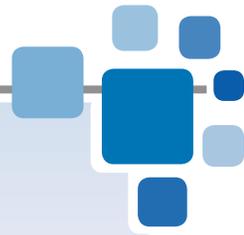




## CAPABILITY 11: Non-Pharmaceutical Interventions



**Non-pharmaceutical interventions are the ability to recommend to the applicable lead agency (if not public health) and implement, if applicable, strategies for disease, injury, and exposure control. Strategies include the following:**

- Isolation and quarantine
- Restrictions on movement and travel advisory/warnings
- Social distancing
- External decontamination<sup>232</sup>
- Hygiene<sup>233</sup>
- Precautionary protective behaviors<sup>234</sup>

This capability consists of the ability to perform the following functions:

**Function 1:** Engage partners and identify factors that impact non-pharmaceutical interventions

**Function 2:** Determine non-pharmaceutical interventions

**Function 3:** Implement non-pharmaceutical interventions

**Function 4:** Monitor non-pharmaceutical interventions

### Function 1: Engage partners and identify factors that impact non-pharmaceutical interventions

Identify and engage with health partners, government agencies, and community sectors (e.g., education, social services, faith-based, and business/industry) to identify the community factors that affect the ability to recommend and implement non-pharmaceutical interventions.

#### Tasks

This function consists of the ability to perform the following tasks:

**Task 1:** Prior to an incident, identify jurisdictional legal, policy, and regulatory authorities that enable or limit the ability to recommend and implement non-pharmaceutical interventions, in both routine and incident-specific situations.

**Task 2:** Prior to an incident, engage healthcare organizations, government agencies, and community sectors (e.g., education, social services, faith-based, business, and legal) in determining their roles and responsibilities in non-pharmaceutical interventions on an ongoing basis through multidisciplinary meetings. *(For additional or supporting detail, see Capability 1: Community Preparedness)*

#### Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

#### Resource Elements

*Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.*

**P1: (Priority)** Written plans should include documentation of the applicable jurisdictional, legal, and regulatory authorities and policies for recommending and implementing non-pharmaceutical interventions in both routine and incident-specific situations. This includes but is not limited to authorities for restricting the following elements: <sup>235,236,237,238</sup>

- Individuals
- Groups
- Facilities
- Animals (e.g., animals with infectious diseases and animals with exposure to environmental, chemical, radiological hazards)
- Consumer food products
- Public works/utilities (e.g., water supply)
- Travel through ports of entry

PLANNING (P)



## CAPABILITY 11: Non-Pharmaceutical Interventions

### Function 1: Engage partners and identify factors that impact non-pharmaceutical interventions

#### Resource Elements *(continued)*

Public health departments are strongly encouraged to consult with jurisdictional legal counsel or academic centers for assistance. If applicable by jurisdictional authority, develop written memoranda of understanding or other letters of agreement with law enforcement for enforcing mandatory restrictions on movement.

#### Suggested resources

- CDC Public Health Law Program's Coordinated Implementation of Community Response Measures (Including Social Distancing) to Control the Spread of Pandemic Respiratory Disease: A Guide for Developing a MOU for Public Health, Law Enforcement, Corrections, and the Judiciary: <http://www2a.cdc.gov/phlp/docs/crm%20mou%20Final.pdf>
- CDC Public Health Law Program's Social Distancing Law Assessment Template, Appendix A: <http://www2a.cdc.gov/phlp/SDLP/>

**P2: (Priority)** Written plans should include documentation of the following elements: <sup>239, 240, 241, 242</sup>

- Contact information of at least two representatives from each partner agency/organization
  - Suggested community partners: schools, community organizations (e.g., churches and homeless shelters), businesses, hospitals, and travel/transportation industry planners
- Memoranda of understanding or other written acknowledgements/agreements with community partners outlining roles, responsibilities, and resources in non-pharmaceutical interventions
- Agreements with healthcare providers which must include at a minimum:
  - Procedures to communicate case definitions determined by epidemiological surveillance
  - Procedures for reporting identified cases of inclusion to the health department
 (For additional or supporting detail, see *Capability 13: Public Health Surveillance and Epidemiological Investigation*)
- Suggested partners: Conference of Radiation Control Program Directors: <http://www.crcpd.org/Map/RCPmap.html>, other radiation subject matter experts, health physicists, state environmental protection agency, U.S. Department of Energy, and U.S. Department of Agriculture

