

Surveillance
PHASES 1/2 - SITUATION A
Novel (new) influenza virus in birds or other animals overseas
RESPONSE ACTION - WATCH

Action Item 1: With collaboration from stakeholders, integrate and maintain a statewide surveillance/reporting system for tracking influenza related morbidity/mortality in NJ
See "Virologic and Disease Surveillance for Influenza" (Appendix 1)

- 1.1 The NJ Department of Health and Senior Services (NJDHSS) Communicable Disease Service (CDS) Influenza Surveillance Program (ISP) and stakeholders participate in the Centers for Disease Control and Prevention (CDC) Influenza Sentinel Provider Surveillance Network. See Sentinel Provider Surveillance documents: "Form" (Attachment B1), "Recruitment Fact Sheet" (Attachment B2), "Recruitment Letter" (Attachment B3), and "Recruitment – County Memo" (Attachment B4).
- 1.2 ISP and stakeholders conduct Influenza-like Illness (ILI) Surveillance with school, long term care facilities (LTCFs), and hospital emergency departments. See "ILI Surveillance – County Memo" (Attachment C).
- 1.3 ISP monitors 122 City Mortality Reporting System.
- 1.4 ISP and stakeholders conduct pediatric influenza surveillance for influenza associated deaths and severe illness. See "Pediatric Influenza Surveillance Memo" (Attachment D).
- 1.5 ISP monitors reports of nosocomial respiratory outbreaks.
- 1.6 ISP maintains current reporting with regard to unexplained death program. See "Unexplained Deaths Project" (Attachment F).
- 1.7 ISP and regional/LINCS epidemiologist monitor other surveillance systems [e.g., respiratory syncytial virus surveillance, Communicable Disease Reporting and Surveillance System (CDRSS), Real-time Outbreak and Disease Surveillance (RODS), emergency department volume/admissions, NJ Business Force Absenteeism Reports, Biosense] for respiratory illness which can assist in verification of influenza surveillance data.
- 1.8 ISP develops reporting protocols by which state/county medical examiners can report unusual deaths possibly due to an infectious cause to state/local health officials.
- 1.9 ISP explores the possibility of developing a mechanism to capture ILI data from home health agencies.
- 1.10 ISP explores reporting of ILI from military bases in NJ.
- 1.11 ISP works with Public Health and Environmental Laboratories (PHEL) staff to obtain clinical samples for testing.

Surveillance
PHASES 1/2 - SITUATION A
Novel (new) influenza virus in birds or other animals overseas
RESPONSE ACTION - WATCH

Action Item 2: With stakeholders, perform year-round analysis of influenza surveillance data on a weekly basis and share information

See "Virologic and Disease Surveillance for Influenza" (Appendix 1)

- 2.1 ISP determines influenza activity level in the state using Council of State and Territorial Epidemiologists (CSTE) guidelines.
- 2.2 ISP develops a weekly report which summarizes information obtained by influenza surveillance. See "Weekly Influenza Report" (Attachment E).
- 2.3 ISP distributes the report on a weekly basis to stakeholders via LINCIS and web-posting.

Action Item 3: With stakeholders, collect information on suspect human cases infected with a novel influenza virus

See "Reporting Cases of Severe Respiratory Illness" (Appendix 2)

- 3.1 Using the World Health Organization (WHO) and CDC guidance if available, ISP works with clinical staff to develop written guidelines which include information on:
 - identification of suspect cases
 - risk factors which might be associated with the circulating novel influenza virus.
 - collection tool (e.g., form, database)
 - reporting mechanism (e.g., fax, database)
- 3.2 ISP distributes Appendix 2 (above) through LINCIS or other acceptable mechanism, the developed guidelines to stakeholders involved in reporting (e.g., local health departments [LHDs], health care providers, infection control professionals).

