Deceleration)

- Adapt school facilities to supplement healthcare delivery if needed by local public health officials. (Initiation- affected state through Deceleration)
- Establish the criteria and procedures for resuming childcare and school operations and activities. (Resolution)
- Develop communication plans for advising employees, staff, and families of the resumption of programs and activities. (Resolution)
- Develop the procedures, activities, and services needed to restore the learning environment. (Resolution)

Education Community - Colleges and Universities:

- Review business/other employers list above for pertinent activities.
- Implement the pandemic plan that includes continuity of essential operations and modified operations. (Initiation- affected state through Deceleration)
- Inform students about plans and procedures for providing and completing course work. (Acceleration- affected state through Deceleration)
- Provide guidance to students and faculty on continuing student instruction. Such guidance may include assessing the possibility of altering course-work requirements. (Acceleration- affected state through Deceleration)
- Provide ongoing assignments using distance-learning such as regular mail, e-mail, Internet links, telephone, teleconferencing, or calling into a recorded message at the university. (Acceleration- affected state through Deceleration)
- Provide information on accessing college/university healthcare staff (e.g., nurses, nurse practitioners, physicians, physician assistants, counselors, and psychologists) who could be recommended as consultation resources for students with physical and mental/emotional healthcare needs. (Acceleration-affected state through Deceleration)
- Implement plan to accommodate students, especially international students, who remain on campus during an influenza pandemic. (Acceleration- affected state through Deceleration)
- Provide parents/families with information discussing how dismissal of students will be announced, why students will be dismissed from classes and the importance of keeping students from congregating with others in the community, and how alternate instruction will be provided. (Acceleration-affected state through Deceleration)
- Provide students who soon will be leaving for home with information discussing why students are being dismissed from classes and the importance of keeping students from congregating with other students in the community. Students should understand the differences between seasonal and pandemic influenza, how influenza is spread, and what individuals can do help prevent the spread of influenza. (Initiation- affected state through Deceleration)
- Remind students who live in residence halls to take their books and other personal items with them on the last day of classes, if indicated. (Initiation-affected state through Deceleration)
- Establish the criteria and procedures for resuming childcare and school operations and activities. (Resolution)

- Develop communication plans for advising employees, staff, and families of the resumption of programs and activities. (Resolution)
- Develop the procedures, activities, and services needed to restore the learning environment. (Resolution)

Faith-based and Community Organizations

- Review business/other employers list above for pertinent activities.
- Encourage leadership to model staying at home when ill as well as the use of proper cough and sneeze etiquette and hand hygiene.
- Where appropriate, align public health messages and recommendations with your organization's values and beliefs. For example, develop a culture that recognizes the positive behaviors of voluntarily staying home when ill to get well and avoid spreading infection to others.
- Implement strategies that will allow people to continue to make donations and contributions via the postal service, the Internet, or other means if they are at home for an extended period.
- Communicate with your employee and volunteer staff during an emergency to provide information and updates.
- Implement alternatives to mass gatherings. Examples could range from video messages on the Internet to e-mailed messages, mailed newsletters, pre-recorded messages from trusted leaders on a designated call-in phone number, and daily teaching guides from trusted leaders.
- Temporarily suspend or modify activities, rituals, and traditions, such as hand shaking, hugging, and other close-proximity forms of greeting, or communal sharing of cups or other utensils that may increase the spread of infection.
- Designate people from your organization to be responsible to check on specific vulnerable people or families in your community who may need assistance.
- Designate an experienced person who can take calls and organize individuals who call spontaneously to volunteer during an emergency to facilitate the best use of their particular skills and experience.
- Refer people in the community to mental health or counseling hotlines.

Shopping Areas, Theatres, Sports Arenas:

- Implement community-level containment measures that decrease social contact (e.g., cancellation of public events, closing recreational facilities and public buildings, and snow days).

Home or Community-Based Facility Isolation or Quarantine Assessment Checklist

Although the home is generally the preferred setting for isolation or quarantine, alternative sites for isolation and quarantine may be necessary in certain situations. For example, persons who do not have a home situation suitable for this purpose or those who require isolation or quarantine away from home (e.g., during travel) will need to be housed in an alternative location. Because persons who have been exposed to influenza may require quarantine for as long as 10 days, and persons infected with influenza may require isolation for 10 days, it is important to ensure that the environment (home or facility) is conducive to meeting the individual's ongoing physical, mental, and medical needs. Ideally, one or more community-based facilities that could be used for isolation or quarantine should be identified and evaluated as part of influenza preparedness planning. The home or facility evaluation should be performed on site by a public health official or designee.

The most important items on the following checklist are shown with an asterisk (). Settings that lack important items are generally not suitable for isolation or quarantine.

