Coronavirus Disease 2019 (COVID-19) Outbreak, Update # 11
Cloth Masks & Updated Specimen Collection Guidance

Key Points and Recommendations:

• COVID-19 can be transmitted when a person is asymptomatic or before symptoms develop [MMWR Mar 26;69(12):347-352; MMWR Apr 3;69(13):377-381; MMWR Apr 1;69(early release)]. In combination with an increasing number of healthcare provider infections and recognition of healthcare facility outbreaks, we recommend that (after usual screening for symptoms) all visitors and staff entering a healthcare facility should be given a washable (reusable) cloth mask to wear to reduce asymptomatic/pre-symptomatic transmission of COVID-19 while in the facility.
  - A commercial, disposable face mask is likely more effective for this purpose, so if supplies are adequate, a surgical mask can be used instead.
  - Clearly communicate that a cloth mask is NOT personal protective equipment (i.e., it does not protect the wearer, but can protect others in case the wearer is pre-symptomatically or asymptomatically shedding virus).
  - A healthcare provider caring for a patient with suspect/confirmed COVID-19 should remove their cloth face mask, secure it in a plastic bag, conduct hand hygiene, and don usual COVID-19 PPE, which should include at a minimum a surgical face mask, eye protection, gown, and gloves. An N95 or higher level respirator should be used for patients undergoing aerosol-generating procedures.
  - Anyone wearing a cloth mask must regularly perform hand hygiene and avoid touching their mask and face to avoid contaminating their hands and contaminating surfaces if they are pre- or asymptomatically shedding virus.
  - Cloth masks should be collected from visitors and staff exiting the facility for washing and re-use.
  - NH Division of Public Health Services (DPHS) is acquiring a supply of cloth masks for facilities to supplement the supply of community produced masks.

  - A nasopharyngeal (NP) swab is still the preferred specimen, but other acceptable alternatives now include patient-collected nasal mid-turbinate (NMT) or anterior nares swabs. This approach can conserve PPE and reduce risk to healthcare providers. We recommend obtaining a NMT rather than an anterior nares swab because of superior sensitivity (NMT swab sensitivity of 96% compared to NP swab; reference pending publication), unless the necessary flocked tapered swab is not available.
  - For collection of the NMT swab, a provider should instruct the patient in the proper procedure facilitated by the attached Figure (below) and oversee collection of the swab from a safe distance:
    ➢ For the preferred nasal mid-turbinate swab (flocked tapered swab)
1. Insert swab in the horizontal position into one nasal passage until gentle resistance is encountered
2. Rotate the swab in place for 10-15 seconds
3. Repeat the process in the other nostril using the same swab

➢ For the anterior nares swab (foam swab):
   1. Insert swab in the vertical position into one nasal passage until gentle resistance is encountered
   2. Rotate the swab in place for 10-15 seconds
   3. Repeat the process in the other nostril using the same swab

➢ Place the single swab in appropriate transport media and ensure tight closure.
➢ Refrigerate specimen at 2-8°C prior to transport to the testing laboratory

- Some long-term care facilities (LTCFs) are requiring negative COVID-19 testing in asymptomatic patients before accepting patient transfers from hospitals; this is because of guidance from the AHCA and NCAL. NH DHHS does not recommend testing of asymptomatic persons, in accordance with current Centers for Disease Control and Prevention (CDC) guidance, especially because the requirement for negative testing creates barriers to hospital discharge at a time when we need to be increasing hospital capacity.
  - According to CMS guidance, LTCFs should admit any individuals they would normally admit to their facility, but admitted/re-admitted residents can be subject to 14-day quarantine. If possible, LTCFs should dedicate a unit/wing exclusively for any residents coming or returning from the hospital. This can serve as a step-down unit where they remain for 14 days with no symptoms instead of integrating as usual.
  - When available, we suggest all hospitals implement rapid COVID-19 testing capability (e.g., Abbott, Cepheid) to facilitate testing if required. If NP swabs are in shortage, alternate sample collection methods are also now options for COVID-19 testing (see above).

- In partnership with the New Hampshire Health Care Association, we will begin weekly standing calls starting on Wednesday April 8th from 12:00 – 1:00pm for LTCFs, assisted living facilities and other congregate settings with vulnerable patients.
  - Zoom webinar: https://zoom.us/j/511075725
  - Call-in phone number: (929) 205-6099
  - Meeting ID: 511 075 725

- We will continue to host weekly calls to answer healthcare provider and local partner questions about COVID-19. The next discussion will be held on Thursday April 9th from 12:00 – 1:00 pm (noon hour), and calls will recur weekly. Call-in information for the Q&A session is: (833) 709-6685; this is an operator assisted call so no conference code is needed.

- All COVID-19 cases must be reported to NH DHHS by filling out and faxing the COVID-19 Case Report Form to our confidential fax at 603-271-0545.
  - Please also use this form to report any confirmed COVID-19 cases who become hospitalized in your facility even if they were previously diagnosed and reported.
Situational Update:

New Hampshire has confirmed 540 individuals with COVID-19, including 80 hospitalizations (15%), and 7 deaths (1%). All deaths were in individuals who were over the age of 60 and/or had chronic medical conditions which put them at increased risk of COVID-19 complications. The majority of infected individuals are female (57%). A large percentage of confirmed cases in NH are healthcare providers (26%) who either acquired their infection in the community or through work-related exposures. Institutional outbreaks have also been reported. A town level map of COVID-19 cases has been published on the NH COVID-19 website; however, we believe COVID-19 to be wide-spread in most areas of NH and the actual number of COVID-19 cases is likely much higher than confirmed cases. We expect COVID-19 cases to continue to increase over the coming several weeks. Timing of the peak of the outbreak in NH is uncertain, but we expect this outbreak to continue for at least several months. See the below epidemic curve for confirmed case counts by illness onset date.

