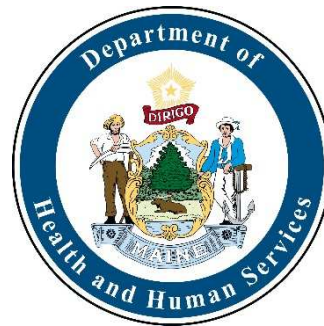


2019 Novel Coronavirus and Acute Care Healthcare Facilities Preparedness

Maine Center for Disease Control and Prevention
February 4, 2020, 11:00AM

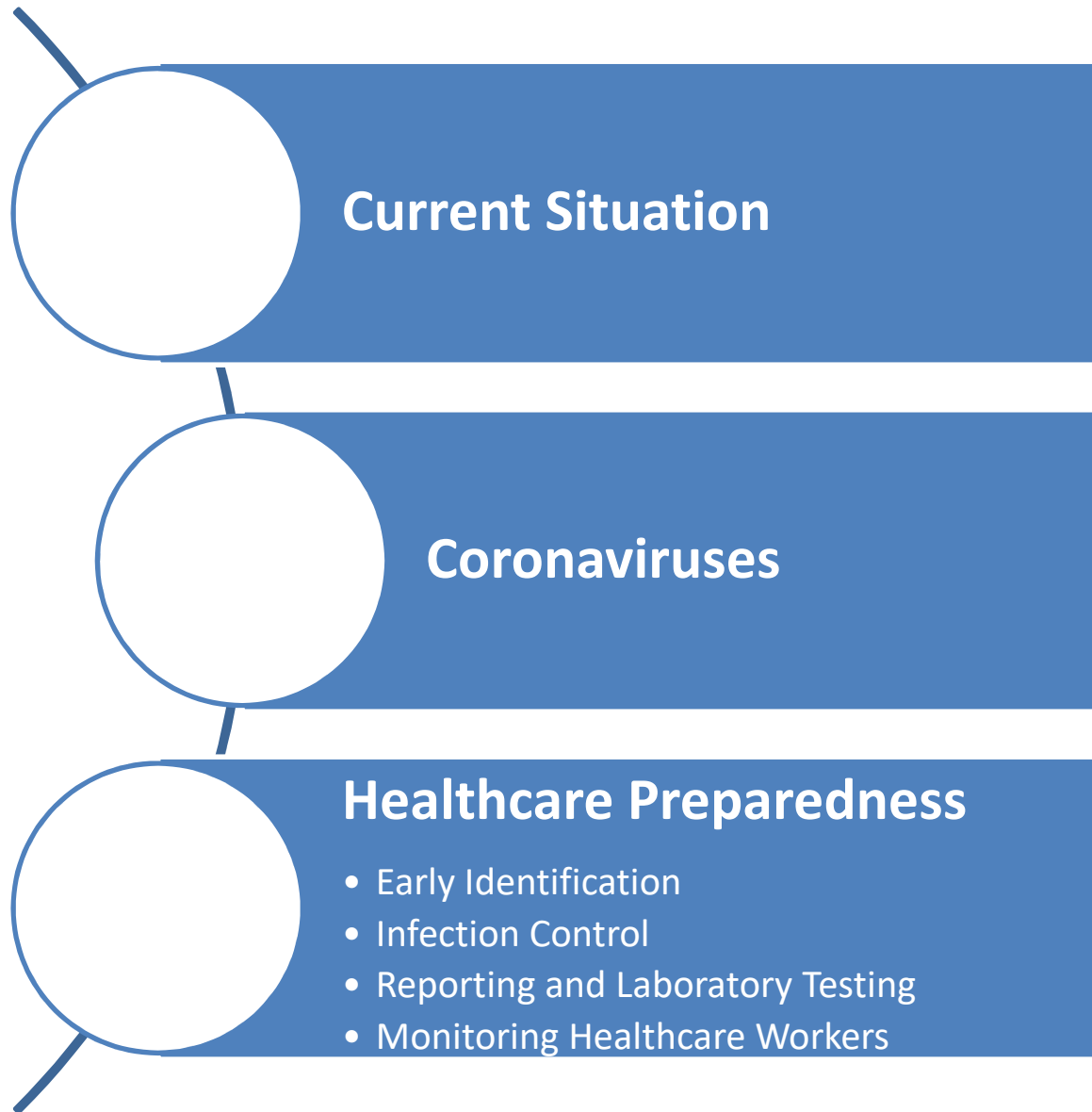


Agenda

Dir. Nirav Shah
Director Maine CDC

Dr. Siiri Bennett
State Epidemiologist

Rita Owsiak
Healthcare Associated
Infections Program



