

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provided by Nebraska Public Health Laboratory.

## FEDERAL/STATE GUIDANCE OR COMMUNICATIONS NEEDED BY CLINICAL LABORATORIES

- Identify and communicate additional patient demographics potentially needed for surveillance reports prior to pandemic.
- Develop plans and messages to communicate changes in surveillance and testing needs.
- Identify potential adjustments in regulatory requirements for emergency personnel, verification/validation for changes in testing, etc.
- Communicate plans for patient triage, specimen collection sites, and staffing.
- Develop plans and messages to communicate which patients should be tested at stages of the pandemic.
- Develop plans and messages to communicate where patients should go for specimen collection and treatment.
- Develop plans and messages to communicate the current stage of the pandemic and which tests are (or are not) necessary.
- Develop plans and messages to communicate the reliability, restricted use of rapid tests, culture tests during the pandemic.
- Develop recommendations for treatment of patients on the basis of clinical indicators without laboratory results.
- Develop recommendations for specimen collection and testing without standard personal protective equipment (PPE) or other current biosafety equipment.
- Develop alternate courier and transport plans, e.g., use of “hubs” for drop-off and pick-up of specimens, to go to the State Laboratory.
- Develop plan for inter-laboratory communication of laboratory status, needs, available resources (e.g., supply/personnel shortage), to provide mutual support within the statewide laboratory network.
- Develop a stockpile of critical laboratory supplies and a protocol for distribution.
- Develop a communications method for rapid transmission and receipt of messages to partners/stakeholders (e.g., email may not be checked frequently).
- Develop plan to communicate beginning, end, and other status updates of the pandemic to partners/stakeholders, public.
- Review communications plan to ensure all stakeholders/partners are included (e.g., hospitals, clinicians, clinics, laboratories, etc., using multiple methods.

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provide by Nebraska Public Health Laboratory.

Not Applicable	Not Started	In Progress	Completed	Plan Component
<b>Laboratory Personnel and Staffing</b>				
				Identify internal resources for temporary employees
				<ul style="list-style-type: none"> <li>▪ Review hospital incident command system plan</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Ask Human Resources to conduct skills assessment</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Identify staff from other departments for pre-analytical, post-analytical processes:</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Retrieve patient demographics for surveillance reports</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Complete and submit surveillance reports</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Accession specimens</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Enter specimen and result data</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Store specimens</li> </ul>
				Identify personnel to perform specimen collection, including at off-site patient centers, if they are set up
				<ul style="list-style-type: none"> <li>▪ Nurses</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Home Health Care agencies</li> </ul>
				<ul style="list-style-type: none"> <li>▪ CLS/MT/technical schools or students</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Local Health Department or Community Health nurses</li> </ul>
				Identify personnel to assist with testing process
				<ul style="list-style-type: none"> <li>▪ Cross-train staff</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop “stand-by” list of testing personnel</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Employees in other departments</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Former employees</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Veterinary laboratory staff</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Scientists from industry, e.g., breweries, food production.</li> </ul>
				Develop plan for rapid training and certification of staff to package increased number of samples for transport.

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provide by Nebraska Public Health Laboratory.

Not Applicable	Not Started	In Progress	Completed	Plan Component
<b>Laboratory Personnel and Staffing (continued)</b>				
				Develop accelerated hiring protocols
				<ul style="list-style-type: none"> <li>▪ Develop emergency hiring process</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop shortened orientation process</li> </ul>
				Develop accelerated training protocols
				<ul style="list-style-type: none"> <li>▪ Develop specific job action sheets</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop modular training protocols</li> </ul>
				Develop agreements/alliances with neighboring laboratories
				<ul style="list-style-type: none"> <li>▪ Develop plan to share or “shift” staff</li> </ul>
				Develop “report to work” policy (when to report/when not to report)
				<ul style="list-style-type: none"> <li>▪ Review applicability of current sick leave policy</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop plan for daily assessment of absenteeism</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop “influenza-like illness” surveillance plan for staff</li> </ul>
				Resolve personnel funding issues
				<ul style="list-style-type: none"> <li>▪ Identify issues for payment of emergency staff</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop policies and processes for payment of emergency staff</li> </ul>
				Develop resources and protocols to provide support for staff
				<ul style="list-style-type: none"> <li>▪ Food, beds</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Transportation</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Adult and child family care</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Psycho-social-emotional support</li> </ul>

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provide by Nebraska Public Health Laboratory.