Action Item 4: Report situations involving animals potentially infected with novel influenza virus

See "Role of NJDHSS in Animal Surveillance for Novel Influenza" (Appendix 3)

- 4.1 ISP along with the NJ Department of Environmental Protection (NJDEP), the NJ Department of Agriculture (NJDA), and the U.S. Department of Agriculture (USDA) develops and implements reporting protocols by which reports of suspicious morbidity/mortality in animals (domestic or wild) can be reported to appropriate agency (NJDEP, NJDA, USDA).
- 4.2 ISP and other agencies as above develops and implements a communication tool by which information regarding suspicious animals can be shared among agencies involved.
- 4.3 ISP and other agencies as above develops and implements notification protocols among the agencies regarding reporting animals which test positive for novel virus.

Surveillance
PHASES 1/2 - SITUATION A
Novel (new) influenza virus in birds or other animals overseas
RESPONSE ACTION - WATCH

Action Item 5: Identify individuals who routinely handle birds and bird products and may be exposed to animals potentially infected with novel influenza virus

See “**Animal Exposure Guide**” (Appendix 4) NOTE: In Phases 1/2A, this primarily would be through contact with animals smuggled or transported illegally to NJ.

- 5.1 ISP works with USDA/Food Safety and Inspection Service (FSIS)/NJDA/NJDEP/CDC Division of Global Migration and Quarantine (DGMQ) to identify individuals exposed to animals potentially infected with a novel influenza virus.
- 5.2 ISP makes Appendix 4 (above) available to LHDs to provide guidance to individuals who have been identified as being exposed to animals potentially infected with a novel influenza virus.
- 5.3 ISP along with other agencies as above develops reporting mechanisms for agencies to refer individuals in contact with suspect animals to local/state public health agencies.
- 5.4 ISP works with clinical staff and local health agencies to collect and monitor information necessary on individuals exposed to potentially infected animals. [Assumptions: Clinical staff provides guidance on actions taken with these individuals (i.e., temperature checks, clinical evaluation)]. LHDs are responsible for follow-up.

Action Item 6: Identify animal/poultry workers exposed to animals potentially infected with novel influenza virus

See “**Animal Worker Surveillance for Novel Influenza**” (Appendix 5)

To be implemented in Phases 1/2C, Action Item 2

- 6.1 ISP develops a plan with USDA/NJDA/NJDEP, in consultation with occupational health and clinical staff, to implement an animal/poultry worker surveillance program.
NOTE: This includes public and private workers.

Action Item 7: Comply with reporting procedures of CDC’s DGMQ station at Newark Liberty International Airport

- 7.1 ISP follows DGMQ protocols for reporting possible case/contacts of ill travelers.

Action Item 8: Works with CDS staff and the NJDHSS Office of Communications (OCOM) to develop a data table for communicating relevant case/outbreak information

See “**Communication Data**” (Appendix 6) To be implemented in Phase 3C, Action Item 1

- 8.1 Staff develop data table and define timeline in which information will be shared.
See “**Communication Data Table**” (Appendix 6 – Attachment A).
- 8.2 Staff develop contact list and mechanism by which data table will be shared.

Surveillance
PHASES 1/2 - SITUATION A
Novel (new) influenza virus in birds or other animals overseas
RESPONSE ACTION - WATCH

Action Item 9: Develop check lists, command structure and outbreak management protocols by which the ISP operates under CDS Incident Command System (ICS) structure See “Outbreak Response Structure - Influenza Surveillance” (Appendix 7)

To be implemented in Phase 3F, Action Item 2

9.1 ISP develops command, control and management procedures by which ISP will operate.

Surveillance
PHASES 1/2 - SITUATION B
Novel (new) influenza virus in birds or other animals in North America
RESPONSE ACTION - WATCH

Action Item 1: Continue activities as previously implemented

1.1 ISP continues from Phases 1/2A, Action Items 1, 2, 3, 4 and 5.

Surveillance
PHASES 1/2 - SITUATION C
Novel (new) influenza virus in birds or other animals in New Jersey
RESPONSE ACTION - ALERT

Action Item 1: Continue activities as previously implemented

1.1 ISP continues from Phases 1/2A, Action Items 1, 2, 3, 4 and 5.

Action Item 2: Identify persons exposed to animals infected with novel influenza virus See “Animal Worker Surveillance for Novel Influenza” (Appendix 5)

2.1 ISP implements the animal/poultry worker surveillance program developed in Phase 1/2A, Action Item 6. NOTE: This includes public and private workers.