Current Situation: China

Confirmed cases

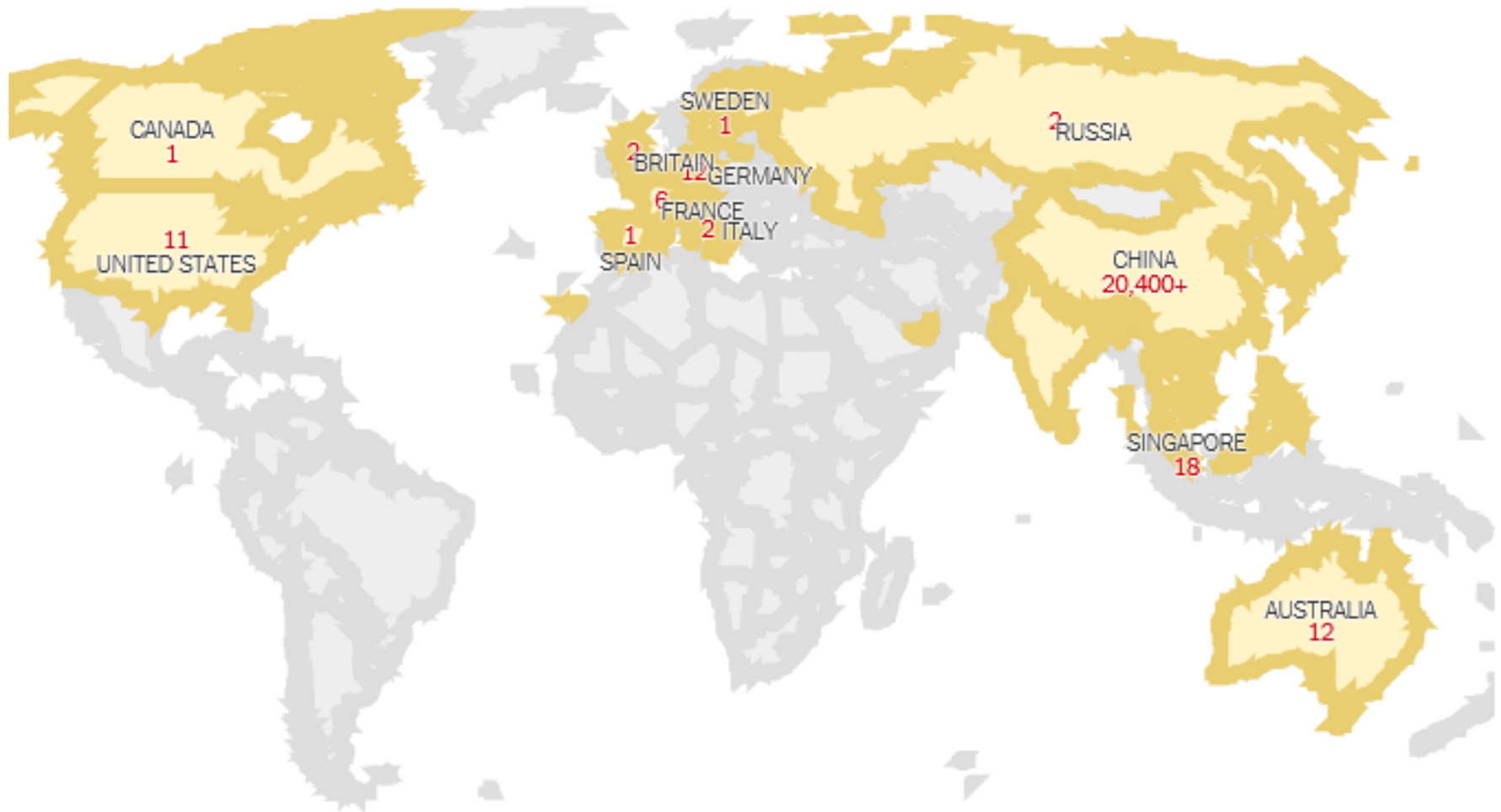


20,500 confirmed cases

Person-to-person spread
Asymptomatic spread

Sources: The Center for Systems Science and Engineering at Johns Hopkins University; National Health Commission of the People's Republic of China; local governments. Note: Data as of 10:30 p.m. E.T., Feb. 3