#### Suggested resources

- H1N1 Flu: A Guide for Community and Faith-Based Organizations, Sections F, H, I: <http://www.flu.gov/professional/community/cfboguidance.pdf>
- Pandemic Influenza Community Mitigation Interim Planning Guide for Businesses and Other Employers (Appendix 4): <http://www.flu.gov/professional/community/commitigation.html>
- Doing Business During an Influenza Pandemic: Human Resource Policies, Protocols, Templates, Tools, & Tips: <http://www.cidrap.umn.edu/cidrap/files/33/cidrap-shrm-hr-pandemic-toolkit.pdf>
- Coordinated Implementation of Community Response Measures (Including Social Distancing) to Control the Spread of Pandemic Respiratory Disease: A Guide for Developing a MOU for Public Health, Law Enforcement, Corrections, and the Judiciary: <http://www2a.cdc.gov/phlp/emergencyprep.asp>
- Flu Guidance, Checklists and Resources: <http://www.flu.gov/professional/index.html>
- Community Strategy for Pandemic Influenza Mitigation: <http://pandemicflu.gov/professional/community/commitigation.html>
- Business Pandemic Influenza Planning Checklist: <http://pandemicflu.gov/professional/business/businesschecklist.html>

PLANNING (P)

### Function 2: Determine non-pharmaceutical interventions

Work with subject matter experts (e.g., epidemiology, laboratory, surveillance, medical, chemical, biological, radiological, social service, emergency management, and legal) to recommend the non-pharmaceutical intervention(s) to be implemented.



## CAPABILITY 11: Non-Pharmaceutical Interventions

### Function 2: Determine non-pharmaceutical interventions

#### Tasks

This function consists of the ability to perform the following task:

**Task 1:** At the time of the incident, assemble subject matter experts to assess the severity of exposure and/or transmission at the jurisdictional level, and determine non-pharmaceutical intervention recommendations. *(For additional or supporting detail, see Capability 13: Public Health Surveillance and Epidemiological Investigation)*

#### Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

#### Resource Elements

*Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.*

PLANNING (P)

**P1: (Priority)** Written plans should include a jurisdictional non-pharmaceutical intervention “playbook” detailing plans for intervention recommendation and/or implementation, based on potential interventions identified from the jurisdictional risk assessment. Suggested categories of interventions include isolation, quarantine, school and child care closures, workplace and community organization/event closure, and restrictions on movement (e.g., port of entry screenings and public transportation). Each plan should address the following items, at a minimum:

- Staff and subject matter expert roles and responsibilities
- Legal and public health authorities for the intervention actions
- Intervention actions
- List of identified locations that have the specific equipment required for, or locations that are easily adaptable for the intervention
- Contact information/notification plan of community partners involved in intervention (e.g., those providing services or equipment)
- Identification of any issues that may be associated with the implementation of individual community-mitigation measures or the net effect of the implementation of measures (secondary effects)
- Intervention-specific methods for information dissemination to the public (e.g. information cards to be distributed at ports of entry during movement restrictions)
- Processes for de-escalation of intervention once it is no longer needed
- Documentation of the intervention during an incident

