



U.S. DEPARTMENT OF  
**ENERGY**



# PRINCETON PLASMA PHYSICS LABORATORY

## PANDEMIC RESPONSE PLAN

### REVISION 3 FEBRUARY 2016

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PRINCETON PLASMA PHYSICS LABORATORY  
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**Purpose**

The Pandemic Response Plan is established to mitigate impacts on PPPL's employees and the Laboratory activities prior to and in response to a pandemic event that may affect PPPL's employees, employee families, and visitors. This plan is consistent with requirements of DOE Order O150.1C, *Continuity Programs*, and PPPL's *Continuity of Operations Plan (COOP)* and addresses the DOE strategy for protecting the health of employees, the performance of mission essential functions, supporting the federal response and communicating with stakeholders.

**The Pandemic Management Team (PDM)**

The Pandemic Management Team (PDM) is responsible for the development, management, administration, and implementation of PPPL's Pandemic Response Plan. The PDM has the authority and responsibility to implement the plan, commit resources, and ensure the safety and health of the Laboratory's employees in response to a pandemic event which impacts the United States and the communities where PPPL employees work and reside.

*Members of the Pandemic Management Team*

Head, Human Resources  
Head, Site Protection  
Head, Best Practices and Outreach  
Director, Occupational Medicine

**Meetings**

For all meetings, teleconference capabilities will be available to allow for full participation in the discussion by members whose schedules do not permit their presence, and to minimize risks to participants as the MEDCON (Medical Condition Alert) level rises.

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**Pandemic Definition**

A **pandemic** is succinctly defined as a global epidemic. An epidemic is the term applied when an infectious disease spreads broadly and rapidly through a given population. A pandemic may start when three conditions have been met:

- A disease emerges which is new to the human population.
- The disease causes serious illness in the human population.
- The disease spreads rapidly and is sustainable through the population.

**Health Protection Plan**

Based on the guidance of the World Health Organization and the National Strategy for Pandemic Influenza, PPPL's Pandemic Response Plan is based on disease surveillance, early notification, education, containment and isolation of the spread of disease for employees and visitors.

PPPL's response actions are keyed to six DOE MEDCON Action Levels (Appendix A). To achieve protection to the greatest possible extent, the MEDCON Levels take into consideration medical response actions, and organizational response actions as the risk and threat increases. Implementation of MEDCON Levels is based on recommendations of Federal, State and Local authorities.

*The six (6) DOE MEDCON LEVELS are:*

- (0) Zero    Normal Condition    - No unusual infectious disease threats known to be imminent.
- (1) One    Initial Concern        - Increase in incidence of infectious disease threat within the world, with potential impact on DOE.
- (2) Two    Disease Outbreak       - Diseases outside the continental United States, directly impacting humans.
- (3) Three   U.S. Outbreak        - Single or cluster outbreak anywhere within the continental United States and border regions.
- (4) Four    State, Local            - Disease cluster confirmed or suspected within local state/region.
- (5) Five    Local/PPPL             - Outbreak at PPPL or nearby (University) community.
- (6) Six     Widespread            - Widespread pandemic throughout the United States.

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**Performance of Essential Functions**

In support of its DOE Mission, PPPL shall take the appropriate actions to meet its Mission Essential Functions (MEFs). In response to a pandemic, an orderly transition from normal operations to essential functions and essential personnel will be initiated. The Pandemic Response Plan may include working from home, relocating employees to disease free facilities, limited site activities, establishing critical personnel assignments, and even limiting Laboratory operations or shutting the Laboratory for an established quarantine period. Actions taken pursuant to this Pandemic Plan are to be taken in concert with the Continuity of Operations Plan (COOP) - which will be activated - in order to ensure that all MEFs are prioritized and accomplished.

**Plan Maintenance**

The PDM will review the plan on a three-year cycle or more often as conditions warrant and update as needed. The membership on the PDM is based on organizational titles, and a need for a change in the membership will be reviewed as part of the review. PPPL supervisors will be made aware of the requirements of this plan on an annual basis.

