Dial in number: 1-877-413-4781 Conference ID: 377 086 9

House Keeping

- *6 will mute and unmute your phone line
 - using own mute button sometimes provides other tones
 - please do not put on 'hold'!
- Roll Call
 - please email manager to advise of participation, especially if joining by phone only
- Questions:

christina.kelly@canada.ca





Key Messages:

- information presented is current to the date of presentation, and is being updated as new information becomes available, therefore, the information in this presentation may change
- risk of transmission in Ontario broadly, in the absence of travel to affected areas, remains very low

Public Health Agency of Canada 2019 novel coronavirus: For health professionals

 https://www.canada.ca/en/public-health/services/diseases/2019-novelcoronavirus-infection/health-professionals.html

Ontario Ministry of Health - Guidance for Health Care Workers and Health Sector Employers on novel coronavirus associated with Wuhan, China (2019-nCoV)

 http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/2019 _guidance.aspx



Learning Objectives

Coronavirus

- · History of emerging diseases
- Overview of the 2019-nCoV
- Case definition & CHN reporting responsibilities
- · How to prevent & prepare
 - Community
 - Clinic

Routine Personal Protective Equipment

- IPAC
- Resources
- Questions





Emerging Infectious Agents

- viruses continue to emerge around the world posing threats to human health and challenges to public health
- 70-80% of these viruses are found in animals
 some can be transmitted from animals and humans
- factors that contribute to the emergence and spread of infectious diseases include:
 - Population growth
 - · Climate change
 - Urbanization
 - International travel

Examples	5
• 2002:	Severe Acute Respiratory Syndrome coronavirus (SARS-CoV, from bats then to civet cats)
• 2009:	H1N1 influenza (from birds)
• 2012:	Middle East Respiratory Syndrome coronavirus (MERS-CoV, from camels)
• 2015:	Ebola Virus Disease (from bush meat)
• 2019:	Novel coronavirus (2019-nCoV, from unknown source at this point)





Coronavirus

- family of viruses known to cause mild illness in humans ranging from the common cold, to more severe diseases such as MERS and SARS
- a new, or novel, coronavirus is called nCoV



2019 Novel Coronavirus (2019-nCoV)

- first detected in Wuhan City, Hubei Province, China
- identified on December 31, 2019, after several unusual pneumonia cases seen in Wuhan
- genetically distinct from common human coronaviruses
- monitored closely by both Provincial and Federal Health Authorities

Cases:

- •3 cases confirmed in Ontario*
- •1 case confirmed in British Columbia*
- •All had history of recent travel from China

* as of Feb 3, 2020 Source: Public Health Ontario



2019 Novel Coronavirus (2019-nCoV) Overall risk of disease spread remains low in Canada

Incubation:

• 2-14 days after exposure

Infectivity:

• duration unknown

Transmission:

- person to person, especially during close contact
- e.g. household contacts, clinical care without appropriate PPE
- people at risk include:
- close contact with animals (e.g. working with animals)
- family members caring for person infected by new coronavirus
- health care workers caring for person infected by new coronavirus
- pre-existing chronic health conditions
- age

Symptoms:

- fever
- cough
- difficulty breathing
- pneumonia
- · kidney failure
- illness ranges from mild to severe mild
 - flu-like symptoms

severe

- · pre-existing chronic health conditions
- age

Treatment:

- no treatment or vaccine is available
- · supportive care



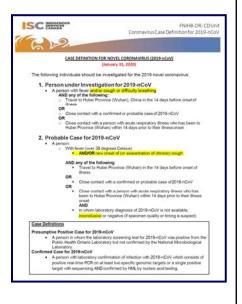
Case Definition & Reporting

- Case Definitions are updated regularly by the Ministry of Health
 - Communications will be sent out from the CD Unit related to definition changes
- Report any suspected cases immediately to CD Nurse
 - CD Nurse will follow up with Regional physician and local Public Health Unit who will determine if testing is indicated

Link for more information related to testing:

https://www.publichealthontario.ca/en/laboratory-services/test-information-index/wuhan-novel-coronavirus