#### Suggested resources

- U.S. Department of Health and Human Services Assistant Secretary for Preparedness and Response, Playbooks for Hurricanes, Aerosolized Anthrax, and Radiological Dispersal Devices: <http://www.phe.gov/Preparedness/planning/playbooks/Pages/default.aspx>
- Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA 400-R-92-001: <http://www.epa.gov/rpdweb00/docs/er/400-r-92-001.pdf>
- Implementation of Protective Actions for Radiological Incidents at Other Than Nuclear Power Reactors: [http://www.epa.gov/rpdweb00/docs/er/symposium\\_on\\_non-npp\\_incidents.pdf](http://www.epa.gov/rpdweb00/docs/er/symposium_on_non-npp_incidents.pdf)
- National Council on Radiation Protection and Measurements, Report No. 161: Management of Persons Contaminated with Radionuclides Handbook: <http://www.ncrponline.org/Publications/161press.html>
- Community Strategy for Pandemic Influenza Mitigation-Appendix 8: <http://www.flu.gov/professional/community/commitigation.html#>
- Faith-Based and Community Organizations Pandemic Influenza Preparedness Checklist: <http://pandemicflu.gov/professional/community/faithcomchecklist.html>
- A Framework for Improving Cross-Sector Coordination for Emergency Preparedness and Response: Action Steps for Public Health, Law Enforcement, the Judiciary and Corrections: [http://www2a.cdc.gov/phlp/docs/CDC\\_BJA\\_Framework.pdf](http://www2a.cdc.gov/phlp/docs/CDC_BJA_Framework.pdf)

*(For additional or supporting detail, see Capability 1: Community Preparedness and Capability 4: Emergency Public Information and Warning)*

## Function 2: Determine non-pharmaceutical interventions

### Resource Elements *(continued)*

PLANNING (P)

**P2:** Written plans should include a decision matrix indicating questions for public health leadership and recommendation options, based on pre-existing community risk assessment and incident severity. Decision tree endpoints will link to sections of the “playbook.” *(For additional or supporting detail, see Capability 1: Community Preparedness)*

SKILLS AND TRAINING (S)

**S1:** Public health staff that will participate in implementing or recommending non-pharmaceutical interventions should have awareness-level training in use of the jurisdiction’s non-pharmaceutical decision matrix.

#### Suggested resource

- Association of Schools of Public Health, Competency for Decision Making under Emergency Conditions: <http://www.asph.org/userfiles/PreparednessCompetencyModelWorkforce-Version1.0.pdf>

**S2:** Training for public health staff should focus on their roles and responsibilities and resource identification.

#### Suggested resource

- Training pages on CDC’s emergency website: <http://emergency.cdc.gov/training/> (See: Quarantine and Isolation, Sanitation and Hygiene, Water-Related Hygiene, Radiation Emergencies)

## Function 3: Implement non-pharmaceutical interventions

Coordinate with health partners, government agencies, community sectors (e.g., education, social services, faith-based, and business), and jurisdictional authorities (e.g., law enforcement, jurisdictional officials, and transportation) to make operational, and if necessary, enforce, the recommended non-pharmaceutical intervention(s).

### Tasks

This function consists of the ability to perform the following tasks:

**Task 1:** At the time of an incident, activate non-pharmaceutical intervention locations (e.g., isolation or quarantine sites) through coordination with jurisdictional officials (e.g., law enforcement, medical, and school).

**Task 2:** At the time of an incident, assist community partners with coordinating support services (e.g., medical care and mental health) to individuals included in non-pharmaceutical intervention(s). *(For additional or supporting detail, see Capability 1: Community Preparedness, Capability 7: Mass Care, and Capability 10: Medical Surge)*

**Task 3:** At the time of an incident, provide recommendations for voluntary or mandatory closure of congregate locales and events<sup>243</sup> to jurisdictional officials (e.g., emergency management, law enforcement, school, and tribal entities) and stakeholders (e.g., mall/store owners, faith-based congregations, and convention centers/event coordinators), if needed.

**Task 4:** At the time of an incident, provide recommendations for voluntary or mandatory restrictions on movement in conjunction with jurisdictional officials (e.g., emergency management, law enforcement, and transportation), if needed.

**Task 5:** Upon request, activate jurisdictional processes for managing and detaining passengers at ports of entry<sup>244</sup> through coordination with CDC’s Division of Global Migration and Quarantine, port authorities, and jurisdictional officials as applicable to the incident.

**Task 6:** At the time of an incident, assure ability to conduct external decontamination of potentially contaminated or contaminated individuals.

**Task 7:** At the time of an incident, educate and inform the public, response agencies and other partners regarding the recommended intervention(s). *(For additional or supporting detail, see Capability 4: Emergency Public Information and Warning)*

## Function 3: Implement non-pharmaceutical interventions

### Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

### Resource Elements

Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.