Current Situation: Global



Current Situation: United States



Maine: (as of 02/03/2020)

Confirmed cases = 0

PUIs = 0

Close Contacts = 1

People Under Investigation (PUI) in the United States**

As of 2/3/2020

Positive	11
Negative	167
Pending [§]	82
Total	260

*Cumulative since January 21, 2020.

†Numbers closed out at 7 p.m. the night before reporting.

§Includes specimens received and awaiting testing, as well as specimens in route to CDC.

Number of states with PUI: 36

Risk for USA remains LOW.

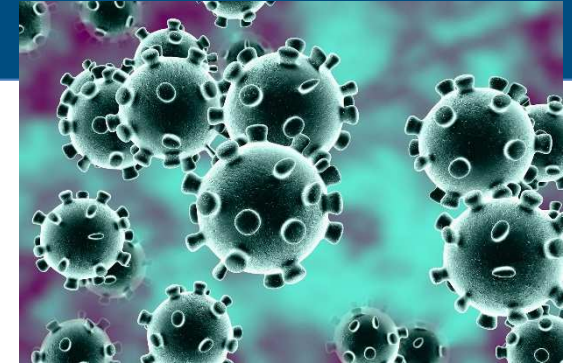
Current Situation: Travelers

As of 5pm 02/02/2020 US Presidential Proclamation went into effect:

- Suspending entry into US of foreign nationals who have visited China (excluding Hong Kong and Macau) within the last 14 days.
- All travelers arriving in US from China will be funneled through 11 US airports:
 - Traveler from **Hubei Province, China**
 - Mandatory 14-day Quarantine
 - Federal government oversight
 - Traveler from **other parts of China**
 - Monitored 14-day Self-Quarantine
 - Maine CDC oversight for Maine residents

Traveler from **non-China countries**: no screening or quarantine recommendations from federal CDC.

Coronaviruses



<https://www.webmd.com>

Coronaviruses...

- Enveloped virus
- Spread by contact with infected secretions or by aerosol droplets
- Survivability outside the body:
 - 1-2 days on nonporous surfaces (e.g. hard surfaces)
 - 8-12 hours on porous surfaces (e.g. soft goods)

Survivability
dependent on
temperature,
humidity,
inoculation size,
etc.