List of Diseases of Public Health Significance to Report: Coronavirus ADDED

- Coronavirus associated disease, novel, including:
 - 1. Severe Respiratory Syndrome (SARS)
 - 2. Middle East Respiratory Syndrome (MERS)
 - 3. 2019-novel coronavirus
- Reportable Disease Form has been updated to reflect this and posted on Onehealth.ca







Role of the CHN: Preparation, Planning & Prevention

- Education
 - clients, community, Health facility staff and Chief & Counsel on Coronavirus
 - provide credible resources for accurate and current information
 - · use various means of communication applicable for the community
- Prepare for Appropriate Screening & Assessment
- Practice appropriate Infection Prevention and Control
 - continue routine infection prevention and control practices
 - · apply additional precautions based on risk assessment



Preparation – Community Education

- be up-to-date with all recommended adult vaccinations as per current Publicly Funded Immunization Schedule for Ontario
- provide up to date education and awareness on the novel virus to community via usual communication channels
 (e.g. radio, bulletin board, community social media website, newsletters)
- · hand hygiene practices
- · cough etiquette
- avoid touching your face, mouth, nose and eyes with unwashed or gloved hands
- avoid close contact with anyone with anyone developing cold or flu-like symptoms and seek medical care if exhibiting any fever, cough, difficulty breathing
- individuals planning to travel should consult PHAC travel advisory website



Preparation – Clinical Setting

Screening/Signage (passive screening):

Do you have fever and/or onset of cough or difficulty breathing, **AND** any of the following:

 Travel to Hubei Province (includes Wuhan), China in the 14 days before onset of illness

OR

Close contact with a confirmed or probable case of 2019-nCoV

OR

• Close contact with a person with acute respiratory illness who has been to Hubei Province (Wuhan), China within 14 days prior to their illness onset

Clients meeting above criteria should be isolated immediately and further assessed after donning PPE



Preparation – Clinic Staff

- self- monitor for fever and respiratory symptoms such as cough, shortness of breath and/or difficulty breathing
- seek medical attention and report these to your manager and occupational heath and safety department
- stay informed with memos from the Communicable Disease Unit,
 Public Health Agency of Canada, and the Ministry of Health and
 Long-Term Care
 - Onehealth.ca
- ensure all staff are:
 - aware of screening criteria
 - · updated as needed regarding changes in case definition
 - · screening for travel history



Preparation – Clinic Supplies

- adequate supply of personal protective equipment for at least 2 weeks
 - Including: gloves, gown, surgical mask, N-95 or fit tested mask, eye shield
 Ontario's Pandemic Plan recommends the following formula
 to calculate the number of N95 masks required during a pandemic,
 which can be used as a guide:

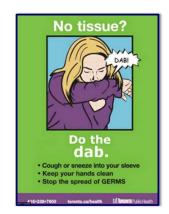
staff/shift X 4 PPE changes/shift X n shifts/day X n days

- confirm appropriate stock for testing supplies
 - i.e. nasopharyngeal swabs and viral swab kits, laboratory forms, transport supplies
- ensure the "pandemic box" is up-to-date
 - for health centres with treatment and nursing stations
- communicable disease plan is up-to-date (aka pandemic plan)
 - ensure involved stakeholders and partners are aware of their role
- reference cleaning and sanitation procedures for all precautions as per Environmental Cleaning Manual



Patient Management

- · identify appropriate room for patients being isolated
- post signage for required precautions
- patients should wear a surgical mask during transportation, if tolerated
- equipment must be dedicated to the client whenever possible
- · visitors should be kept to a minimum
- ensure education on hand hygiene and appropriate use of PPE as indicated on the signage



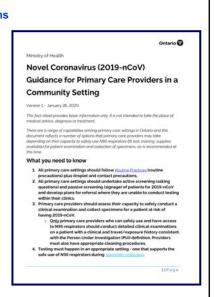




Infection Prevention and Control

- PPE and contact, droplet and airborne precautions are encouraged should a patient present with the criteria outlined in the Ministry's guidance document
- additional information related to routine practices and additional precautions for the Coronavirus is found within the Ministry document
- IPAC recommendations and resources may be found in FNIHB-OR Nursing policies (<u>Onehealth.ca</u>)
- the application of routine practices and additional precautions (RPAP) is based on a point-of-care risk assessment (PCRA)