Date: _____/_____/_____

Tracking ID/Bar Code

Patient/Facility Name: _____

Address: _____

Patient Telephone Number (_____) _____ - _____

Primary Caregiver Name: Last _____ First: _____

Primary Caregiver Telephone Number (_____) _____ - _____

Inspectors Name: Last _____ First: _____

Type of Home/Facility

- Single Family/Single Unit
- Single Family/Multiple Unit
- Single Family/Apartment
- Community-Based Facility (describe) _____
- Other (describe) _____

Number of Occupants in home/facility _____

_____ Number of (bed)rooms

_____ Number of bathrooms

Consideration	Yes	No
*Basic utilities (running water, electricity, adequate heating or air-conditioning)		
Central Air Conditioning		
Has the central air conditioning unit/system been modified to prevent air from the influenza patient's room from circulating throughout the home/facility?		
Window Air Conditioning Units Number of units _____		
Is the air conditioning unit condensate drain hard-plumbed to the sewer system? Cooling is accomplished by removing moisture from the air and the condensate liquid may contain infectious material and should be handled accordingly.		
Services for removal of waste. (No special precautions for removal of waste are required as long as persons remain asymptomatic.)		
Adequate rooms and bathrooms for each case/contact		
Is there a separate (bed)room available to be used only by each influenza patient during the isolation period?		
Can the (bed)room window be opened?		
Is each (bed)room physically separated by walls from adjacent rooms?		
Does each (bed)room have a door which can be kept closed?		
Is there a designated bathroom for the influenza patient(s)?		
Is the patient area carpeted?		
*Mechanism for communication, including functioning telephone (for monitoring by health staff, reporting of symptoms, gaining access to support services, and communicating with family)		
*Access to food and food preparation		
*Delivery systems for food, supplies, and other needs		
*Mechanism for addressing special needs (e.g., filling prescriptions)		
Basic supplies (clothing, linens, etc.)		
*Sufficient medical supplies (gloves, surgical masks, hand-hygiene supplies and disinfectant)		
Access to supplies such as thermometers, fever logs, phone numbers for reporting symptoms or accessing services, and emergency numbers (these can be supplied by health authorities if necessary)		
*Available household member/facility staff person to be the patient's primary caregiver (isolation) and/or monitor contacts at least daily for fever and respiratory symptoms (quarantine)		
*Accessibility to healthcare workers or ambulance personnel		
*Transportation for treatment/medical evaluation for persons who worsen (isolation) or develop symptoms (quarantine)		
Access to mental health and other psychological support services.		
Adequate security for those in the home/facility		
Sign posted on the patient's door restricting access only to the Caregiver/Staff		
Other occupants of the home relocated (if possible)		
*Contingency for emergencies been developed (e.g., who to notify)		
*Caregiver(s), Staff and patient(s) instructed on the proper procedures for disposing of waste materials and laundering		
*Caregiver/staff instructed how to clean/disinfect the influenza patient's room		
*Patient(s) instructed to restrict his/her mobility and take precautions (e.g. surgical mask)		

Contact Identification and Management

Surveillance of contacts of cases infected with a novel influenza virus may be helpful in *early* control efforts. Through rapid identification, evaluation, and monitoring of exposed contacts, further transmission of disease may be prevented or reduced. Contacts who are found to be clinically ill can be quickly isolated to avoid further novel influenza virus transmission. When contact identification and management is indicated, surveillance of contacts will be conducted by LHDs, with assistance from NYSDOH as needed. NYSDOH, in consultation with CDC and LHDs, will provide guidance regarding if and when contact tracing should be conducted.

- **Definitions**

- **Close Contact:** A person who cared for or lived with a person with a novel influenza virus or who had a high likelihood of direct contact with respiratory secretions and/or body fluids of a person with a novel influenza virus (during encounters with the patient or through contact with materials contaminated by the patient), during the period of 24 hours prior to the patient's onset to 14 days after onset of symptoms (*note: the definition of the infectious period is under discussion with the CDC*). Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (< 3 feet), physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief time.
- **Infectious Period:** Period of time from the 24 hours prior to onset symptoms to up to 14 days after the onset of symptoms (*note: the definition of the infectious period is under discussion with the CDC*).

- **Contact Identification and Tracing**

- Determine the time period in which the case was infectious.
- Initiate identification of a case's contacts as soon as possible after a diagnosis of probable or confirmed infection with a novel influenza virus.
 - Obtain information about the case and all contacts from the case, next of kin, workplace representatives, or others with appropriate knowledge of the case-patient's recent whereabouts and activities.
- Attempt to locate and contact all close contacts within 12 hours of the case/contact report.
 - Use work and school contact numbers, telephone directories, voting lists, neighborhood interviews, site visits, etc. to trace contacts when locating information is unknown or incomplete.
 - If having difficulty locating a contact, consult with STD and/or TB staff who have contact tracing experience.

- If the contact has left the county and/or state, notify the NYSDOH Regional Epidemiologist.
- **Contact Evaluation and Monitoring**
 - Alert contacts of their potential exposure to a novel influenza virus.
 - Verify exposures.
 - Verify exposure to index case during the period of infectiousness.
 - Verify the type of exposure.
 - If initial contact is made at a home or workplace visit, the appropriate personal protective equipment (PPE) should be utilized since the contact's health status will be unknown.
 - Evaluate contact's health status using the Pandemic Influenza Contact Record Form (Appendix 8-C).
 - Ensure prophylaxis is provided, if indicated.
 - Identify any additional contacts who may not have been listed by the index case.
 - Enter data from the Contact Record Form on the HIN.
 - Consider quarantine of contacts based on the level of influenza activity.
- **Ill Contacts**
 - If the contact is febrile or has respiratory symptoms, make arrangements for a medical evaluation by a healthcare provider.
 - Ensure that the medical facility staff are informed and prepared to handle a suspect novel influenza virus case.
 - Ensure that the contact does not take public transportation en route to their medical evaluation.
 - Advise the contact to remain at home and use respiratory precautions until they are evaluated by a healthcare provider.
 - Ill contacts should be counseled, interviewed, and reported as a suspected novel influenza virus case using the Pandemic Influenza Case Reporting Form (see Section 2: Surveillance and Laboratory Testing), and his/her contacts should be identified using the Pandemic Influenza Contact Record Form (Appendix 8-C).
- **Well Contacts**
 - Initiate plans for ongoing symptom monitoring for 10 days after their last exposure to a novel influenza virus case. Monitoring of contacts may be active (e.g., regular workplace body temperature monitoring by a supervisor) or passive (e.g., self monitoring of symptoms and temperature by the contact with reporting to the local health department at least once a day).