Transmission

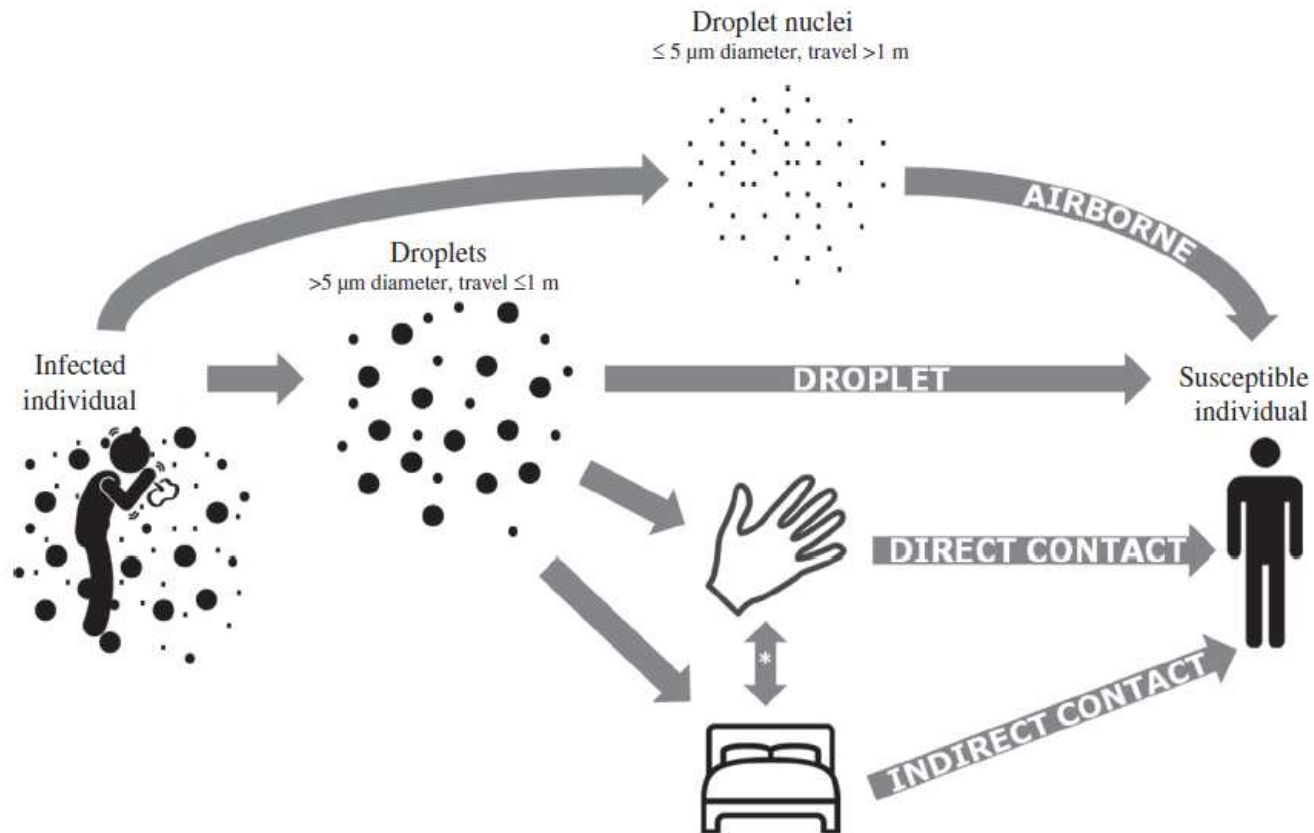


Figure 1. Transmission routes: droplet, airborne, direct contact, and indirect contact. (Indirect contact: routes involving a combination of hand and surface.) Definitions of 'droplet' and 'droplet nuclei' are from Atkinson *et al.*⁵

[https://www.journalofhospitalinfection.com/article/S0195-6701\(15\)00367-9/abstract](https://www.journalofhospitalinfection.com/article/S0195-6701(15)00367-9/abstract)

Early Identification...Triage

- **Symptoms:**

- Flu-like

- **Fever and lower respiratory illness (e.g. cough, difficulty breathing)**
 - Runny nose
 - Headache
 - Sore throat
 - General feeling of being unwell

- **Travel Question:**

- Have you been outside of Maine in the last 30 days?
 - Have you been to China in the last 14 days?

Lessons learned from Ebola activities: Americans are not so good at geography...have maps handy!



<https://www.chinahighlights.com/hubei/map.htm>



2019 nCoV (current) Case Definition

Criteria to Guide Evaluation of Patients Under Investigation (PUI) for 2019-nCoV

January 31, 2020

Patients in the United States who meet the following criteria should be evaluated as a PUI for 2019-nCoV.

Clinical Features	&	Epidemiologic Risk
Fever ¹ or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	AND	Any person, including health care workers, who has had close contact ² with a laboratory-confirmed ^{3,4} 2019-nCoV patient within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)	AND	A history of travel from Hubei Province , China within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization ⁴	AND	A history of travel from mainland China within 14 days of symptom onset