Surveillance
PHASE 3 - SITUATION A
Human case of novel (new) influenza virus (no human spread) overseas
RESPONSE ACTION – ALERT

Action Item 1: Continue activities as previously implemented

1.1 ISP continues from Phases 1/2A, Action Items 1, 2, 4 and 5 and from Phases 1/2C, Action Item 2.

Surveillance
PHASE 3 - SITUATION A
Human case of novel (new) influenza virus (no human spread) overseas
RESPONSE ACTION – ALERT

Action Item 2: Initiate “Enhanced Passive Surveillance for Novel Strains of Influenza” (Appendix 9)

- “Surveillance and Testing for Influenza A (H5N1) in Humans – Pandemic Alert Period - Protocol for Health Care Providers and Local Health Departments” (Attachment 9A).
- “Surveillance and Testing for Influenza A (H5N1) in Humans – Pandemic Alert Period – Protocol for NJDHSS” (Attachment 9B).
- “Novel and Pandemic Influenza Case Investigation Form” from CDC (Attachment 9C).
- “Avian Influenza Screening Information” CDS-25 (Attachment 9D).

- 2.1 Using WHO and CDC guidance, NJDHSS ISP and clinical staff develop clinical and epidemiologic criteria for case definition.
- 2.2 ISP along with clinical, medical and lab technical staff develops guidelines on patient management, infection control, laboratory testing, and epidemiology. (Appendix 9A).
- 2.3 ISP develops reporting mechanism (i.e., forms, database) and protocols to capture reported cases. (Appendix 9A).
- 2.4 ISP disseminates via LINCS, or other appropriate mechanism, technical documents containing clinical, epidemiology and reporting information for stakeholders responsible for reporting (i.e., LHDs, health care providers, infection control professionals).

NOTE: The template for guidelines, forms and reporting mechanisms can be developed, however, specific guidelines may be revised as clinical information evolves.

Action Item 3: Work with clinical staff to develop contact tracing guidelines for identification and monitoring contacts of novel influenza virus cases

See “Contact Tracing” (Appendix 10) To be implemented in Phase 3C, Action Item 2

- 3.1 Using WHO and CDC guidance if available, ISP works with clinical staff to define “contact.”
- 3.2 ISP works with CDS staff and external stakeholders (i.e., LHDs, LINCS Agencies, home health and hospice agencies, hospitals, healthcare providers) on guidelines for monitoring and collecting contact information (finalize draft form and protocol development).
- 3.3 ISP develops mechanism for local health agencies to report contacts of cases (might be contained within case report or separate) to regional/LINCS epidemiologist or NJDHSS ISP.

Surveillance
PHASE 3 - SITUATION A
Human case of novel (new) influenza virus (no human spread) overseas
RESPONSE ACTION – ALERT

Action Item 4: Evaluate seasonal influenza surveillance case definition and alters it based on clinical/epidemiology of novel virus

NOTE: Depending on characteristics of the novel influenza virus – the current seasonal influenza case definition may need to be altered to ensure information is being collected for novel influenza virus and seasonal influenza virus.

- 4.1 ISP evaluates the current case definition.
- 4.2 ISP and clinical staff use WHO and CDC guidance to make alterations to the case definition, as necessary.

NOTE: Some cases of H5N1, primarily children, have presented with gastro-intestinal illness and fever with little or no respiratory symptoms.