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**Appendix A**  
**MEDCON Levels**

**MEDCON LEVEL 0    *NORMAL CONDITION***

RESPONSIBILITY	ACTION
<b>PDM</b>	<ul style="list-style-type: none"> <li>- Document Laboratory Pandemic Response Plan.</li> <li>- Maintain ongoing communications with the University.</li> <li>- Review plan and associated components for readiness, annually.</li> <li>- Brief PPPL Council on Pandemic Response Plan, annually.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Monitor world health trends.</li> <li>- Maintain guidelines for infectious controls.</li> <li>- Determine the need and maintain personnel protective equipment.</li> <li>- Maintain listing of employees considered high risk.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Review Pandemic Communications Plan, Appendix B, annually.</li> </ul>

**MEDCON LEVEL 1    *INITIAL CONCERN***

RESPONSIBILITY	ACTION
<b>PDM</b>	<ul style="list-style-type: none"> <li>- Meet to discuss potential impact on PPPL based on world events and DOE information, when recommended by the Medical Officer.</li> <li>- Review Appendix C, "Actions To Be Taken," and determine if any actions are necessary.</li> <li>- Initiate agreed to actions with approval of Directorate.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Monitor potential threats to PPPL.</li> <li>- Make recommendations to PDM to minimize risk (e.g. immunization).</li> <li>- Evaluate risk of personnel travel, and recommend actions to PDM.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Disseminate information to employees based upon recommendations of the PDM.</li> </ul>

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**Appendix A**  
**MEDCON Levels**  
(continued)

**MEDCON LEVEL 2**     ***DISEASE OUTBREAK OUTSIDE THE UNITED STATES IMPACTING HUMANS***

<b>RESPONSIBILITY</b>	<b>ACTION</b>
<b>PDM</b>	<ul style="list-style-type: none"> <li>- Meet to discuss potential impact on PPPL based on world events and DOE information, when recommended by the Medical Officer.</li> <li>- Review Appendix C, "Actions To Be Taken," and determine if any actions are necessary.</li> <li>- Initiate agreed to actions with approval of Directorate.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Monitor potential threats to PPPL. Notify PDM of any changes to conditions.</li> <li>- Determine availability and need for personnel protective equipment (e.g. masks, gloves, etc.).</li> <li>- Make recommendations to minimize risk (e.g. immunization, etc.).</li> <li>- Purchase of vaccines and medications, as necessary.</li> <li>- Evaluate risk of personnel travel and recommend actions to PDM.</li> <li>- Initiate health surveillance in accordance with CDC and Homeland Security Council Guidelines, if appropriate.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Disseminate information to employees based upon recommendations of the PDM.</li> </ul>
<b>PPPL Council</b>	<ul style="list-style-type: none"> <li>- Implement approved PDM recommendations and initiatives.</li> </ul>

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**Appendix A**  
**MEDCON Levels**  
(continued)

**MEDCON LEVEL 3**    ***SINGLE OR CLUSTER OUTBREAK WITHIN THE CONTINENTAL UNITED STATES AND BORDER REGIONS***

<b>RESPONSIBILITY</b>	<b>ACTION</b>
<b>PDM</b>	<ul style="list-style-type: none"> <li>- Meet to discuss potential impact on PPPL based on events and the impact of the outbreak affecting the continental United States, and DOE information, when recommended by the Medical Officer.</li> <li>- During the meeting, review Appendix C, "Actions To Be Taken," and determine if any actions are necessary.</li> <li>- Initiate agreed to actions with approval of Directorate.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Monitor potential threats to PPPL. Notify PDM of any changes to conditions.</li> <li>- Determine availability and need for personnel protective equipment (e.g. masks, gloves, etc.).</li> <li>- Make recommendations to minimize risk (e.g. work at home, immunization, etc.).</li> <li>- Purchase of vaccines and medications, as necessary.</li> <li>- Evaluate risk of personnel travel and recommend actions to PDM.</li> <li>- Consider early medical treatment for "high risk" employees.</li> <li>- Initiate health surveillance in accordance with CDC and Homeland Security Council Guidelines, if appropriate.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Distribute pandemic information to those at high risk based upon the actions the PDM has recommended.</li> <li>- Update web site with current information or link to University web site as applicable.</li> </ul>
<b>PPPL Council</b>	<ul style="list-style-type: none"> <li>- Implement approved PDM recommendations and initiatives.</li> </ul>

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**Appendix A**  
**MEDCON Levels**  
(continued)