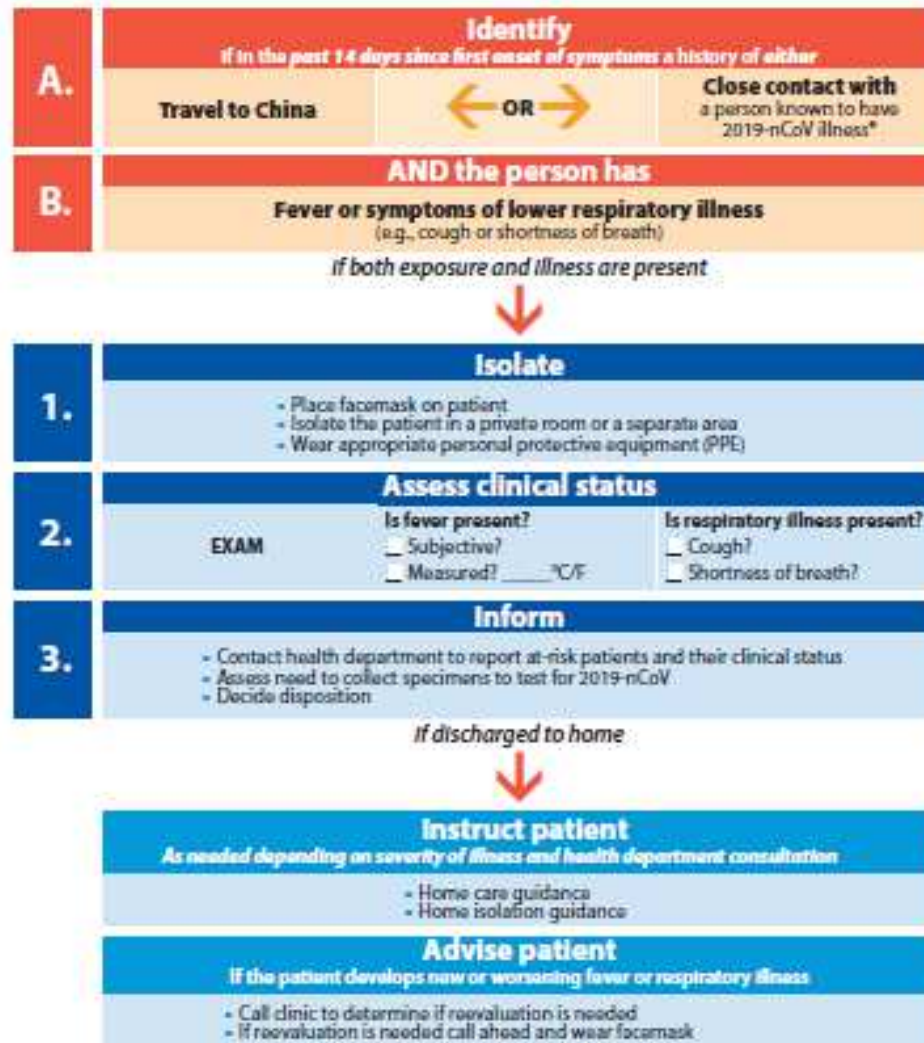
The criteria are intended to serve as guidance for evaluation. Patients should be evaluated and discussed with public health departments on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain travel or exposure).

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

Suspect you have a PUI...Isolate Patient IMMEDIATELY!!!

Flowchart to Identify and Assess 2019 Novel Coronavirus

For the evaluation of patients who may be ill with or who may have been exposed to 2019 Novel Coronavirus (2019-nCoV)