- 4.3 ISP ensures distribution of case definition to stakeholder via LINCS or other appropriate mechanism.

Surveillance
PHASE 3 - SITUATION B
Human case of novel (new) influenza virus (no human spread) in North America
RESPONSE ACTION – ALERT

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2, 4 and 5 and from Phases 1/2C, Action Item 2.

Surveillance
PHASE 3 - SITUATION C
Human case of novel (new) influenza virus (no human spread) in NJ
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; and from Phase 3A, Action Item 2.

Action Item 2: Implement communications plan with the OCOM

- 2.1 ISP implements the “Communication Data Table” (Appendix 6) developed in Phases 1/2A, Action Item 8.

Surveillance
PHASE 3 - SITUATION C
Human case of novel (new) influenza virus (no human spread) in NJ
RESPONSE ACTION - RESPONSE

Action Item 3: Implement surveillance to detect contacts of novel influenza cases

- 3.1 ISP notifies external stakeholders (i.e., LHDs, LINCS Agencies, home health and hospice agencies, hospitals, HCPs), via LINCS or other appropriate mechanism, to implement contact tracing developed in Phase 3A, Action Item 3. See “Contact Tracing” (Appendix 10).

Surveillance
PHASE 3 – SITUATIONS D and/or E
First case of human to human spread of novel (new) influenza overseas and/or in North America
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3.

Surveillance
PHASE 3 - SITUATION F
First case of human to human spread of novel (new) influenza in NJ
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3.

Action Item 2: Implement command and control

- 2.1 ISP implements command and control procedures for epidemiology and surveillance developed in Phase 1/2 A, Action Item 9. See “Outbreak Response Structure - Influenza Surveillance” (Appendix 7).

Surveillance
PHASE 4 - SITUATION A
Clusters of cases of human spread overseas
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3, and from Phase 3F, Action Item 2.

Surveillance
PHASE 4 - SITUATION A
Clusters of cases of human spread overseas
RESPONSE ACTION - RESPONSE

Action Item 2: Work with local health agencies and facilities providing acute care to develop mechanism and reporting protocol to capture case counts of patients infected with novel influenza

See “Tracking Case Counts” (Appendix 11) To be implemented in Phase 5C

- 2.1 ISP works with healthcare planning staff to identify reporting entities by determining where patients are most likely to be evaluated medically (i.e., acute care facilities, triage centers, Federally Qualified Health Centers, LTCFs and set up reporting structure specific to these entities).
- 2.2 ISP works with clinical staff to determine the case definition by which these entities will be reporting (i.e., all cases meeting clinical criteria, positive laboratory test).
- 2.3 ISP develops mechanism and reporting protocol to capture case counts of patients from these entities (most likely use CDRSS ILI module to collect data - decision will be based on what information CDC is asking NJDHSS to collect).
- 2.4 Case counts from reporting entities are collected by local health authorities and reported to the regional/LINCS epidemiologist responsible for that jurisdiction.
- 2.5 The regional/LINCS epidemiologist collects case count and reports county/city specific case count to NJDHSS.
- 2.6 ISP relays case counts through NJDHSS chain of command.
- 2.7 ISP notifies CDC of statewide case counts.

Action Item 3: Work with NJDHSS community disease control staff and local health authorities to develop a mechanism and reporting protocol to capture community containment measures being implemented by local health authorities

See Community Disease Control section of this plan: Phase 4, Situation A, Action Item 1

Surveillance
PHASE 4 - SITUATION B
Clusters of cases of human spread in North America
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3, and from Phase 3F, Action Item 2.

Surveillance
PHASE 4 - SITUATION C
Clusters of cases of human spread in NJ
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3, and from Phase 3F, Action Item 2.