**P1: (Priority)** Written plans should include agreements with healthcare coalitions and other community partners to coordinate support services to individuals during isolation or quarantine scenarios.<sup>245,246,247,248</sup> (For additional or supporting detail, see Capability 10: Medical Surge)

**P2: (Priority)** Written plans should include procedures to support the separation of cohorts of potentially exposed travelers from the general population at ports of entry. Plans should include but are not limited to the following elements:<sup>249</sup>

- Identification of resources (e.g., staff, facilities, and equipment) at or near ports of entry to be used for separation of cohorts
- Scalable plans to accommodate cohorts of various sizes in identified facilities
- Local and state Communicable Disease Response Plan compatible with CDC’s Division of Global Migration and Quarantine guidance<sup>250</sup>
- Applicable state/local legal authorities for detention, quarantine, and conditional release of potentially exposed persons and isolation of ill persons
- Processes for transportation of cohorts to, and security at, pre-identified sites

#### Suggested resource

- Pandemic Influenza Federal Guidance 2008, Appendix B.2:  
<http://www.pandemicflu.gov/news/guidance031108.pdf>

**P3:** Written plans should include a process for coordinating and/or implementing isolation or quarantine at designated locations. Plans should include but are not limited to the following elements:<sup>251,252,253</sup>

- Pre-identified sites for housing cohorts under non-pharmaceutical intervention
- Memoranda of understanding or letters of agreement with site owners for use of sites
- Written agreements for equipment needed at designated sites
- Processes for conversion of sites to environment needed for intervention (e.g., converting rooms to negative pressure rooms)
- Time frame for establishing operations at location
- Processes for returning the site to normal operation, including decontamination or sanitization, if needed
- Documenting expenses for potential reimbursement at either the jurisdictional or federal level

**P4:** Written plans should include memoranda of understanding or letters of agreement with mental /behavioral health specialists for provision of services to individuals affected by non-pharmaceutical interventions. Services should include but are not limited to the following elements:

- Support in identifying individuals in need of mental/behavioral health services (e.g., during isolation or quarantine)
- Agreements to provide services in person or via communication method (e.g., phone, internet, or teleconference)

**P5:** Written plans should include protocols to support coordination of population monitoring and external decontamination of individuals. Protocols should include but are not limited to the following elements:

- Screening based on incident-specific criteria levels determined by radiological/nuclear subject matter experts
- Registration of exposed and possibly exposed populations, including collection of name, address, contact information, and person’s location at the time of the incident, and coordination with organizations trained in decontamination to establish external decontamination stations at designated sites and remove and/or store contaminated materials

#### Suggested resource

- Population Monitoring in Radiation Emergencies:  
<http://emergency.cdc.gov/radiation/pdf/population-monitoring-guide.pdf>

## Function 3: Implement non-pharmaceutical interventions

### Resource Elements *(continued)*

PLANNING (P)

**P6:** Written plans should include templates or actual intervention-specific public educational materials, either newly developed or adapted from existing materials that can be modified at the time of the incident. Materials should include, at a minimum, content describing the following elements:

- How the public can access information (e.g., hotlines)
- If applicable, when and where the public should, or should not, seek medical care
- How to prevent infection/exposure
- Hand washing and other protective behaviors as they apply to an incident

#### Suggested resources

- Clean Hands Save Lives, CDC:  
<http://www.cdc.gov/cleanhands/>
- H1N1 Prevention and Treatment:  
<http://www.flu.gov/individualfamily/prevention/index.html>
- Hygiene and Sanitation After a Disaster or Emergency, CDC:  
<http://emergency.cdc.gov/disasters/floods/sanitation.asp>
- Protect Yourself and Your Family from Debris Smoke, CDC:  
[http://www.cdc.gov/nceh/airpollution/airquality/debris\\_smoke.htm](http://www.cdc.gov/nceh/airpollution/airquality/debris_smoke.htm)

SKILLS AND TRAINING (S)

**S1:** Training for public health personnel participating in or supporting operations at a radiological emergency community reception center should cover the following activities:<sup>254,255</sup>