- Determine the time period in which the contact must be monitored (10 days after last exposure).
- Provide thermometers to any contacts who do not have and are not willing to purchase one.
- Provide contact with a daily temperature/symptom log (Appendix 8-D).
- Complete the Pandemic Influenza Contact Daily Temperature Log Tracking Form (Appendix 8-E). Update the form each day.
- Enter contact monitoring/symptom data on the HIN.
- Provide information on seeking medical care should the contact develop fever and/or respiratory symptoms while they are being monitored.
 - Immediately notify the LHD.
 - Seek medical evaluation by a healthcare provider.
 - Ensure the medical facility is informed and prepared to handle a suspect novel influenza virus case.
 - Ensure the contact does not take public transportation en route to their medical evaluation.
 - Advise the contact to remain at home and use respiratory precautions until they are evaluated by a healthcare provider.

Modify, as needed, existing procedures for locating contacts who are lost to follow-up during the monitoring period.

Contact Record Form

Original Patient Serial No: _____ Index Case No: _____

Name: _____

Sex: _____ DOB: _____ Race/Ethnicity: _____

Pregnant: _____ Underlying Medical Conditions: _____

Contact Information:

Home Address:

Work Address:

Phone: _____

Phone: _____

Cellular Phone: _____

Exposure History:

First Exposure: _____

Last Exposure: _____

Frequency/Duration: _____

Exposure Ongoing? _____

If HCW, PPE Used:

Eye Protection: Y / N

Respiratory: Y / N

Gown: Y / N

Gloves: Y / N

Aerosol Generating Procedure? Y/N

Describe: _____

Type of Exposure: _____

Exposure Timing: _____

Outcome:

Date Notified: _____

Symptoms Present? _____

If Yes, Date of Onset: _____ Symptom Type: _____

Date of Resolution: _____

Medical Exam? _____ If Yes, Date of Exam: _____

Start of Quarantine: _____ End of Quarantine: _____

Administrative Data:

Supervisor: _____

Initiating Agency: _____

Investigating Agency: _____

Disposition: _____

Disposition Date: _____

Assigned To: _____

Dx. _____

Dx. Date: _____

Worker No. _____

If New Case Enter HIN#: _____

Notes:

Contact Daily Temperature Log

Name: _____ Date of Birth: _____

Since you may have been exposed to a new strain of influenza virus through either foreign travel or close contact to someone who is ill with this virus, you need to monitor your temperature twice a day. This should be done for the 10 days following your exposure (date of return from travel or date of last close contact with the ill person). Your local health department will provide you with the exact dates. You have been provided this chart, the recommended infection control precautions for patients with this new strain of influenza and a supply of facial masks.

The attached chart is to record your temperature daily and any respiratory symptoms, should they occur. If you develop a fever (greater than 100.4) OR any respiratory symptoms, such as cough or shortness of breath:

- Notify your health care provider immediately.
- If you are able, contact your local health department.
- Before leaving your home to seek medical attention, place a mask on your face.

The local health department will be contacting you daily to monitor your temperature and any symptoms. If you have any questions about monitoring for symptoms, please contact _____ at _____.

You may wish to enter your health care provider's name and telephone below for easy reference should you become ill.

Health Care Provider: _____

Telephone Number: _____

Definitions: Interventions for Community Containment

Source: Adapted from the November 2005 HHS Pandemic Influenza Plan, Supplement 8, Appendix 1

The ultimate goal of isolation and quarantine is to separate and restrict the movement or activities of persons who are ill, suspected of being ill, or who have been exposed to infection, for the purpose of preventing transmission of diseases.

Isolation

Restriction of movement or separation from other persons, in such places, under such conditions, and for such time, as will prevent transmission of the infectious agent, of persons known to be ill or suspected of being infected with contagious disease (10 NYCRR 2.25(d)).

- Isolation allows for the focused delivery of specialized health care to persons who are ill, and it protects healthy persons from becoming ill.
- Ill persons are usually isolated in a hospital, but they may also be isolated at home or in a designated community-based facility, depending on their medical needs.

“Isolation” is typically used to refer to actions performed at the level of the individual patient.

Quarantine

Restriction of movement and activities or separation of well person(s) believed to have been exposed to a contagious disease (household contacts and/or incidental contacts) to premises designated by the health officer (10 NYCRR 2.25(f)).