Infection Prevention and Control

- healthcare workers (HCW) should use both Droplet/Contact and Airborne precautions
 - i.e. gown, gloves, eye protection, N95 respirator or fitted mask
- new PPE must be worn by the HCW between each client and if PPE becomes soiled
- patients should wear a surgical mask during transportation
- ensure that precautions are initiated whenever a case is suspected;
 precautions to be discontinued when case is cleared



Infection Prevention and Control

- appropriate selection and use of personal protective equipment:
 - gloves; AND
 - a long-sleeved gown; AND
 - facial protection: Surgical/procedural mask and eye protection, face shield, or surgical/procedural mask with visor attachment

Hand hygiene should be performed whenever indicated, paying particularly attention to before and after removal of PPE, and after leaving the patient care environment



Use of IPAC Policy & Procedure

Policy & Procedure Manual is available on Onehealth.ca

Suggested Ways to use the IPAC Policy and Procedure Manual

- Keep this manual in a readily available place as a reference on current IPAC best practices in the health care setting.
- 2. This manual should be used as part of the IPAC orientation for newly hired HCPs.
- FNIHB staff should review this manual and could use this activity as part of their individual Learning and Development Plan within the Performance Management Agreement.
- Supervisors/managers can use the policies and procedures to audit IPAC best practices in the health care setting and to develop appropriate education plans for the HCPs they supervise/manage.
- 5. In order to use this manual to capacity, FNIHB HCPs should review the next section (Overview of the Chain of Transmission) of this manual as part of their orientation and/or Learning and Development Plan to understand the basic principles behind infection prevention and control and how it relates to all health care delivery by all health care providers.

The policies and procedures in this manual are primarily based on the Provincial Infectious Diseases Advisory Committee (PIDAC) Best Practice documents. The best practices in this manual reflect the best evidence available at the time of development. As new information becomes available, these policies and procedures will be reviewed and updated.

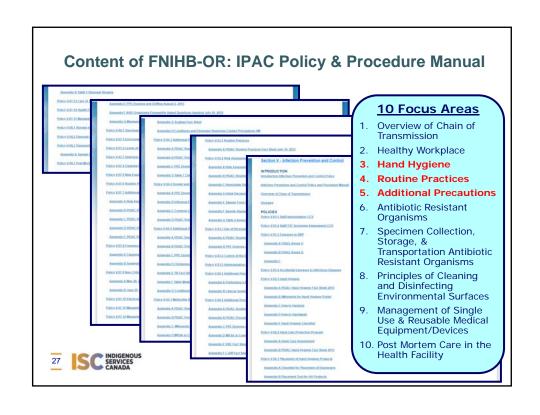


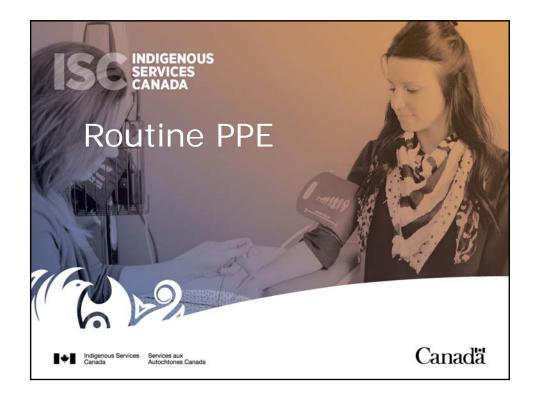
Reference the IPAC Policy & Procedure Manual- 2017

Location of FNIHB-OR: IPAC Policy & Procedure Manual



26 SC INDIGENOUS SERVICES





POINT-OF-CARE RISK ASSESSMENT (PCRA)

- determining if there is a risk of HCP being exposed to an infectious agent for a specific interaction, with a specific client, in a specific environment and under current conditions
- choosing the appropriate actions (e.g. placing the client in a single room) and PPE needed to minimize the risk of exposure
- PCRA is performed by HCP to determine:
 - the appropriate IPC measures for safe client care (e.g., to protect the client from transmission of microorganisms)
 - to protect the HCP from exposure to microorganisms (e.g., from sprays of blood)