- Determining the location of community reception centers based on the amount of space needed, the anticipated magnitude of the radiation incident, and population needs of the community  
Suggested resource
  - Virtual Community Reception Center: <http://www.emergency.cdc.gov/radiation/crc/vcrc.asp>
- Establishing crowd management operations, including the development of process flow/ triage procedures and the distribution of patient information sheets during population monitoring
- Using on-site equipment to monitor external contamination  
Suggested resources
  - Virtual Community Reception Center: <http://www.emergency.cdc.gov/radiation/crc/vcrc.asp>
  - Population Monitoring in Radiation Emergencies: A Guide for State and Local Public Health Partners: <http://www.emergency.cdc.gov/radiation/pdf/population-monitoring-guide.pdf>
  - Radiation Emergency Assistance Center Training/Training Site: <http://orise.orau.gov/reacts/>
- Identifying and addressing functional needs of at-risk populations
- Facilitating referrals of individuals experiencing psychological trauma to mental/behavioral services
- Establishing and maintaining contacts with federal agencies for equipment, personnel, and expertise

#### Suggested resources

- Radiation Emergencies Virtual Reception Center Application, CDC:  
<http://emergency.cdc.gov/radiation/crc/vcrc.asp>
- Handbook for Responding To A Radiological Dispersal Device (Dirty Bomb) First Responder's Guide:  
[http://www.crcpd.org/RDD\\_Handbook/RDD-Handbook-ForWeb.pdf](http://www.crcpd.org/RDD_Handbook/RDD-Handbook-ForWeb.pdf)
- Population Monitoring in Radiation Emergencies:  
<http://emergency.cdc.gov/radiation/pdf/population-monitoring-guide.pdf>

## Function 4: Monitor non-pharmaceutical interventions

Monitor the implementation and effectiveness of interventions, adjust intervention methods and scope as the incident evolves, and determine the level or point at which interventions are no longer needed.



## CAPABILITY 11: Non-Pharmaceutical Interventions

### Function 4: Monitor non-pharmaceutical interventions

#### Tasks

This function consists of the ability to perform the following tasks:

- Task 1:** Assess the degree of transmission, contamination, infection and severity of exposure. *(For additional or supporting detail, see Capability 13: Public Health Surveillance and Epidemiological Investigation)*
- Task 2:** Disseminate situational awareness reports<sup>256</sup> on impact of the intervention to all agencies involved in the intervention(s). *(For additional or supporting detail, see Capability 3: Emergency Operations Coordination and Capability 6: Information Sharing)*
- Task 3:** Revise recommendation(s) for non-pharmaceutical interventions as indicated by the incident, including recommending intervention escalation or de-escalation. *(For additional or supporting detail, see Capability 13: Public Health Surveillance and Epidemiological Investigation)*
- Task 4:** Document non-pharmaceutical implementation actions taken by local jurisdictions and document feedback from community partners assisting in the intervention(s) as part of the incident After Action Report.

#### Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

#### Resource Elements

Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.

PLANNING (P)

- P1:** Written plan should describe how the health department will monitor known cases/exposed persons through community partner assistance, including but not limited to processes to accomplish the following tasks:<sup>257</sup>
  - Share surveillance information between community partners and health departments
  - Support short and long-term follow-up of known or suspected households under voluntary intervention in the community (2008 Pan Flu Ops Review, Population Monitoring in Radiation Emergencies: <http://emergency.cdc.gov/radiation/pdf/population-monitoring-guide.pdf>)
  - Ensure secure storage and retrieval of sensitive information *(For additional or supporting detail, see Capability 6: Information Sharing)*
- P2:** Written plans should include documentation of feedback related to intervention actions taken by community partners as part of the incident After Action Report.<sup>258,259</sup>

Suggested resource

  - Homeland Security Exercise and Evaluation Program, Participant Feedback Form: [https://hseep.dhs.gov/hseep\\_vols/allDocs.aspx?a=P](https://hseep.dhs.gov/hseep_vols/allDocs.aspx?a=P) (first document in list)

EQUIPMENT AND TECHNOLOGY (E)

- E1:** Have or have access to equipment to support collection and compilation of incident data (e.g., electronic communication and data storage). *(For additional or supporting detail, see Capability 6: Information Sharing)*