- Persons are usually quarantined in their homes, but they may also be quarantined in community-based facilities.
- Quarantine can be applied to an individual or to a group of persons who are exposed at a large public gathering or to persons believed exposed on a conveyance during international travel.
- Quarantine can also be applied on a wider population- or geographic-level basis. Examples of this application include the closing of local or community borders or erection of a barrier around a geographic area with strict enforcement to prohibit movement into and out of the area.

Contacts of pandemic influenza patients can be managed by use of a range of interventions, all of which are designed to facilitate early recognition of illness in persons at greatest risk of becoming infected and thereby prevent transmission to others. Whereas many of these interventions are applied individually to persons identified as contacts of a person with possible or known influenza disease, others are applied to larger groups of persons, or communities, which share a similar risk of exposure. Measures applied to individuals may not be feasible during the Pandemic Period, when quarantining individuals and tracing close contacts may not be possible. The range of interventions includes the following:

Passive Monitoring

- *Definition:* The contact is asked to perform self-assessment at least twice daily and to contact authorities immediately if respiratory symptoms and/or fever occur.
- *Application:* Situations in which 1) the risk of exposure and subsequent development of disease is low, and 2) the risk to others if recognition of disease is delayed is also low.
- *Benefits:* Requires minimal resources. Places few constraints on individual movement.
- *Challenges:* Relies on self-reporting. Affected persons may not perform an adequate self-assessment.
- *Resources Required:* Supplies (thermometer; symptom log; written instructions). Hotline to notify authorities about symptoms or needs. Staff to receive telephone reports and provide in-person evaluation and care. Plans and procedures for rapid isolation of persons who develop symptoms.
- *Partners:* Household members.
- *Forms/Templates:* Symptom logs. Instructions for patients and healthcare workers

Active Monitoring without Explicit Activity Restrictions

- *Definition:* A healthcare or public health worker evaluates the contact on a regular (at least daily) basis by phone and/or in person for signs and symptoms suggestive of influenza.
- *Application:* Situations in which 1) the risk of exposure to and subsequent development of disease is moderate to high, 2) resources permit close observation of individuals, and 3) the risk of delayed recognition of symptoms is low to moderate.
- *Benefits:* Places few constraints on individual liberties.
- *Challenges:* Requires adequate staffing. Requires a system to track information and to verify monitoring and appropriate actions based on findings.
- *Resources Required:* Trained staff to provide in-person and/or telephone evaluations. Plans and procedures for rapid isolation of persons who develop symptoms. Contingency plans for managing noncompliant persons. Hotline to notify authorities about symptoms or needs.
- *Partners:* Professional and lay healthcare workers to perform evaluations on behalf of the health department. Possible need for law enforcement to assist with management of noncompliant persons
- *Forms/Templates:* Checklist for assessment of active monitoring. Template for recording results of clinical evaluation.

Active Monitoring with Activity Restrictions (Quarantine)

- *Definition:* The contact remains separated from others for a specified period (up to 10 days after potential exposure), during which s/he is assessed on a regular basis (in person at least once daily) for signs and symptoms of influenza disease. Persons with fever, respiratory, or other early influenza symptoms require immediate evaluation by a trained healthcare provider. Restrictions may be voluntary or legally mandated; confinement may be at home or in an appropriate

- facility. No specific precautions are required for those sharing the household with a person in quarantine as long as the person remains asymptomatic. Because onset of symptoms may be insidious, it may be prudent to minimize interactions with household members during the period of quarantine, if feasible.
- *Application:* Situations in which the risk of exposure and subsequent development of disease is high and the risk of delayed recognition of symptoms is moderate.
 - *Benefits:* Reduces risk of spread from persons with subacute or subclinical presentations or from delayed recognition of symptoms.
 - *Challenges:* May infringe on personal movement. May lead to a feeling of isolation from family and friends. May lead to loss of income or employment. Requires plans/protocols for provision of essential services. Requires plan for provision of mental health support. Risk of noncompliance, particularly as duration increases. May require enforcement for noncompliance.
 - *Resources Required:* Staff for monitoring and evaluation. Appropriate facility if home setting is unavailable or inadequate. Staff, funding, and goods for provision of essential services. Hotline for notification of symptoms or personal needs. Mechanisms to communicate with family members outside the household or facility. Mental health and social support services. Delivery systems for food and other essential supplies.
 - *Partners:* Professional and lay healthcare workers to perform assessments on behalf of the health department. Community volunteers/workers to assist with provision of essential services. Potential need for law enforcement to assist with noncompliant persons.
 - *Forms/Templates:* Checklist for active monitoring. Template for recording results of clinical evaluation. Checklist and guidelines for evaluation of homes for quarantine. Checklist and guidelines for evaluation of community-based sites for quarantine. Guidelines for monitoring compliance with home quarantine. Guidelines for monitoring compliance with quarantine in community-based facilities. Forms for recording compliance with quarantine.
 - *Examples:* Home quarantine (voluntary or mandatory). Facility quarantine (voluntary or mandatory).

Working Quarantine

- *Definition:* Employees exposed to pandemic influenza but not yet ill are permitted to work but must observe activity restrictions while both on and off duty. Monitoring for influenza-like illness before reporting for work is usually required. This may change based on the clinical presentation of the novel strain. Use of appropriate PPE, including a surgical or procedure mask while at work, is required.
- *Application:* Persons for whom activity restrictions (home or facility quarantine) are indicated but who provide essential services (e.g., healthcare workers).
- *Benefits:* Reduces risk of community spread from high-risk contacts while minimizing adverse impact of activity restrictions on provision of essential services. Clinical monitoring at work reduces the staff required for active monitoring at the quarantine site.