![Epidemic Curve: Onset of Illness Among Persons with Laboratory Confirmed COVID-19 in New Hampshire through April 2, 2020 (n=458)](chart.png)

Period of Uncertainty: People infected during this time may not yet be symptomatic and reported. This time period is estimated to be approximately 3 weeks. This includes the time between becoming exposed to the virus and developing illness, which is between 2 to 14 days (typically 5-6 days) and the time from illness onset to the illness being reported to the health department (typically within about 7 days).

New studies strongly suggest that COVID-19 transmission occurs in the days before an infected person develops symptoms. Testing of passengers on the Diamond Princess Cruise Ship found that out of the 712 passengers and crew who were positive for COVID-19, 47% were asymptomatic at the time of testing (MMWR Mar 26;69(12):347-352). Testing of LTCF residents during an outbreak in King County, Washington found that out of the 23 positive residents, 57% were asymptomatic at the time of testing (77% of these went on to develop symptoms) (MMWR Apr 3;69(13):377-381). Finally, pre-symptomatic transmission was demonstrated 1-3 days before symptom onset in cluster investigations in Singapore (MMWR Apr 1;69(early release)).

Because of pre-symptomatic transmission, universal social distancing is a critically important strategy to prevent transmission. Continue to counsel and enable your patients to stay home as much as possible and maintain at least 6 feet of distance between people. People entering a healthcare facility should be masked with a washable, re-usable cloth mask at a minimum
(given disposable PPE shortages) to help prevent and minimize pre-symptomatic transmission within facilities. The use of washable, reusable cloth masks worn in public has intuitive but unproven efficacy to reduce pre-symptomatic transmission.

**Additional Testing Guidance:**
Access to COVID-19 testing has improved, but sampling exposes the public and healthcare system to contagious cases and consumes limited personal protective equipment (PPE) and testing supplies. DPHS continues to recommend that you test the following symptomatic patients:

- Healthcare workers and first responders
- Family members of healthcare workers and first responders (because it impacts the ability for these individuals to return to work)
- Any person residing in, or who has worked or visited, a long-term care facility (LTCF) or healthcare setting
- Patients hospitalized with fever or respiratory illness
- Patients who may have had close contact with a large number of people

Testing other patients is up to the clinical judgement of the healthcare provider based on a patient’s signs/symptoms, vulnerability (e.g., comorbidities, advanced age), risk of exposing others, and ability to self-isolate. Patients with mild illness, who are not in need of medical care, can self-isolate at home and monitor for symptom progression. Testing can be considered if symptoms worsen.

When submitting specimens to the New Hampshire Public Health Laboratories (PHL) for COVID-19 testing, use the [new PHL requisition form](#), which includes checkboxes for prioritizing testing of select patients.

**Home Isolation for Patients with COVID-19:**
Patients with confirmed or suspect COVID-19, including persons who are not tested, who can be managed at home should remain home until:

- At least 7 days have passed *since symptoms first appeared*,
- AND
- At least 72 hours (3 days) have passed *since recovery* – which is defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms.

When patients are being managed at home for suspected or confirmed COVID-19, provide them the following information:

- [Caring for yourself at home](#)
- [Preventing the spread of COVID-19 in homes](#)
- [Cleaning and disinfection guidance](#)

For hospitalized patients diagnosed with COVID-19, providers should follow CDC’s guidance for [discontinuation of transmission-based precautions](#).
FIGURE: Patient Instructions for Bilateral Nasal Midturbinate (NMT) swab collection

1. Wash your hands with soap and water
2. Remove the swab from the plastic sleeve and hold by the white handle
3. Identify the safety stopping point and the breaking point
   
   ![Swab diagram]

   - Place this end in nostril
   - Collar or safety stopping point
   - Breaking point
   - Handle

4. Position yourself as in picture below, with your head tilted slightly back
5. Gently insert the swab in your RIGHT nostril until the collar/safety stopping point touches the outside of your nose

   ![Swab insertion]

   - Insert swab to safety stopping point

6. When the swab is in place, rotate in a circular motion 2 times and then keep it there for 15 seconds
7. Remove the swab and repeat the process for the LEFT nostril
8. Remove the swab, but DO NOT LAY THE SWAB DOWN
9. While holding the swab, remove the cap from the accompanying tube and place the swab in the tube
10. Break the swab handle at the break point and throw the swab handle in the garbage
11. Wash your hands with soap and water

FIGURE 1. Patient instructions for midturbinate nasal swab collection.
Additional Information

- NH DHHS COVID-19 website: https://www.nh.gov/covid19/

- For any questions regarding this notification, please call the NH DHHS, DPHS, Bureau of Infectious Disease Control at (603) 271-4496 during business hours (8:00 a.m. – 4:30 p.m.).
- If you are calling after hours or on the weekend, please call the New Hampshire Hospital switchboard at (603) 271-5300 and request the Public Health Professional on-call.
- To change your contact information in the NH Health Alert Network, contact Adnela Alic at (603) 271-7499 or email DHHS.Health.Alert@dhhs.nh.gov.

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From: Benjamin P. Chan, MD, MPH, State Epidemiologist
Originating Agency: NH Department of Health and Human Services, Division of Public Health Services

Attachments: none