

Policy Title: Nasopharyngeal Swab Collection and Screening for Respiratory Illness

Applies To: Authorized Prescribers, Regulated Care Providers, Unregulated Care Providers

Location Applicability: All Nova Scotia Health Zones and Sites

Approved:	Effective:	Next Review:
November 22, 2021	November 30, 2021	November 22, 2025

Sponsor: Senior Director, Quality Improvement and Safety

Approval Authority: VP, Quality and System Performance

Number: IPC-SC-001	Manual: Infection Prevention and Control
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PURPOSE

The purpose of this policy is to provide direction on the collection of Nasopharyngeal Swabs when Viral Respiratory Illnesses are suspected.

POLICY STATEMENTS

Note: If a respiratory outbreak is suspected, contact IPAC and refer to [NSHA IPC-CD-001 Outbreak Management](#)

- An approved Care Directive (CD) must be in place or an Authorized Prescriber’s order obtained for collection of a nasopharyngeal (NP) swab when a Viral Respiratory Illness is suspected. Examples include, but are not limited to:
 - Influenza A/B
 - Respiratory syncytial virus (RSV)
 - Adenovirus
 - Human metapneumovirus
 - Parainfluenza

- Coronavirus
2. An NP swab may be collected autonomously by:
- Any Authorized Prescriber (AP)
 - Any of the following Regulated Health Care Providers (RCPs) with a valid CD or an AP's order:
 - Registered Nurses (RN)
 - Licensed Practical Nurses (LPN)
 - Registered Respiratory Therapists (RRT)
 - Physiotherapists (PT)
 - Any of the following RCPs with a valid CD or an AP's order, in collaboration with an RN, RRT, or PT, and with the appropriate education:
 - Advanced Care Paramedic (ACP)
 - Critical Care Paramedic (CCP)
 - Speech Language Pathologist (SLP)
 - Dietitian
 - Graduate Nurse, Graduate Practical Nurse
 - Medical Laboratory Technologist (MLT)
 - An Unregulated Care Provider (UCP) as per [Testing for Respiratory Infections Care Directive](#)
 - A Health Care Learner in collaboration with their RCP preceptor
3. The provider collecting the specimen is responsible to self-assess their competency and obtain any necessary education to perform this procedure.
4. Patients with suspected respiratory illness must be placed on [Droplet](#) and [Contact](#) Precautions, in addition to [Routine Practices](#).
- 4.1. [Airborne Precautions](#) may be warranted based on a Point-of-Care Risk Assessment (PCRA).

PRINCIPLES AND VALUES

- o **Person-Centred Care:** “As a foundation of Nova Scotia Health, we are working to place the dignity and respect of patients, families, and communities at the heart of every decision. We seek to build trust-based relationships to achieve more genuine partnerships with those we serve.”
- o Nova Scotia Health is committed to providing safe and appropriate care to patients.
- o Nasopharyngeal swabs are an essential component of viral respiratory illness detection
- o Accurate technique in obtaining nasopharyngeal swabs is critical to ensuring a safe, quality specimen is obtained.

- o The ideal specimen for diagnosis of respiratory viruses is an NP swab. Throat swabs are easier to collect but are much less sensitive.

PROCEDURE

1. Obtain viral collection swab. Check the expiry date.
 - 4.2. Swabs **do not** need to be refrigerated prior to use – they are stable at room temperature.
 - 4.3. Expired swabs will not be processed, except as directed by Infection Prevention and Control.
5. Use the swab supplied with the viral transport media to collect the specimen.
 - 5.1. Some viral collection kits come with two swabs; choose the smaller caliber, flexible shaft swab.
6. Perform [hand hygiene](#).
7. Don Personal Protective Equipment (PPE): Gown, mask with eye protection, and gloves (as indicated by a Point of Care Risk assessment and Droplet and Contact Precautions).
8. Explain the procedure to the patient.
9. If nasal mucous is visible, either ask the patient to use tissue to gently clean out the mucous or clean the nostril with a cotton swab.
 - 9.1. Have the patient perform [hand hygiene](#) after using the tissue.