- *Challenges:* Need for close and consistent pre-shift monitoring at the work site to prevent inadvertent exposures. May require means of transporting persons to and from work site to minimize interactions; persons in working quarantine should wear appropriate PPE during transport. Must maintain close cooperation and communication between work site and local health authorities. Need to provide mental health services to address concerns about isolation from family and friends.
- *Resources Required:* Appropriate facility for off-duty quarantine if home is unavailable or inadequate. Staff, funding, and goods for provision of essential services. Personal protective equipment. Hotline for notification of symptoms and personal needs. System to track results of work-site monitoring and location(s) of off-duty quarantine. Mental health, psychological, and behavioral support services, especially if work includes care of influenza patients.
- *Partners:* Work-site administrators and infection control personnel. Community volunteers/workers. Staff/volunteers to assist with transportation to and from work. Mental health professionals. Potential need for law enforcement to assist with noncompliant persons.
- *Forms/Templates:* Guidelines and instructions for persons in working quarantine. Instructions for supervisors of persons in working quarantine. Checklist to evaluate homes for quarantine. Guidelines for monitoring compliance. Checklist for active monitoring at work site. Template for recording results of clinical evaluation. Forms for recording compliance.

Focused Measures to Increase Social Distance

- *Definition:* Intervention applied to specific groups, designed to reduce interactions and thereby transmission risk within the group. When focused, the intervention is applied to groups or persons identified in specific sites or buildings, most but not necessarily all of whom are at risk of exposure to influenza.
- *Examples:* Quarantine of groups of exposed persons. Cancellation of public events. Closure of office buildings, schools, and/or shopping malls; closure of public transportation such as subways or bus lines.
- *Application:* Groups or settings where transmission is believed to have occurred, where the linkages between cases is unclear at the time of evaluation, and where restrictions placed only on persons known to have been exposed is considered insufficient to prevent further transmission.
- *Benefits:* Applied broadly, reduces the requirement for urgent evaluation of large numbers of potential contacts to determine indications for activity restrictions. May enable reductions in transmission among groups of persons without explicit activity restrictions (quarantine).
- *Challenges:* May be difficult to solicit cooperation, particularly if popular buildings are closed or popular events are cancelled. Requires excellent communication mechanisms to notify affected persons of details and rationale. May need to provide replacement for affected activities (e.g., school, essential services). Generally relies on passive monitoring.

- *Resources Required:* Systems to communicate relevant messages. May require enforcement, particularly if closure of buildings or gathering places is necessary. Requires resources for passive monitoring. Hotlines to report symptoms and obtain follow-up instructions. Transportation for medical evaluation, with appropriate infection control precautions.
- *Partners:* News media and communication outlets. Law enforcement. Community groups.
- *Forms/Templates:* Messages for affected persons. Messages for employers of affected persons. Messages for persons supplying essential services.

Community-Wide Measures to Increase Social Distance

- *Definition:* Intervention applied to an entire community or region, designed to reduce personal interactions and thereby transmission risk. The prototypical example is implementation of a “snow day,” in which offices, schools, and transportation systems are cancelled as for a major snowstorm.
- *Examples:* Snow days.
- *Application:* All members of a community in which 1) extensive transmission of influenza is occurring, 2) a significant number of cases lack clearly identifiable epidemiologic links at the time of evaluation, and 3) restrictions on persons known to have been exposed are considered insufficient to prevent further spread.
- *Benefits:* Reduces need for urgent evaluation of large numbers of potential contacts to determine indications for activity restrictions. May enable reductions in transmission among groups without explicit activity restrictions (quarantine). “Snow days” are familiar concepts and thus are easy to implement on short notice.
- *Challenges:* May be difficult to solicit cooperation. Requires excellent communication mechanisms to notify affected persons of details and rationale. May need to provide replacement for affected activities (e.g., school, essential services). May need to address mental health and financial support issues. When an entire community is involved, requires cooperation with neighboring jurisdictions that may not be using a similar intervention, particularly in situations where persons live in one city and work in another and only one locale is affected by the intervention. Generally relies on passive monitoring. Social and economic impact of public transportation closures.
- *Resources Required:* Communication outlets. Enforcement. Resources for passive monitoring. Hotlines and other communication systems to report symptoms and obtain follow-up instructions.
- *Partners:* News media and other communication outlets. Law enforcement and transportation officials to enforce restrictions (e.g., closure of bridges, roads, or mass transit systems) and plan for provision of critical supplies and infrastructure.
- *Forms/Templates:* Messages for affected persons. Messages for employers of affected persons. Messages for persons supplying essential services.

Widespread Community Quarantine, Including *Cordon Sanitaire*

- *Definition:* Legally enforceable action that restricts movement into or out of the area of quarantine of a large group of people or community; designed to reduce the likelihood of transmission of influenza among persons in and to persons

outside the affected area. When applied to all inhabitants of an area (typically a community or neighborhood), the intervention is referred to as *cordon sanitaire* (sanitary barrier).

