

WIDE-SPREAD INFLUENZA OUTBREAKS OR PANDEMIC

Essential Elements of Information – (EEI)

EEI contain Situational Awareness information on **People, Systems, and Services Providers** that is critical to acquire in the first and perhaps second operational periods. **Specific elements listed here may not apply in every event. Additional elements must be generated and refined as the event evolves through Recovery.**

Impact of Event or Scenario

The most likely pandemic event will begin with a mutation in a zoonotic disease. The most likely disease will be influenza although others such as SARS may gain pandemic or near pandemic status. The EEI for an influenza-based outbreak are relevant to other diseases as well. World Health Organization (WHO) Phases 1-3 are defined as pre-pandemic phases which are characterized by monitoring and situation Awareness. WHO Phase 4 *may* signal the beginning of a pandemic and is an important early indicator.

Phase 4 is characterized by verified human-to-human transmission of an animal or human-animal influenza re-assortant virus able to cause “community-level outbreaks.” The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic. Any country that suspects or has verified such an event should urgently consult with WHO so that the situation can be jointly assessed and a decision made by the affected country if implementation of a rapid pandemic containment operation is warranted. Phase 4 indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a forgone conclusion.

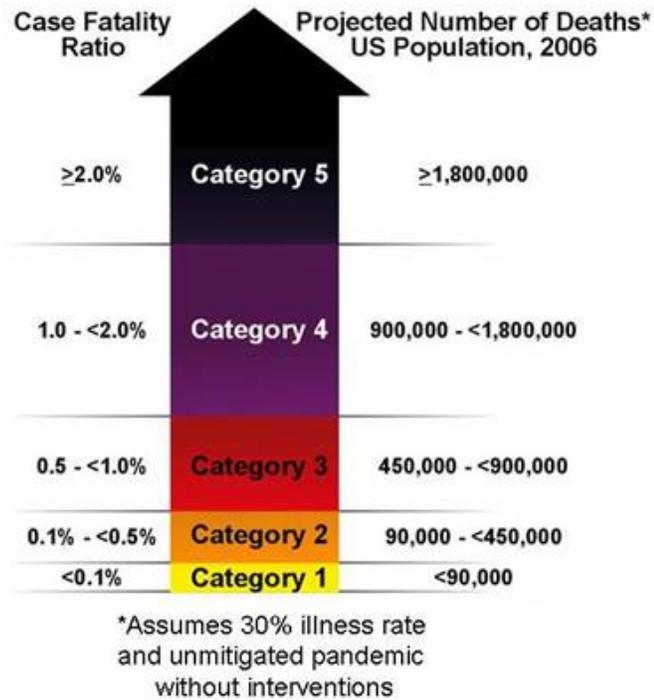
WHO Phase 5 is a strong indication that a pandemic may be imminent.

Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

WHO Phase 6 characterization defines a pandemic:

Phase 6, the pandemic phase, is characterized by community level outbreaks in at least one other country in a different WHO region in

addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way



Upon WHO declaration of Phase 6, the Center for Disease Control and Prevention (CDC) uses a Pandemic Severity Index (PSI) that is based on case fatality ratio as the critical driver for categorizing the severity of a pandemic. The index is designed to enable estimation of the severity of a pandemic on a population level to allow better forecasting of the impact of a pandemic and to enable recommendations to be made on the use of mitigation interventions.

See Table on the next page

Interventions* by Setting	Pandemic Severity Index		
	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., stadium events, theater performances) -modify work place schedules and practices (e.g., telework, staggered shifts)	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend

The EEI listed below will be needed by the ESF 8 Situation Unit to determine current situation and forecast response strategies during a pandemic phase based on WHO Pandemic Phases and CDC PSI and SEOC Activation Levels. Actions to be taken by Department of Health are found in the Pandemic Influenza Annex to the Emergency Operations Plan. Actions to be taken by the State Emergency Response Team (SERT) are found in the Pandemic Influenza Annex to the Florida Emergency Management Plan (CEMP). Actual EEI that are needed will be dependent of the evolution of the disease event.

People

People include vulnerable populations, the general population, and responders. Vulnerable populations may be classified as static or transitory. Vulnerable populations may be more susceptible to communicable diseases such as influenza because of reduced or compromised immunity, have associated complications such as pneumonia, and have a longer recovery period.

Static populations consist of people who have medically complex conditions, those who are functionally disabled, frail elderly and children who are two years old or younger.

Transitory populations are those who have chronic medical conditions, seniors in high-rise buildings, and children older than two years old.

Depending on the area, there may be large numbers of transient vulnerable populations (tourists) that will require assistance.

Behavioral health issues may also require monitoring and treatment over time.