Note: The presence of visible mucous in the nose can interfere with the collection of viruses.

10. Prior to sample collection, determine the direction and depth for swab insertion:
 - 10.1. Using the swab, measure the distance from the crease of the nose to the ear
 - 10.2. The collection swab should be inserted **one half to two thirds of this length**.
11. Seat the patient comfortably.
12. Tilt the patient's head back slightly to straighten the passage from the front of the nose to the nasopharynx to make the insertion of the swab easier.
13. Insert the swab along the medial part of the septum, along the floor of the nose, until it reaches the nasopharynx; gentle rotation of the swab may be helpful.

Note: If resistance is encountered, try the other nostril. Do **NOT** force.

14. Do not aim the swab upwards; the direction of insertion should be parallel to the palate.
15. Allow the swab to remain in the nostril for a duration 5-10 seconds.
 - 15.1. Removing hand away from the swab during this time may improve patient comfort.

16. When it is time to remove the swab, slowly rotate the swab several times to dislodge the columnar epithelial cells.

Note: Insertion of the swab usually induces a cough and tearing of the eye.

17. Slowly withdraw the swab and place in the collection tube.

17.1. Break the end of the swab to seal the tube.

17.2. Secure the cap tightly.

18. Label the collection tube as per facility laboratory procedures and place in a specimen bag.

19. On exit of patient room, remove PPE and perform [hand hygiene](#).

20. Complete the microbiology requisition or enter in Meditech Order Entry. Ensure inclusion of all of the following information:

- Date and time specimen collected
- Name of provider who collected the specimen
- Specimen source: Nasopharyngeal swab
- The examination requested: Viral detection of respiratory virus
- If testing is associated with an outbreak, include the Outbreak Number on the requisition

21. **Refrigerate** the swab immediately after the specimen is collected.

22. Arrange for transport to the laboratory as soon as possible to avoid delay in specimen processing.

22.1. Keep specimens at 4 °C or colder and ensure they are received by testing laboratory within 72 hours.

22.2. Swabs that will be delayed past 72 hours are frozen at -70°C and transported as soon as possible.

23. Document the specimen collection in the health record/plan of care.

REFERENCES

Legislative Acts

Health Protection Act, Statutes of Nova Scotia (2004, c. 4). Retrieved from the Nova Scotia Legislature website <http://nslegislature.ca/sites/default/files/legc/statutes/health%20protection.pdf>

Other

Health Canada. (2017). *Canada immunization guide chapter on influenza and statement on seasonal influenza vaccine for 2017-2018*. Retrieved from <http://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-statement-seasonal-influenza-vaccine-2017-2018.html>

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Nova Scotia Department of Health and Wellness. (2017). *It's the law: Reporting notifiable diseases and conditions*. Retrieved from http://novascotia.ca/dhw/CDPC/documents/06026_ItsTheLawPoster_En.pdf

Nova Scotia Department of Health and Wellness. (2021). *Respiratory response plan for public health 2021-2022*. Retrieved from http://novascotia.ca/dhw/cdpc/documents/Respiratory_Response_Plan_for_Public_Health.pdf

Nova Scotia Health. (n.d.). Nasopharyngeal swabbing for respiratory viruses – the 4 D's. Retrieved from <https://vimeo.com/516853275/c67017fd3a>

Provincial Public Health Laboratory Network of Nova Scotia. (2017). *Provincial microbiology user's manual PPHLN-M0008-02*. Retrieved from <https://www.cdha.nshealth.ca/system/files/sites/116/documents/provincial-microbiology-users-manual.pdf>

Public Health Agency of Canada. (2010). *Guidance: Infection prevention and control measures for health care workers in acute care and long-term care settings. Seasonal influenza*. Retrieved from <http://www.phac-aspc.gc.ca/nois-sinp/guide/ac-sa-eng.php>

RELATED DOCUMENTS

List all the related documents that are required to support this policy. These may include other policies, forms, brochures, appendices, learning modules, etc.