- *Application:* All members of a group in which 1) extensive transmission is occurring, 2) a significant number of cases lack identifiable epidemiologic links at the time of evaluation, and 3) restrictions placed on persons known to have been exposed are considered insufficient to prevent further spread. Widespread quarantine is unlikely to be necessary because other less restrictive measures (e.g., snow days) may be equally effective.
- *Benefits:* Reduces need for urgent evaluation of large numbers of potential contacts to determine indications for activity restrictions.
- *Challenges:* Controversial because of the degree that individual movement is restricted. Difficult to solicit cooperation for extended periods, particularly if the rationale is not readily apparent or was not clearly explained. Requires excellent communication mechanisms to inform affected persons and to maintain public confidence in the appropriateness of the chosen course of action. Need to ensure continuation of essential services. Need to provide financial support and mental health support services for the affected population. When an entire community is involved, requires cooperation with neighboring jurisdictions that may not be using a similar intervention, particularly in situations where persons live in one city and work in another and only one locality is affected by the intervention. Need to provide mechanisms for isolating symptomatic persons with minimal delay.
- *Resources Required:* Systems to communicate relevant messages. Enforcement to maintain security at borders. Transportation for persons requiring medical evaluation, with appropriate infection control precautions. Staff and supplies to maintain access to and availability of essential services and goods, including food, water, medicine, medical care, and utilities. Psychological support staff. Plan to divert flow of critical infrastructure supplies and materials that normally transit through quarantined area.
- *Partners:* News media and other mass communication outlets. Public and private groups, industries, and officials to coordinate supply and provision of essential services to affected area. Law enforcement to maintain security at borders and to enforce movement restrictions. Transportation industry.
- *Forms/Templates:* Messages for affected persons. Messages for employers of affected persons. Messages for persons supplying essential services.
- *Examples:* Quarantine (*cordon sanitaire*) of a city or town. Quarantine of occupants of a housing complex or office building.

NYSDOH Model Influenza Voluntary Home Isolation and Quarantine Agreements

The New York State Department of Health (NYSDOH), Division of Legal Affairs, has developed the Model Voluntary Home Isolation Agreement and the Model Voluntary Home Quarantine Agreement for the local health departments (LHD) to use when asking a suspect or probable influenza patient or contact to submit to voluntary isolation or quarantine. The LHD should provide the appropriate agreement to patients with influenza symptoms or contacts as a means to instruct them on the necessary infection control precautions to be taken to prevent transmission to family members, friends, and other outside contacts. While these agreements are not intended to be legally binding contracts with the patient or contact, they clearly spell out what is expected of the patient or contact and his/her family by the LHD. This document may also be useful as evidence by the LHD in any subsequent court proceeding seeking involuntary isolation or quarantine, as it would show what was expected of the patient or contact and that the patient or contact was informed of these expectations, and that the LHD tried voluntary measures prior to seeking assistance from the court. **These models may be used as is or the LHD may choose to modify them as necessary to meet the needs of the particular situation, especially with regard to quarantine. We encourage the counties to add or remove provisions, or change the language of the agreements as necessary to make them more patient specific.**

There is a space at the end of each document for the suspected or probable influenza patient or contact and his or her caretaker or head of household to sign the document, acknowledging that s/he understands the information contained therein. There is also a place for the name and signature of the LHD representative who explained the provisions of the agreement to the suspected or probable influenza patient or contact and the caretaker/head of household. There should be three copies of the document signed by all three parties, one to be left with the patient, a copy for the caretaker/head of household, and the other to be placed in the file maintained by the LHD. In the event that there is no caretaker/head of household present, the LHD need only use two copies and note that there is no third party.

Should either person refuse to sign the document, the LHD representative should still sign each copy, give a copy to the patient, a copy to the caretaker/head of household, and keep the other copy in the LHD file with a note that the patient or caretaker/head of household refused to sign the document. Mere refusal to sign the document is not enough evidence of lack of cooperation on the part of the patient to justify seeking a commissioner's or court order. In addition to refusal to sign the agreement, justification for a commissioner's or court order would typically include evidence of the patient's failure to follow recommendations and demonstration of medical need for isolation or quarantine.

CDC guidelines suggest that quarantining persons who were exposed to influenza but who are not symptomatic may be a strategy to slow the spread of pandemic influenza as much as possible in order to provide additional time for the development, manufacture, distribution and administration of influenza vaccine and the manufacture and the distribution of influenza antiviral medications. To achieve this end, the LHDs need not implement strict quarantine in the traditional sense (i.e. asking someone to confine themselves to their house and not leave for any reason until the 7 day period is up). Depending on the situation, the LHDs could restrict the movement of the contact by implementing modified quarantine techniques (i.e. allowing the contact to leave the house to go to work but for no other reason). The level of restriction should be proportionate to the type of contact/exposure and the level of influenza activity. The following table is an example of the level of restriction required for certain influenza contacts based upon CDC recommendations. This table is merely an example and the methods that may be applied. Depending on the individual situation the LHDs could require more or less restrictions.