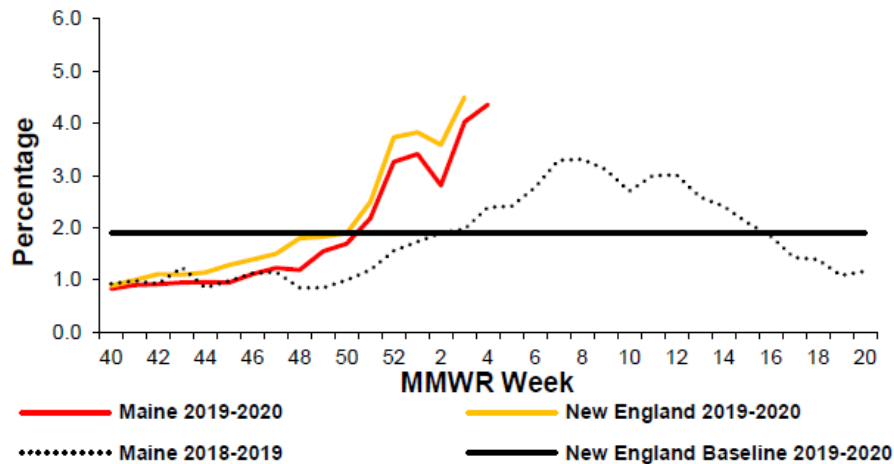


* Documentation of laboratory confirmation of 2019-nCoV may not be possible for travelers or persons caring for patients in other countries. For more clarification on the definition for close contact see CDC's Interim Guidance for Healthcare Professionals: www.cdc.gov/coronavirus/2019-nCoV/hcp-clarification.html.

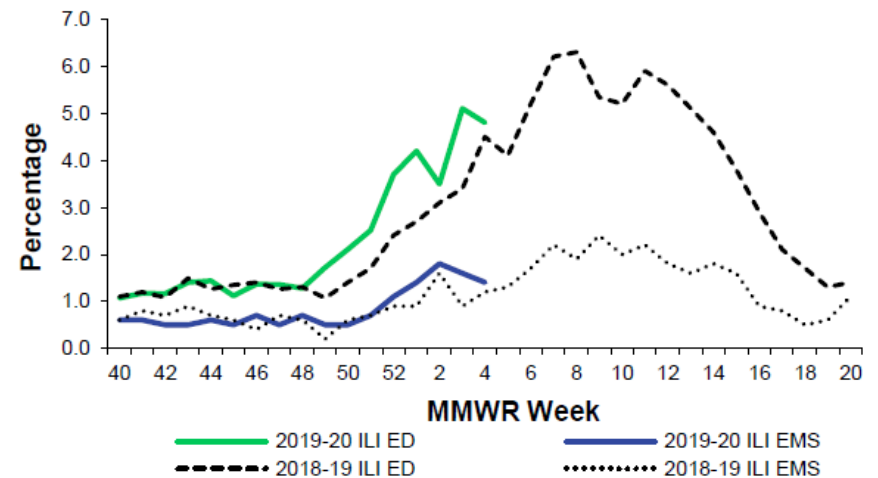
“Look-a-Like” Illness

MMWR Week 4 (ending 01/25/2020)

Outpatient Visits for ILI – Maine, 2018-20



Syndromic Surveillance data for ILI – Maine, 2018 -20



Maine ILI Report posted online weekly at: <https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/influenza/influenza-surveillance-weekly-updates.shtml>