Not Applicable	Not Started	In Progress	Completed	Plan Component
<b>Laboratory Personnel and Staffing (continued)</b>				
				Develop plan to monitor staff capacity to prevent staff exhaustion/"burnout".
				Develop plan for utilization of immunocompromised staff
				Identify staff prophylaxis, vaccination plans
				Develop alternate plans if purchasing staff, information systems, custodial staff are not available.
				See " <i>Biosafety</i> ", " <i>Testing</i> "
<b>Testing</b>				
				Develop process for rapid decision-making and communications for changes in testing menu, turn-around time.
				Develop plans for increased tests, e.g., WBCs, sputum, blood gases, creatinine, BUN, urine antigen testing, blood cultures, susceptibility testing, liver function panels, stool cultures, etc.
				Evaluate which tests can be temporarily discontinued.
				Evaluate which tests can be batched.
				Develop plan for specimen processing and pre-analytical protocols for increased referral specimens.
				Evaluate which tests can be outsourced/referred.
				<ul style="list-style-type: none"> <li>▪ Develop list of potential outsource/referral laboratories.</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop plans and protocols for increased outsourcing/referral of specimens.</li> </ul>
				Develop plan to prioritize testing, both influenza-related and non-influenza related
				Define other options for tests used to triage patients.
				Evaluate need for a laboratory triage area for incoming specimens.

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provide by Nebraska Public Health Laboratory.

Not Applicable	Not Started	In Progress	Completed	Plan Component
<b>Testing (continued)</b>				
				Evaluate possibility of centralized testing within laboratory network or region to conserve staff and materials.
				Evaluate possible tactics for lack of supplies
				<ul style="list-style-type: none"> <li>▪ Perform specimen collection, testing without PPE?</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Resolve liability issues.</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Develop policy and protocol.</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Treat patients on basis of clinical indicators without laboratory results</li> </ul>
				Develop plan to maintain record of testing protocols and changes related to specific samples.
				Identify options for additional specimen storage.
				Identify options for additional incubator needs.
				Funding – identify issues related to reimbursement for testing.
				See “ <i>Laboratory Personnel and Staffing, Biosafety</i> ”
				Autopsies – Develop plan for increased autopsies (e.g., home deaths, pediatric deaths).
				<ul style="list-style-type: none"> <li>▪ Identify who will perform them</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Identify needed supplies and potential sources</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Identify facility/site for autopsies</li> </ul>
<b>Service Shortages</b>				
				Identify alternate couriers, carriers for specimen transport
				Develop alternate plans for waste disposal
				Develop alternate plans for instrument maintenance
				Develop plan for possible shortage of purchasing, custodial, information systems personnel.

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provide by Nebraska Public Health Laboratory.

Not Applicable	Not Started	In Progress	Completed	Plan Component
<b>Service Shortages (continued)</b>				
				Identify community service vulnerabilities
				<ul style="list-style-type: none"> <li>▪ Transportation</li> </ul>
<b>Supply Shortages</b>				
				Identify critical and vulnerable material and reagent supplies
				Identify “trigger points” for re-ordering, initiating alternate plans for supplies.
				Identify alternate vendors, supplies
				Identify stockpiles, contacts and protocols
				<ul style="list-style-type: none"> <li>▪ Hospital stockpiles</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Community, local health department stockpiles</li> </ul>
				<ul style="list-style-type: none"> <li>▪ State, laboratory network stockpiles</li> </ul>
				Identify substitute materials
				Increase standard inventory for vulnerable, critical supplies
				Evaluate possible tactics for lack of supplies
				<ul style="list-style-type: none"> <li>▪ Perform specimen collection, testing without PPE?</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Treat patients on basis of clinical indicators without laboratory results</li> </ul>
				<ul style="list-style-type: none"> <li>▪ Outsource testing</li> </ul>
				Identify options for additional specimen storage.
<b>Communications</b>				
				Identify official communications plans to ensure unified, accurate communications to clients, public.
				Develop protocol for rapid decision-making process for communications
				Develop plan for rapid, effective communications to clients

# Laboratory Checklist for Pandemic Influenza Preparedness

Developed by the Wisconsin State Laboratory of Hygiene, provide by Nebraska Public Health Laboratory.

Not Applicable	Not Started	In Progress	Completed	Plan Component
<b>Communications</b>				
				▪ Changes in test turnaround time
				▪ Tests that will be referred/outsourced, batched, discontinued
				▪ Appropriate use of tests to conserve staff and supplies.
				Develop plan to provide staff with situation updates.
				▪ Evaluate effectiveness, availability, rapid receipt of email, fax, etc.
				Develop plan to ensure critical patient information is collected and relayed to laboratory staff.
				Communicate changes in anticipated test needs (e.g., canceling elective surgeries, routine physicals, etc.)
<b>Biosafety</b>				
				Identify/define institutional, community, statewide priorities and plans for personal protective equipment (PPE) and other biosafety supplies.
				Review biosafety in specimen handling respiratory samples during all testing, not just influenza testing.
				Evaluate possible tactics for lack of supplies
				▪ Perform specimen collection, testing without PPE?

*This document was developed based on the input of staff of Wisconsin Laboratory Response Network (WLRN) laboratories, infection control practitioners, and local health department representatives who attended the 2006 WLRN Regional Meetings. We thank them for their invaluable contributions.*