TYPE OF CONTACT/EXPOSURE	QUARANTINE METHODS
Contact has history of travel to affected area but no direct contact w/influenza case.	<ul style="list-style-type: none"> ✓ May be required to monitor for fever and report if fever develops ✓ Advise proper hand hygiene ✓ Advise avoidance of unnecessary trips out of the home
Health care worker with contact with influenza case (probable or suspect)	<ul style="list-style-type: none"> ✓ May be required to monitor for fever and report if fever develops ✓ Leave home to go to work only ✓ Advise not to use public transportation ✓ Advise against unnecessary contact with friends and relatives, no visitors. ✓ Advise against going to public gatherings (church, funerals, etc.)
Household member who is primary caregiver for a influenza patient in home isolation	<ul style="list-style-type: none"> ✓ Prohibit leaving the home for any reason ✓ May be required to monitor for fever and report if fever develops ✓ Advise proper hand hygiene and use of protective equipment (masks & gloves) ✓ Prohibit contact with visitors

NYSDOH Model Influenza Voluntary Home Isolation Agreement

I have been informed that I have been diagnosed as a suspect or probable case of influenza, a communicable disease dangerous to the public health, and that unless precautions are taken, others may contract this infection from me. The local health department (LHD) and its commissioner, is required to protect the public from the danger of such communicable diseases by Public Health Law §§ 308 and 324, Public Health Law Art. 21, and 10 NYCRR Part 2. In order to prevent the spread of this virus the LHD has provided me with the following information, advised me of the need to comply with the following instructions and I hereby agree to the following:

- I shall remain in home isolation for a period of X days without fever, respiratory symptoms (such as cough, shortness of breath, or difficulty breathing) or sore throat.
- I shall be isolated at the following location which shall hereinafter be referred to as “home”:

Street address: _____

City: _____ County: _____ Zip: _____

Telephone: (____) _____-_____

- I have been educated about the disease, the reasons for isolation in the home, and the length of time I can expect to be confined to the home.
- I shall limit all activities and interaction with all other persons living outside the home. I shall not go to school, a house of worship, work, out-of-home day care, stores or other public areas.
- I shall not leave the home for any reason unless first authorized to do so by the LHD.
- I understand that only those persons authorized by the LHD may enter my home during the period of my isolation. Those who enter the home without prior authorization from the LHD may be subject to isolation or quarantine themselves. I agree to notify friends and relatives that they shall not visit the home until further notice.
- I shall use a separate bed and, if possible, a separate bedroom.
- I shall wear a surgical mask when in the same room with non-infected persons. If I cannot wear a surgical mask, others in the same room will be asked to wear a surgical mask or respirator.

- ❑ If I am not masked I shall cover my nose and mouth with a disposable tissue when coughing or sneezing.
- ❑ Household waste, including surgical masks and disposable tissues soiled with respiratory secretions, blood, or other body fluids will be disposed of as normal household waste.
- ❑ I will wash my hands with soap and water after all contact with respiratory secretions from coughing or sneezing, blood, and all other body fluids (e.g. urine, feces, wound drainage, etc.). I will educate and encourage other members of my household to do the same.
- ❑ All members of my household will wear gloves on both hands when they have contact with my respiratory secretions (lung or nasal), blood, and all other body fluids (e.g. urine, feces, wound drainage, etc.). Alcohol-based hand hygiene products may be substituted for hand washing with soap and water after removing the gloves, **IF** the hands are not visibly soiled with respiratory secretions, blood, or other body fluids. Gloves shall not be reused and shall be discarded immediately after removal.
- ❑ My eating and drinking utensils will be washed with hot water and a household dishwashing detergent.
- ❑ Environmental surfaces (e.g. countertops, tables, sinks, etc.) in the kitchen, bathroom, and my bedroom will be cleaned and disinfected with a household disinfectant, such as household bleach or Lysol[®], while wearing gloves, at least daily and when soiled with the respiratory secretions, blood, and other body fluids.
- ❑ My bed linens, towels, and personal clothing shall not be shared with other members of the household. Clothes and linens will be washed in hot soapy water.
- ❑ All members of my household or other close contacts who develop fever or respiratory symptoms will seek medical evaluation.
- ❑ I understand that to prevent transmission of influenza, I should advise members of the household who develop influenza symptoms that they shall call the physician's office, clinic, or hospital emergency department where they intend to seek care to alert healthcare workers there prior to seeking treatment.
- ❑ I will obtain or request the LHD to provide me and members of my household with surgical masks, gloves, and other items necessary to prevent the spread of influenza (i.e. alcohol-based hand wash).
- ❑ I will arrange or request the LHD to arrange for the delivery of necessary items to my home, including but not limited to, food, clothing, and supplies, during the period of isolation.

- I agree to adhere to any additional recommendations and instructions from the LHD that may be listed below:

I, or my legal guardian, may contact the following LHD representative to seek relief from, clarification of, or further explanation of the conditions contained in, any part of this agreement.

(Name of LHD contact person) (____)____-_____
(Daytime telephone #)

The provisions of this agreement have been explained to me by the LHD representative and I fully understand that my failure to follow these guidelines or to voluntarily remain in isolation may result in my being placed in involuntary isolation, or committed to a facility where I may be isolated against my wishes.

(Print name of influenza case/contact) (Signature)

Date: _____

I, the caretaker/head of household, acknowledge that the LHD representative has explained the provisions of this agreement to me as well as the patient in isolation. I fully understand that my failure to follow these guidelines may result in my exposure to influenza and in my being placed in involuntary isolation, or committed to a facility where I may be isolated against my wishes.

