Yale NewHaven Health Yale New Haven Hospital

### MEMO

#### TO: YNHH

FROM: Marie L. Landry, MD, Director, Clinical Virology Laboratory

- **DATE:** May 1, 2020
- SUBJECT: Collection Kits with Phosphate Buffered Saline (PBS) and assorted swabs and Mid-turbinate (deep nasal) Sample Collection Instructions for SARS-CoV-2 PCR
- S: New collection kits will be distributed, and collection instructions for midturbinate deep nasal samples are needed.
- **B:** Currently, Nasopharyngeal (NP) swabs and media are in short supply. Additional sample collection kits and sample types are acceptable for diagnosis of SARS CoV-2.
- A: Due to shortages of collection devices, supplementary COVID collection kits have been assembled in Lab, using clear PBS and assorted available swab types. The samples collected for SARS CoV-2 PCR will vary, depending on the availability of swab types. Possible options are given below.
  - NP plus Oropharyngeal (OP) swab combination increases the viral load in the sample.
  - **NP swab** inserted through the nose back to the nasopharyngeal wall.
  - Mid-turbinate nasal swab inserted into the nose to the turbinates.

R:

- If the collection kit has both NP and OP swabs, the provider can collect both and combine into one vial.
- If the collection kit contains only a **flexible NP swab, collect NP**.
- If kit contains a larger swab, collect a mid-turbinate (deep nasal) swab.
- Label all of these options as Nasopharynx (NP).

Inquiries and feedback may be directed to Maureen Owen, at 203-688-3524 or <u>Maureen.owen@ynhh.org</u>.

# ALERT: Phosphate Buffered Saline (PBS) and Swabs for COVID-19 PCR

- Due to supply chain issues, alternate COVID collection devices are needed
- The Lab has prepared collection "kits" with a single tube and swab in a bag



- The Media tube (left) contains clear PBS
- Examples of assorted swab options (right)
  - These generally have a thick tip
  - For mid-turbinate (deep nasal) rather than Nasopharyngeal (NP) swab collection (see figure next page)

### YNHHS COVID Phosphate Buffered Saline (PBS) Testing Media Kit

Use the swab contained within this kit to collect sample\*\* Break swab off into COVID PBS Testing Media tube Discard other ancillary components if present \*\* This COVID PBS testing Kit is approved for Mid turbinate (deep nasal) or throat swabs ONLY.

## Nasopharyngeal versus Mid-turbinate Nasal Sample Collection

https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html



[Figures from Cepheid package insert]

Nasopharyngeal Swab Collection: Insert minitip swab with a flexible shaft through the nostril parallel to the palate (not upwards) until **pharyngeal wall** reached. Swab should reach depth equal to distance from nostrils to outer opening of the ear. Gently rub and roll the swab. Leave swab in place for several seconds to absorb secretions. Slowly remove swab while rotating it. Specimens can be collected from both sides using the same swab, if swab not already fluid-saturated.

Mid-turbinate (Deep Nasal) Swab: Tilt patient's head back 70 degrees. While gently rotating the swab, insert swab ~ one inch (about 2 cm) into nostril (until resistance is met at **turbinates**). Rotate the swab several times against nasal wall and **repeat in other nostril using the same swab**.

*Throat/OP swab (not shown)*: Insert swab into the posterior pharynx and tonsillar areas. Rub swab over both tonsillar pillars and posterior oropharynx and avoid touching the tongue, teeth, and gums.