**MEDCON LEVEL 4    *SINGLE OR CLUSTER OUTBREAK WITHIN LOCAL REGION (Mercer/Middlesex Counties)***

RESPONSIBILITY	ACTION
<b>PDM</b>	<ul style="list-style-type: none"> <li>- Meet to discuss potential impact on PPPL based on events and the impact of the outbreak affecting the region, and DOE information, when recommended by the Medical Officer.</li> <li>- During the meeting, review Appendix C, "Actions To Be Taken," and determine if any actions are necessary. Consideration will be given to coordinating information and operations with Princeton University, Princeton and Plainsboro Township.</li> <li>- Initiate agreed to actions with approval of Directorate.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Monitor potential threats to PPPL. Notify PDM of any changes to conditions.</li> <li>- Determine availability and need for personnel protective equipment (e.g. masks, gloves, etc.) and recommends any changes to emergency medical response protocols."</li> <li>- Make recommendations to minimize risk (e.g. work at home, immunization, etc.).</li> <li>- Purchase of vaccines and medications, as necessary.</li> <li>- Implement distribution of prophylactic medication, as appropriate.</li> <li>- Evaluate risk of personnel travel and recommend actions to PDM.</li> <li>- Consider early medical treatment for "high risk" employees.</li> <li>- Initiate health surveillance in accordance with CDC and Homeland Security Council Guidelines, if appropriate.</li> <li>- Consult with local medical facilities and medical authorities.</li> <li>- Provide current information to Communications and Media Relations.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Distribute pandemic information to Laboratory based upon PDM recommendations.</li> <li>- Update web site with current information or link to University web site as applicable.</li> </ul>
<b>PPPL Council</b>	<ul style="list-style-type: none"> <li>- Implement approved PDM recommendations and initiatives.</li> </ul>

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**Appendix A**  
**MEDCON Levels**  
(continued)

**MEDCON LEVEL 5**    ***OUTBREAK AT PPPL OR NEARBY (UNIVERSITY) COMMUNITY (Plainsboro/Princeton)***

RESPONSIBILITY	ACTION
<b>PDM</b>	<ul style="list-style-type: none"> <li>- Meet to discuss potential impact on PPPL based on events and the impact of the outbreak affecting the region, and DOE information, when recommended by the Medical Officer.</li> <li>- During the meeting, review Appendix C, "Actions To Be Taken," and determine if any actions are necessary. Consideration will be given to coordinating information and operations with Princeton University, Princeton and Plainsboro Township.</li> <li>- Initiate agreed to actions with approval of Directorate.</li> <li>- Direct Departments to initiate contingency plans for limiting operations or closing Laboratory</li> <li>- Activate EOC after reviewing Appendix C, "Actions To Be Taken." Minimum staffing of EOC is selected from the PPPL Emergency Response Organization (ERO) and is specified in Appendix D, "Activation of the Emergency Operations Center."</li> <li>- Recommend returning to limited or full Laboratory operations, when appropriate.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Evaluate local and global situations.</li> <li>- Monitor current CDC and Homeland Security information.</li> <li>- Consult with local medical facilities and medical authorities.</li> <li>- Keep PDM updated on current situations.</li> <li>- Manage employee potential health issues.</li> <li>- Provide updated information to Communications and Media Relations.</li> <li>- Make recommendation to the PDM on closing Departments and/or the Laboratory.</li> <li>- Provide vaccines and medications, if available and if appropriate.</li> <li>- Make recommendations on use of personal protective equipment (PPE) as well as provides direction on emergency medical response protocols.</li> <li>- Continue to consider future medical impacts of returning to full operations of the Laboratory.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Intensify employee pandemic information.</li> <li>- Update web site with current information or link to University web site as applicable.</li> </ul>
<b>PPPL Council</b>	<ul style="list-style-type: none"> <li>- Implement approved PDM recommendations and initiatives.</li> </ul>
<b>Site Protection</b>	<ul style="list-style-type: none"> <li>- Notify all employees of limited operations or Laboratory closure via PTENS, EVES, and web site.</li> <li>- Notify all employees of reopening of Laboratory via PTENS, EVES, and web site.</li> </ul>

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**Appendix A**  
**MEDCON Levels**  
(continued)