Policies

[IPC-RP-005 Routine Practices](#)

[IPC-RP-015 Droplet Precautions](#)

[IPC-RP-010 Contact Precautions](#)

[IPC-RP-020 Hand Hygiene](#)

Care Directives

[Testing for Respiratory Infections - Care Directive - IWK CL-790, NSHA CD-CL-003](#)

Procedures

NSHA Patient and Family Guide (2017): [Cold and Flu Season: Taking Care While You're in the Hospital](#)

Poster

[The 4 Ds of a Quality Nasopharyngeal Swab](#)

Educational Materials

[Regulated/ Unregulated Care Provider Training COVID 19 testing sites](#)

[COVID-19 Swab Collection via Nasopharyngeal – Regulated Care Provider Skill Competency Checklist](#)

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[Collection Instructions of a Nasopharyngeal Swab for Respiratory Viruses](#)

Video

[Nasopharyngeal swabbing for respiratory viruses – the 4 D's.](#)



Appendices

[Appendix A – Definitions](#)

Appendix A: Definitions

Authorized Prescriber	A health care professional permitted by legislation, their regulatory college, NSHA, and practice setting (where applicable) to prescribe medications and treatments. The authority to order medications is not linked to any particular health profession and may also differ within that health care profession depending upon specific competencies and skills.
Graduate Nurse/Graduate Practical Nurse	Newly graduated nurse or graduate from a nursing program outside of Canada who holds a conditional license with a regulatory body.
Health Care Learner	Enrolled in a regulated health care program.
Regulated Care Providers (RCPs)	<p>The practice of a regulated health care provider is set out by legislation. A college, association, board or other entity regulates the practice of the provider in the public interest by setting out the criteria for membership, a process for the investigation/resolution of complaints against members and provides that persons who are not admitted as members may not engage in the scope of practice as defined in the governing statute. A regulated health care provider has a governing statute; a scope of practice as defined in its governing statute; and is guided by standards of practice and a code of ethics.</p> <p>For the purpose of this Policy a regulated care provider includes the following: NSHA Registered Nurse (RN), Licensed Practice Nurse (LPN), Advanced and Critical Care Paramedics (ACP and CCP), Registered Respiratory Therapist (RRT), Physiotherapist (PT), NSHA Speech Language Pathologist (SLP), NSHA Medical Laboratory Technologist (MLT), NSHA Dietitian with additional education and training in dysphagia (Government of Nova Scotia, 2012), NSHA Graduate Nurse and NSHA Graduate Practical Nurse.</p>
Unregulated Care Providers (UCPs)	<p>The practice of UCPs is not set out in or regulated by legislation. UCPs are accountable for their actions (which includes inactions) to their employer through a scope of employment, rather than a regulatory body (e.g., College, Association). Individual UCPs are always accountable for their actions (which includes inaction) and the decisions they make within their scope of employment.</p> <p>For the purpose of this policy UCP includes the following NSHA care providers, who have successfully completed required education: Continuing Care Assistant (CCA), Care Team Assistant (CTA), Emergency Support Aide (ESA), and Medical Laboratory Assistant (MLA).</p>
Viral Respiratory Illness	Viral infections commonly affect the upper or lower respiratory tract. Viral respiratory illness symptoms can include Fever/chills, headache, myalgia (muscle aches), arthralgia (joint pain), sore throat, cough, and exhaustion.

POLICIES BEING REPLACED

Nasopharyngeal Swab Collection by Unregulated Care Providers - Policy Directive

VERSION HISTORY

Version:	Effective:	Approved by:	What's changed:
Original	2018-12-31	VP, Quality and System Performance	N/A
Revised	2021-11-30	VP, Quality and System Performance	Major Revision: <ul style="list-style-type: none"> ○ Now includes Unregulated Health Care Providers and learners ○ Overall revision with updates to applicability, definitions, and resources/related documents
Revised	December 17, 2024	Senior Director of Quality and Improvement	Minor Revision: <ul style="list-style-type: none"> ○ Clarification provided for roles of Unregulated Care Providers and Health Care Learners ○ Referral to IPPL Care Directive for guidance on Unregulated Care Providers



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