(Print name of caretaker/head of household) (Signature)

Date: _____

(Print name of LHD representative) (Signature)

Date: _____

NYSDOH Model Influenza Voluntary Quarantine Agreement

I have been informed that I have been determined to be a contact of a suspect or probable case of influenza, a communicable disease dangerous to the public health, and that unless precautions are taken, I could potentially infect others. In order to prevent the spread of this virus, the local health department (LHD), pursuant to Public Health Law §§ 308 and 324, Public Health Law Art. 21, and 10 NYCRR Part 2, has provided me with the following information, and I hereby agree to the following:

- I shall remain in quarantine for 10 days after the date of my exposure and will immediately notify the LHD should I develop influenza symptoms, including but not limited to, a temperature greater than 100.4° F., and/or symptoms of a respiratory infection such as cough, shortness of breath or difficulty breathing, and/or sore throat.

The LHD has determined that the date of my exposure was _____ and I shall be released from quarantine on or about _____, provided I do not develop influenza symptoms as noted above.

- I shall be quarantined at the following location, which shall be referred to as “home”:

Street address: _____

City: _____ County: _____ Zip: _____

Telephone: (____) _____ - _____

- I have been educated about the disease, the reasons for my quarantine, and the length of time I can expect to be restricted from certain activities.
- I shall limit all activities and interaction with all other persons living outside the home.
- I understand that during the quarantine period I may only leave the home to go to _____ (work/school/pharmacy, etc.). I shall not go to a house of worship, out-of-home day care, stores/malls, restaurants, movies, sporting events, or other public areas or events.
- I understand that only those persons authorized by the LHD may enter my home during the quarantine period. Those who enter the home without prior authorization from the LHD may be subject to isolation or quarantine themselves. I agree to notify friends and relatives that they shall not visit the home until further notice.

- ❑ I understand that whenever I leave the home I shall avoid close contact (within 3 feet) with others to the best of my ability. This includes, but is not limited to, avoiding the use of public transportation and confining myself to my office as much as possible when I'm at work (if applicable).
- ❑ I shall cover my nose and mouth with a disposable tissue when coughing or sneezing.
- ❑ Household waste, including surgical masks and disposable tissues soiled with respiratory secretions, blood, or other body fluids will be disposed of as normal household waste.
- ❑ I will wash my hands with soap and water after all contact with respiratory secretions from coughing or sneezing, blood, and all other body fluids (e.g. urine, feces, wound drainage, etc.). I will educate and encourage other members of my household to do the same.
- ❑ I shall not share food or beverages with members of the household and my eating and drinking utensils will be washed with hot water and a household dishwashing detergent.
- ❑ Environmental surfaces (e.g. countertops, tables, sinks, floors, etc.) in the household will be cleaned and disinfected with a household disinfectant, such as household bleach or Lysol[®], while wearing gloves, at least daily and when soiled with the respiratory secretions, blood, and other body fluids.
- ❑ If requested by the county health department, I agree to monitor my temperature two times a day and report this information to the LHD as requested. The number I must call to report this information is (_____) ____-____.
- ❑ If requested by the county health department, I will advise all members of my household or other close contacts who develop fever or respiratory symptoms to advise the LHD when such symptoms arise.
- ❑ I understand that to prevent transmission of influenza, if I or the members of the household develop influenza symptoms and I need to visit my physician's office, clinic, or hospital emergency department, I will alert healthcare workers prior to seeking treatment or immediately upon arrival.

- I understand that if I develop fever or respiratory symptoms I must adhere to the following additional provisions:
 - I shall use a separate bed and, if possible, a separate bedroom.
 - I shall wear a surgical mask when in the same room with non-infected persons. If I cannot wear a surgical mask, others in the same room will be asked to wear a surgical mask or respirator.
 - My bed linens, towels, and personal clothing shall not be shared with other members of the household. Clothes and linens will be washed in hot soapy water.
 - All members of my household will wear gloves on both hands when they have contact with my respiratory secretions (lung or nasal), blood, and all other body fluids (e.g. urine, feces, wound drainage, etc.). Alcohol-based hand hygiene products may be substituted for hand washing with soap and water after removing the gloves, **IF** the hands are not visibly soiled with respiratory secretions, blood, or other body fluids. Gloves shall not be reused and shall be discarded immediately after removal.
 - I will obtain or request the LHD to provide me and members of my household with surgical masks, gloves, and other items necessary to prevent the spread of influenza (i.e. alcohol-based hand wash).

- I understand that I will arrange or request the LHD to arrange for the delivery of necessary items to my home, including but not limited to, food, clothing, and supplies, during the quarantine period if I am not authorized to leave the quarantine location in order to obtain these items myself.

- I agree to adhere to any additional recommendations and instructions from the LHD that may be listed below:

I, or my legal guardian, may contact the following LHD representative to seek relief from, clarification of, or further explanation of the conditions contained in, any part of this agreement.

_____ (____)____ - _____
(Name of LHD contact person) (Daytime telephone #)

The provisions of this agreement have been explained to me by the LHD representative and I fully understand that my failure to follow these guidelines or to voluntarily remain in quarantine will result in my being placed in involuntary quarantine, or committed to a facility where I may be quarantined against my wishes.

_____ (Print name of influenza contact) _____ (Signature)

_____ (Date)

_____ (Print name of LHD representative) _____ (Signature)

_____ (Date)