Action Item 2: Evaluate and prioritize surveillance mechanisms to determine the most effective ones to use during staff shortages To be implemented in Phase 5C, Action Item 1

- 2.1 ISP determines which surveillance systems are providing the most information with the least resources.
- 2.2 ISP develops prioritized list in the order of which surveillance systems will be eliminated as staff resources decline.
- 2.3 Based upon testing capacity of PHEL, ISP develops and shares the plan for submission of specimens with stakeholders.

Action Item 3: Ensure accurate mortality reporting

- 3.1 ISP works with Medical Examiners Office and Office of Vital Statistics to ensure providers are accurately recording influenza on the death certificate.

Action Item 4: Work with LHDs and acute care facilities to obtain data related to outcomes of influenza patients

- 4.1 ISP develops and implements electronic reporting on influenza patients from acute care facilities. See “Epidemiologic Studies” (Appendix 8).
- 4.2 ISP collects and analyzes data, in conjunction with LHDs.

Surveillance
PHASE 5 - SITUATION A
Widespread cases of human to human spread of novel (new) influenza virus overseas
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3, and from Phase 3F, Action Item 2.

Surveillance
PHASE 5 - SITUATION B
Widespread cases of human to human spread of novel (new) influenza virus in North America
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phases 1/2A, Action Items 1, 2 and 5; from Phases 1/2C, Action Item 2; from Phase 3A, Action Item 2; and from Phase 3C, Action Items 2 and 3, and from Phase 3F, Action Item 2.

Action Item 2: With local health authorities, evaluate the use of contact tracing

- 2.1 ISP evaluates the effectiveness of contact tracing implemented in Phase 3C, Action Item 2 to determine when to discontinue it. Considerations include whether there is sufficient:
- information regarding transmission
 - information regarding geographic dispersion
 - LHD personnel

Action Item 3: After community disease control staff direct local health authorities to implement tracking of community containment measures, work with regional/LINCS epidemiologists to evaluate the data

- 3.1 The regional/LINCS epidemiologist collects county/city specific community containment measures and evaluates the effectiveness of community containment measures.
- 3.2 The regional/LINCS epidemiologist reports these findings to ISP.
- 3.3 ISP relays the following information to community disease control staff:
- Compilation of regional/LINCS epidemiologic evaluations
 - Suggested recommendations regarding community containment measures

Surveillance
PHASE 5 - SITUATION C
Widespread cases of human to human spread of novel (new) influenza virus in NJ
RESPONSE ACTION - RESPONSE

Action Item 1: Eliminate surveillance systems which are time and resource intensive

- 1.1 According to priority list developed in Phase 4C, Action Item 2, ISP directs reporting entities to begin to eliminate surveillance systems.

Action Item 2: Implement Tracking of Case Counts

- 2.1 ISP directs reporting entities to implement the mechanism and reporting protocols for case counts developed in Phase 4A, Action Item 2.

Surveillance
PHASE 6
Increased and sustained transmission in the general population
RESPONSE ACTION - RESPONSE

Action Item 1: Continue activities as previously implemented

- 1.1 ISP continues from Phase 5B, Action Item 3 and Phase 5C, Action Items 1 and 2, as resources permit.
- 1.2 All other surveillance activities are discontinued.

Surveillance
BETWEEN WAVES
RESPONSE ACTION – ALERT

Action Item 1: Instruct local entities to conduct medical chart review (clinical, epidemiological, virologic) on subset of patients infected with novel influenza virus See “Epidemiologic Studies” (Appendix 8)

NOTE: ISP is exploring ideas on how this information might be obtained.

- 1.1 ISP and clinical staff develop a mechanism for selection of patients whose charts will be reviewed.
- 1.2 ISP and clinical staff develop a medical chart review form requesting pertinent information.
- 1.3 With external partners, ISP develops a mechanism for local entities to report finding of medical chart review.
- 1.4 ISP develops an analysis tool and a mechanism for reporting findings back to health care providers.

Action Item 2: Review Surveillance section of this plan and update as appropriate