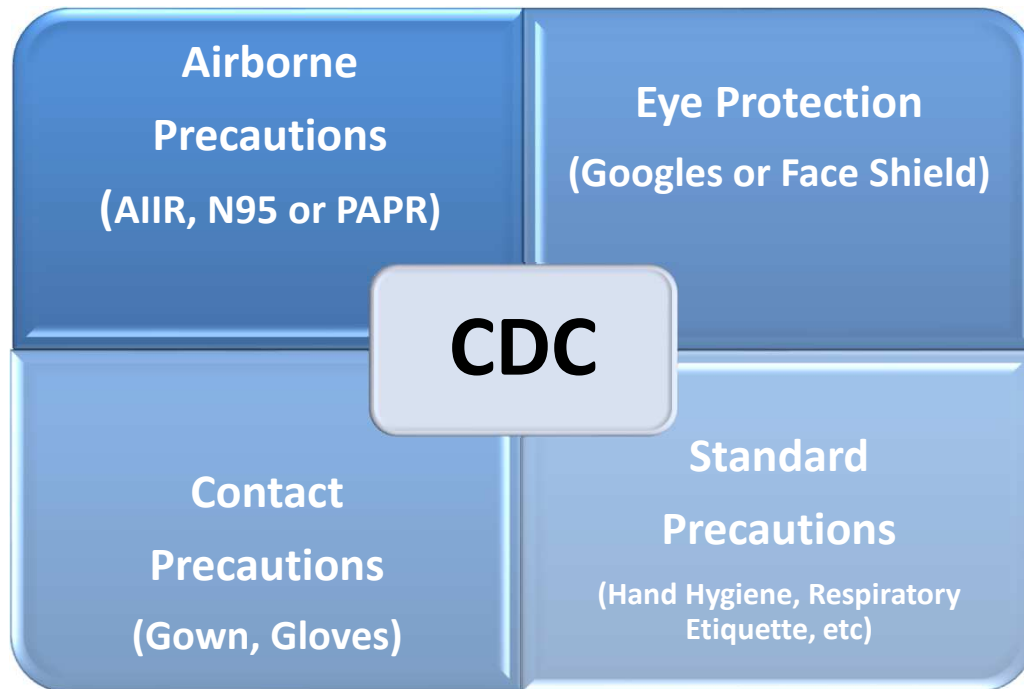
Infection Control

Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for 2019 Novel Coronavirus (2019-nCoV) in a Healthcare Setting (updated 02/03/2020)

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html>

If a PUI does not require hospitalization they can be discharged to home, in consultation with Maine CDC (800-821-5821), if deemed medically and socially appropriate.

Infection Control



AIIR = Airborne Infectious Isolation Room
(a.k.a. Negative Pressure Room)

Additional Information:

Family & Visitors:

- **Restrict visitation.**
- Offer visitation by phone or video-call applications
- Consider exceptions for end-of-life situations. Require PPE: mask, gown, gloves

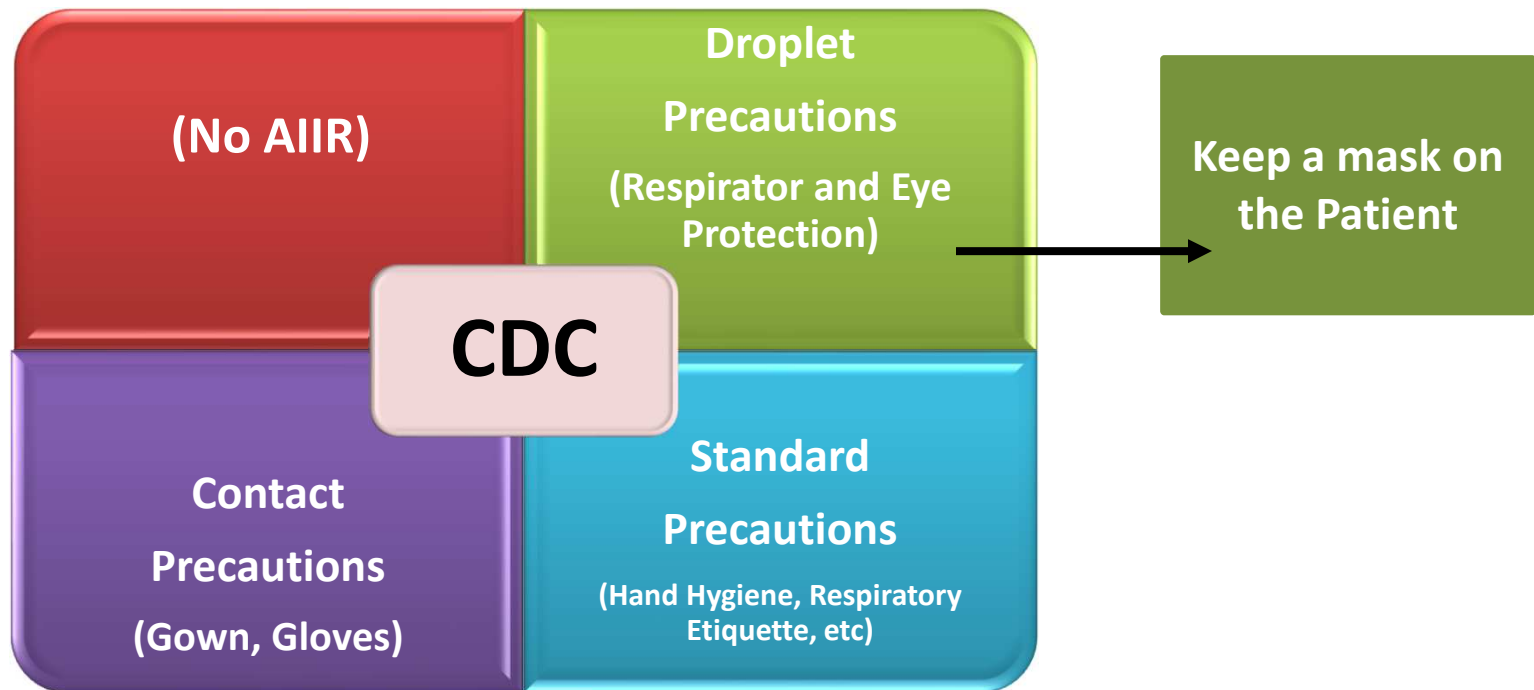
Duration of Precautions:

- Consult with Maine CDC @ 800-821-5821 on a case-by-case basis

Environmental Disinfection:

- Verify product is EPA-approved and has efficacy to enveloped viruses or emerging viral pathogen claims

What if we don't have an AIIR?



What if staff are not fit-tested/trained to respirators? -- Use a mask!

Infection Control Readiness Checklist

(some examples)

- Are you verifying the Air Changes per Hour (ACH) for all Airborne Infectious Isolation Rooms (AIIR) annually?
- Is your facility then verifying the time each AIIR needs to run to clear aerosols, before the room is released for post-discharge cleaning? (calculation based room volume)
- Are you verifying AIIR room alarms quarterly?
- Is fit-testing to N-95 or training on PAPRs occurring annually?
- Are you conducting fit-testing per the OSHA protocol?
- Are you providing staff education on donning and doffing PPE, hand hygiene, respiratory etiquette.
- Are you routinely conducting observation of staff compliance with PPE use and hand hygiene.

Reporting

Suspected cases of 2019 Novel Coronavirus are a Reportable Condition/Disease

Please report:

- Call: 1-800-821-5821
- Fax: 1-800-293-7534
- TTY: Maine relay 711

Reports received 24/7/365.

Isolate submission to HETL is required for all PUIs

Questions: Call Maine CDC at 1-800-821-5821

Laboratory Testing

Pre-approval from Maine CDC is needed for 2019-nCoV Laboratory Testing!

Call: 1-800-821-5821

Once approval is received, specimen should be sent to HETL, the State Public Health Lab

Specimen Requirements	<ul style="list-style-type: none">• Lower Respiratory: nasopharyngeal aspirate/wash or nasopharyngeal AND oropharyngeal swabs in viral transport media or sterile saline.• Upper Respiratory: bronchoalveolar lavage, tracheal aspirates, or sputum.• Serum
Collection Instructions	<ul style="list-style-type: none">• Collect specimens in leak proof containers.• Specimens can be stored at 2-4°C for up to 72 hours after collection. Send specimens on ice packs.• If a delay in shipping is expected, store specimens at -70°C or lower and send on dry ice.
Laboratory Testing Fee	<ul style="list-style-type: none">• There is no cost for 2019-Novel Coronavirus Virus Detection using Real-Time RT-PCR test. <p>If testing approved by Maine CDC!</p>
Additional Information	<ul style="list-style-type: none">• Bacteriology at 207-287-1704, Virology, Respiratory, Arbovirus, and Serology at 207-287-1722• Molecular Biology, Sequencing, and Foodborne at 207-287-5769• Mycobacterium and Rabies at 207-287-1706

<https://www.maine.gov/dhhs/mecdc/public-health-systems/health-and-environmental-testing/micro/submitting-samples.shtml>

Non-symptomatic Healthcare Worker Monitoring

**Federal CDC is not currently recommending any
Healthcare Worker monitoring.**

Screening of Healthcare Workers with unprotected exposure to a PUI or confirmed case – consult with Maine CDC on a case-by-case basis.

Key Take-Aways...

- **Identify....Triage**
 - You must inquire about travel history --- START NOW!
 - At reception AND
 - During patient assessment
- **Isolate...IMMEDIATELY!**
 - If patient identified as a possible PUI, mask patient, immediately!
 - HCW to don respirator and move patient to a isolation room, immediately!
 - Post isolation signage
- **Inform...Communication**
 - Facility Infection Prevention and Control
 - Facility Leadership/Team Lead
 - Maine CDC @ 800-821-5821

Questions?

Contact Maine CDC at 800-821-5821