Systems

Systems include healthcare, medical care, infrastructure, transportation, and communications. During a pandemic with a PSI of 4 or 5, large numbers of absent workers will reduce available health and medical care and erode infrastructure support.

Service Providers

Service providers are those who provide health and medical care and support services. . During a pandemic with a PSI of 4 or 5, large numbers of absent workers will reduce the availability of health and medical services.

Essential Elements of Information

PRE-PANDEMIC

Investigation – Monitor International Surveillance

(WHO Phase 3) (SEOC Activation Level 3)

People:

- World Health Organization (WHO) Surveillance – Confirmed cases by country.
- Trends in morbidity and mortality.

Recognition – Review Preparedness Status

(WHO Phase 4) (SEOC Activation Level 3)

People:

- WHO surveillance data.
- Demographic data trends in morbidity, mortality, viral etiology, and antiviral resistance.

Systems

- Status of FL laboratory diagnostics.
- Status of Epi Investigation Strike Teams organization and training.

- Status of public education materials, PSAs, community response organization and training.
- Pre-pandemic hospital bed baseline reports

Service Providers

- Pre-pandemic census of available assets (LE/Fire) by county (regardless of affiliation).
- Pre-pandemic census of EMS responders measured against a percentage of ambulances by county and type unit (ALS, BLS).
- Pre-pandemic status of CHD staff.
- Status of public education materials, PSAs, community response organization and training.
- Pre-pandemic hospital bed baseline reports.

PANDEMIC

Initiation – Enhanced Surveillance US and FL

(WHO Phase 5) (SEOC Activation Level 2)

People:

- CDC Surveillance – US Cases.
- Geographic and demographic data trends in morbidity, mortality, virus etiology, and antiviral resistance.
- Surveillance reporting at FL international ports of entry.
- Syndromic surveillance reports.
- Reports of school closings and other businesses and government facilities and cancellation of public events – impacts of school closings on children – meals and parental absenteeism

Systems

- Status of FL antiviral stockpile – security and distribution plans.
- Status of Lab Stockpile testing reagents and supplies.
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors.

Service Providers

- Census of available assets (LE/Fire) by county (regardless of affiliation).
- Census of EMS responders measured against a percentage of ambulances by county and type unit (ALS, BLS).
- Status of CHD staff.

- Distribution status of public education materials, PSAs, community response organization and training.
- Hospital bed baseline reports.

Acceleration -- Rapid Response and Containment

(WHO Phase 6) (SEOC Activation Level 2) (PSI 1)

People:

- CDC Surveillance – US confirmed and probable cases and deaths. Particular attention to neighboring states.
- FL influenza cases reported by sentinel sites (hospitals, urgent care sample, private doctors' sample) -- laboratory diagnostic testing reports.
- FL geographic cases by Zip Code.
- Geographic and demographic data trends in morbidity, mortality, virus etiology, and antiviral resistance.
- Surveillance reporting at FL international ports of entry.
- Syndromic surveillance reports.
- Case containment -- number/locations of isolated and quarantined cases. FL antiviral deployments -- how many/where/resupply priorities.
- Reports of school closings and other businesses and government facilities and cancellation of public events – impacts of school closings on children – meals and parental absenteeism.

Systems

- Requests for SNS antiviral allocation to FL. How many/when/where?
- Status of FL antiviral stockpile including SNS distribution received and pending.
- Status of Lab testing reagents and supplies.
- DOH Lab testing burden
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors.
- Deployment of Epi Investigation teams.

Service Providers

- Reports of hospital emergency department visits for influenza like illness (ILI).
- Number of persons hospitalized with ILI symptoms
- Census of responder assets (LE/Fire) by county.
- Census of EMS responders measured against a percentage of ambulances by county and type unit (ALS, BLS).

- Status of CHD staff.
- Burden of CHD response
- Distribution status of public education materials, PSAs, community response organization and training.

Peak Transmission – Community Containment and Mitigation Intervention

(WHO Phase 6) (SEOC Activation Level 1) (PSI 2 - 3)

People:

- CDC Surveillance – US presumed cases and deaths. Particular attention to neighboring states.
- Presumed FL cases – geographic and demographic data trends in morbidity, mortality statewide/by county and Zip Code.
- Geographic and demographic data trends in morbidity, mortality, virus etiology, and antiviral resistance.
- Syndromic surveillance reports.
- Continuing FL antiviral deployments -- how many/where/resupply priorities.
- Reports of school closings and other businesses and government facilities and cancellation of public events – impacts of school closings on children – meals and parental absenteeism.
- Community containment success indications -- social distancing acceptance and facility and event closures.
- Increases in lawlessness – riots, looting, petty crime.
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors

Systems

- ESF 8 status reports DOH Central Office, EMS, CHD, hospital and other health and medical facilities absenteeism rates and impact on operations and services.
- Other ESF status reports – absenteeism rates and impact on operations and services at state agency and county levels.
- Shortages in pharmaceuticals – antibiotics for secondary infections, pneumococcal vaccine, oxygen, ventilators – resupply expectations.
- Status of water and power utilities by county and areas served.
- Status of supermarkets and other food distribution centers.
- Status and provisions of emergency declarations Information on coping/stress reduction/psychological first aid

Service Providers

- Hospital census reports by percentage of flu patients and demographics.
- Hospital expected discharge rates by day.
- Hospital flu mortality trend assessments by age grouping, immuno-suppressed, chronic disease, secondary pneumonia by type.
- Vulnerable population and care facilities status by Zip Code.
- Regional Disaster Behavioral Health Assessment Teams deployed – number and location

Peak Transmission – Community Containment and Mitigation Intervention

(WHO Phase 6) (SEOC Activation Level 1) (PSI 4 - 5)

People:

- CDC Surveillance – US presumed cases and deaths.
- Presumed FL cases – geographic and demographic data trends in morbidity, mortality statewide/by county and Zip Code.
- Impact of increased fatalities on medical examiners and mortuary systems
- Geographic and demographic data trends in morbidity, mortality, virus etiology, and antiviral resistance.
- Syndromic surveillance reports.
- Continuing FL antiviral deployments -- how many/where/resupply priorities.
- Reports of school closings and other businesses and government facilities and cancellation of public events – impacts of school closings on children – meals and parental absenteeism.
- Community containment success indications -- social distancing acceptance and facility and event closures.
- Increases in lawlessness – riots, looting, petty crime.
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors

Systems

- ESF 8 status reports DOH Central Office, EMS, CHD, hospital and other health and medical facilities absenteeism rates and impact on operations and services. Activation of COOP plans
- Other ESF status reports – absenteeism rates and impact on operations and services at state agency and county levels. Activation of State agency COOP plans

- Shortages in pharmaceuticals – antibiotics for secondary infections, pneumococcal vaccine, oxygen, ventilators – resupply expectations.
- Status of water and power utilities by county and areas served.
- Status of supermarkets and other food distribution centers.
- Status and provisions of emergency declarations Information on coping/stress reduction/psychological first aid

Service Providers

- Hospital census reports by percentage of flu patients and demographics.
- Hospital expected discharge rates by day.
- Hospital flu mortality trend assessments by age grouping, immunosuppressed, chronic disease, secondary pneumonia by type.
- Vulnerable population and care facilities status by Zip Code.
- Regional Disaster Behavioral Health Assessment Teams deployed – number and location

Deceleration – Vaccine Availability

(WHO Phase 6) (SEOC Activation Level 1-2)

People

- CDC Surveillance – US presumed cases and deaths.
- Presumed FL cases – geographic and demographic data trends in morbidity, mortality statewide/by county and Zip Code.
- FL influenza cases – geographic and demographic data trends in morbidity, mortality statewide/by county.
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors

Systems

- CDC schedule for vaccine deployment.
- Priority for vaccination
- FL POD sites.
- Expected POD census by day.
- Vaccine transport/POD security issues.
- Expectations of closed schools and other facilities to re-open.
- Vaccine Adverse Events Reporting System (VAERS) reports.
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors

Service Providers

- Hospital census reports by percentage of flu patients and demographics.
- Hospital expected discharge rates by day.
- Hospital flu mortality trend assessments by age grouping, immunosuppressed, chronic disease, secondary pneumonia by type.
- Vulnerable population and care facilities status by Zip Code.

Resolution -- Recovery

(WHO Phase 6) (SEOC Activation Level 2-3)

People

- CDC Surveillance – US presumed cases and deaths.
- Presumed FL cases – geographic and demographic data trends in morbidity, mortality statewide/by county and Zip Code.
- FL influenza cases – geographic and demographic data trends in morbidity, mortality statewide/by county.
- Status of rumors – Predominate statewide rumors, internet and social networking rumors, profession specific rumors

Systems

- Continued vaccination – trends in adverse reactions reports.
- Determination potential for second wave.
- After action report and lessons learned documentation input from all ESFs.

Service Providers

- Hospital census reports by percentage of flu patients and demographics.
- Hospital expected discharge rates by day.
- Hospital flu mortality trend assessments by age grouping, immunosuppressed, chronic disease, secondary pneumonia by type.
- Vulnerable population and care facilities status by Zip Code.