**MEDCON LEVEL 6**     ***WIDESPREAD PANDEMIC THROUGHOUT THE UNITED STATES***

RESPONSIBILITY	ACTION
<b>PDM</b> (Note: meetings will be conducted by phone to minimize risks to participants)	<ul style="list-style-type: none"> <li>- Meet to discuss potential impact on PPPL based on world events and DOE information, when recommended by the Medical Officer.</li> <li>- During the meeting, review Appendix C, "Actions To Be Taken," and determine if any actions are necessary. Consideration will be given to coordinating information and operations with Princeton University, Princeton and Plainsboro Township.</li> <li>- Initiate agreed to actions with approval of Directorate.</li> <li>- Direct Departments to close Laboratory.</li> <li>- Activate EOC after reviewing Appendix C, "Actions To Be Taken." Minimum staffing of EOC is specified in Appendix D, "Activation of the Emergency Operations Center."</li> <li>- Recommend returning to limited or full Laboratory operations, when appropriate.</li> </ul>
<b>Medical Officer</b>	<ul style="list-style-type: none"> <li>- Evaluate local and global situations.</li> <li>- Monitor current CDC and Homeland Security information.</li> <li>- Consult with local medical facilities and medical authorities.</li> <li>- Keep PDM updated on current situations.</li> <li>- Manage employee potential health issues.</li> <li>- Provide updated information to Communications and Media Relations.</li> <li>- Make recommendation to the PDM on closing Laboratory.</li> <li>- Provide vaccines and medications, if available and if appropriate.</li> <li>- Make recommendations on use of personal protective equipment (PPE) as well as provides direction on emergency medical response protocols.</li> <li>- Continue to consider future medical impacts of returning to full operations of the Laboratory.</li> </ul>
<b>Communications and Media Relations</b>	<ul style="list-style-type: none"> <li>- Intensify employee pandemic information.</li> <li>- Update web site with current information or link to University web site as applicable.</li> </ul>
<b>PPPL Council</b>	<ul style="list-style-type: none"> <li>- Implement approved PDM recommendations and initiatives.</li> </ul>
<b>Site Protection</b>	<ul style="list-style-type: none"> <li>- Notify all employees of Laboratory closure via PTENS, EVES, and web site.</li> <li>- Notify all employees of reopening of Laboratory via PTENS, EVES, and web site.</li> </ul>

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**Appendix B**  
**Pandemic Communications Plan**

PPPL has in place a multi-faceted Pandemic Communications Plan to inform employees under circumstances that correspond to the World Health Organization Pandemic alert phases. Various communications vehicles are employed for this laboratory-wide education program depending on the alert level described below.

**Responsibilities**

The PPPL Pandemic Management Team (PDM) has the primary responsibility for the PPPL Pandemic Communications Plan. The Director of Occupational Medicine will determine which materials are to be made accessible to employees, including information from the WHO and CDC, and other authoritative sources. The Director of Occupational Medicine will work with other members of the PDM to determine measures that the Laboratory will place into effect during the various alert periods. Communications and Media Relations will be engaged in the discussion and development of communications information for the staff.

**Normal Operations**

During periods of normal operations, PPPL management provides employees with general information from various governmental health agencies. This material will regard the nature of pandemics and sanitary habits that employees should follow to minimize the transmission of communicable diseases. This information includes sanitary practices supported by PPPL management toward this goal. The dissemination of this information occurs through links posted from the PPPL intranet (<http://www-local.pppl.gov/>) to informative articles published by the federal and state governments, as well as information originating from PPPL management. Initially PPPL employees will be informed regarding the availability of this intranet information by means of a general article in the *PPPL Weekly* about the Laboratory's Pandemic Response Plan. In this article, the staff also will be made aware of the DOE's intranet home page, *EH Portal*, if it is accessible to contract staff. Additional articles regarding Laboratory pandemic policies and procedures will be published in the *PPPL Weekly*, as the need arises, to educate staff on Laboratory efforts and/or additions or changes in the PPPL Pandemic Response Plan. Princeton University also provides a web site with additional information regarding its response to a pandemic event.

**Pandemic Alert Period**

Using intranet links and PPPL *All Staff Messages*, PPPL employees will have access to information published by the World Health Organization (WHO) and authoritative agencies of the U.S. Government, such as the Centers for Disease Control (CDC), on specific threats such as the avian flu. By the same means, PPPL employees will be kept apprised of actions being taken by PPPL management to minimize infection and transmission of specific virus of concern.

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**Appendix B**  
**Pandemic Communications Plan**  
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**Pandemic Period**

During actual outbreaks of various extents, it is expected that federal, state and local governments will use the news media to communicate a wealth of information on personal protective measures. Under severe conditions, governments may also dictate that businesses close for specific periods. In any event, PPPL staff will need to know the status of Laboratory operations, i.e., whether or not to report to work. PPPL management will make use of its existing Laboratory Status posting on the PPPL public web site ([emergency.pppl.gov](http://emergency.pppl.gov)) and the Princeton Telephone and E-Mail Notification System (PTENS) to advise employees of the Laboratory's operational status, including information for essential employees who will be required to report for duty. Staff asked to work will be advised of operational and personnel protective measures in effect at the Laboratory to minimize the transmission of the virus. All of this information will also be disseminated via e-mail messages to all staff and by postings on PPPL's public web site (<http://www.pppl.gov/>) to reach employees at home. In the event that the above measures are not available, PPPL management will invoke the telephone trees for each department.

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**Appendix C**  
**Actions To Be Taken**

Actions to be taken  Medcon Level	Infectious control actions	Vaccine for identified personnel	Social Distancing	Restrict travel to affected area	Restrict non-essential travel	Emergency Operations Center	Prohibit "high risk" personnel from Laboratory	Voluntary quarantine actions	Mandatory quarantine actions	Issue appropriate personal protective equipment	Minimize large public meetings and conferences	Visitor restrictions	Surface cleaning and sanitation actions	Limit activities or close Laboratory	Council briefing	Communications with Staff	Meeting with ERO	Place CERT on standby status	Evaluate HVAC systems	Aggressive personal sanitary practices (e.g., Purell)
0 <i>Normal Conditions</i>																				
1 <i>Initial Concern</i>															C	C				
2 <i>Disease Outbreak Outside the United States Impacting Humans</i>		C		C	C		C								C	C				
3 <i>Single or Cluster Outbreak Within the Continental United States/Border Regions</i>		C		C	C		C			C					C	C	C	C		
4 <i>Single or Cluster Outbreak Within the Local Region (Mercer/ Middlesex Counties)</i>	C	C	C	C	M	C	C	C	C	C	C	C	C	C	I	I	C	C	C	C
5 <i>Outbreak at PPPL or Nearby (University) Community (Plainsboro/ Princeton)</i>	M	M	M	M	M	M	M	C	M	M	M	M	M	M	I	I	M	I	M	M
6 <i>Widespread Pandemic Throughout the United States</i>	M	M	I	I	I	M	M		M	M	I	I	I	M	I	I	M	I	M	M

- C = Consider implementing action
- M = Implement based upon direction of University, health department (local, state), DOE, or Medical Director at PPPL
- I = Implement upon declaration of medcon level
- No action required

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**Appendix D**  
**Activation of the Emergency Operations Center**

The Emergency Operations Center (EOC) will typically be activated during Medcon Level 5 and/or Level 6 with the closure of the Laboratory and a quarantine (voluntary or involuntary). In that case, the Laboratory would be closed for some 5+ days with only limited personnel onsite.

Personnel on site for the EOC would typically include:

- Incident Commander (Consider Assigning 2 - rotate on 12 hour shifts).
- Site Protection Division Representative (need 2 - rotate on 12 hour shifts).\*
- Planning Section Chief (need 1 on site on call 24/7).\*
- Facility Manager (need 1 on site on call 24/7).\*
- DOE Representative (need 1 on site on call 24/7).
- personnel selected with sufficient experience so that they can fill multiple roles if event goes longer than seven days, or if someone on the team becomes ill.

Personnel who need to be available for consultation include:

- The Public Information Officer
- A Human Resources Representative
- An ES&H representative
- An OMO representative

In addition to the EOC personnel, the following critical personnel would also have to be quarantined on site during the Laboratory closure:

- ESU Platoon (may need to augment shifts by adding one or more ESOs from other platoons as backup in case someone becomes ill).
- Boiler Operator (Need 2 - rotate on 12 hour shifts).
- Facilities Personnel (at least one individual to handle operating equipment - wide knowledge of systems is critical).
- Janitor (at least one to clean and decontaminate surfaces).
- All others could be available by phone (Human Resources, Finance, Information Technology, etc.).

Following the NIMS concept, the EOC would be managed utilizing the unified command concept with the goal to:

- Develop an action plan.
- Carry out actions to maintain the Laboratory infrastructure during the closure/quarantine.
- Implement necessary actions to reopen the Laboratory when deemed appropriate.
- Actions taken pursuant to this Pandemic Plan are to be taken in concert with the Continuity of Operations Plan (COOP) - which will be activated - in order to ensure that all Mission Essential Functions are prioritized and completed.