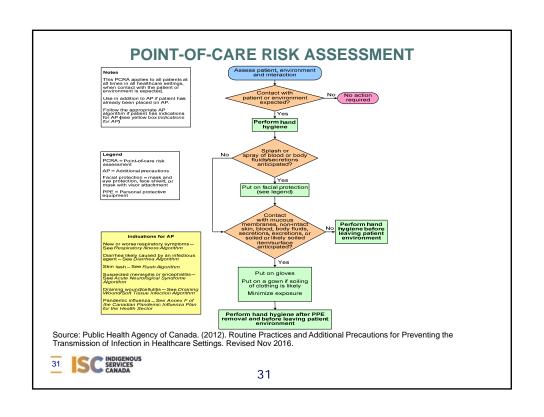
29

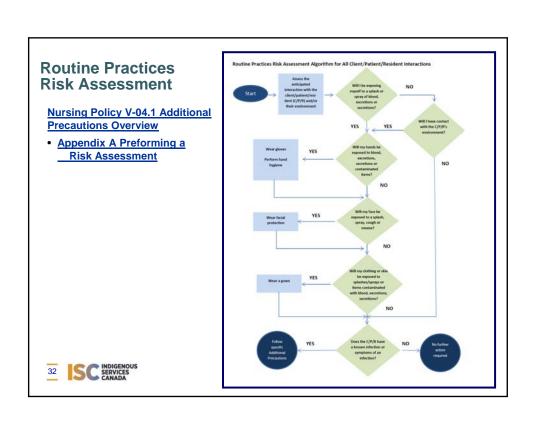
POINT-OF-CARE RISK ASSESSMENT (PCRA)

PCRA should be performed prior to every client interaction:

- What type of contact will I have with the client or their environment?
- What task(s) or procedures(s) will I do?
- Will my hands be exposed to blood, other body fluids or contaminated items?
- Will my face be exposed to splashes or sprays?
- Will my clothing or skin be exposed to splashes or sprays?







CLIENT PLACEMENT AND ACCOMMODATION

- based on risk assessment
- prioritized for single room placement (if available) according to the potential for transmission of microorganisms

Priority

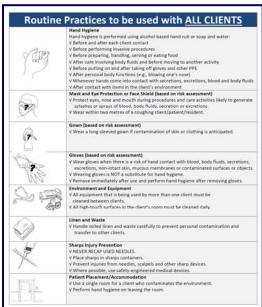
additional precautions: contact, droplet, airborne

- ii. visible soiling of the environment or cannot maintain appropriate hygiene, including respiratory hygiene
- iii. uncontained secretions or excretions
- iv. wound drainage that cannot be contained by a dressing
- v. fecal incontinence if stools cannot be contained in incontinent products or infant diapers

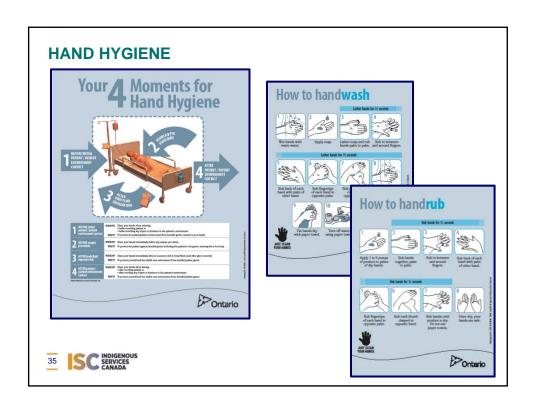


33

Routine Practices



34 SC INDIGENOUS SERVICES CANADA



USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

- need for and type of PPE is informed by the PCRA
- effectiveness of PPE is highly dependent on its appropriate and correct use







USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

Basic principles of safe and effective PPE use:

- large enough to allow unrestricted free movement of body and arms
- must be correctly in place before entering the client care area
- should be put on in a clean area outside the client room
- have sufficient and undisturbed time to put on and remove PPE correctly
- worn for the duration of exposure to potentially contaminated areas must not be adjusted during client care
- be removed in a designated area, immediately outside the client care area, and away from clean areas
- should be discarded into designated receptacles immediately after use



ADDITIONAL PRECAUTIONS: CONTACT

- <u>Contact Precautions</u> are used to prevent transmission of diseases by contact with an infected or colonized individual (direct) or their environment (indirect)
 - · most common route by which infectious agents are spread

PPE	Based on PCRA • Gloves
	• Gown
Common	Norovirus
Infections	• MRSA
	C-diff
Example of	Diarrhea
Symptoms	Vomiting
	 Open, draining wounds
	 Patches of open skin
	Rash



ADDITIONAL PRECAUTIONS: DROPLET

- <u>droplet Pprecautions</u> prevent transmission of diseases caused by large respiratory droplets that are generated by coughing, sneezing, or talking
 - can also contaminate the environment (e.g. a nearby table) and lead to indirect contact transmission

PPE	 Mask and face shield Gloves and gown based on PCRA (particularly if contact with client environment is anticipated)
Common Infections	Influenza Pertussis
Example of Symptoms	 Coughing Sneezing May or may not be accompanied by a fever, fatigue, and headache



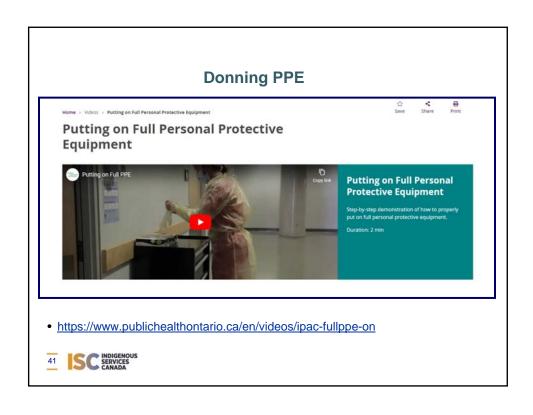
39

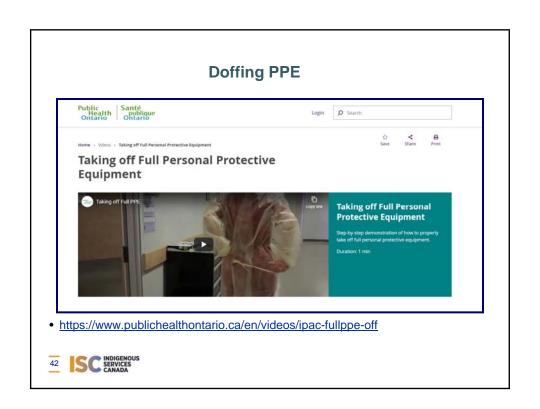
ADDITIONAL PRECAUTIONS: AIRBORNE

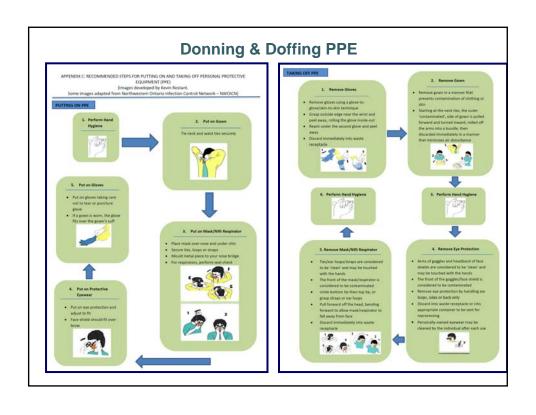
- <u>airborne precautions</u> are used for clients with known or suspected infectious agents that spread through aerosolized airborne droplets (e.g. Tuberculosis or measles)
 - remain suspended in the air for long periods of time and can be dispersed by air currents

PPE	 N95 Respirator and face shield If N95 not available, use a regular procedure mask and ask the client to put one on as well
Common Infections	TuberculosisMeasles
Example of Symptoms	Chronic cough with possible night sweatsFever with unexplained rash

40 SC INDIGENOUS SERVICES

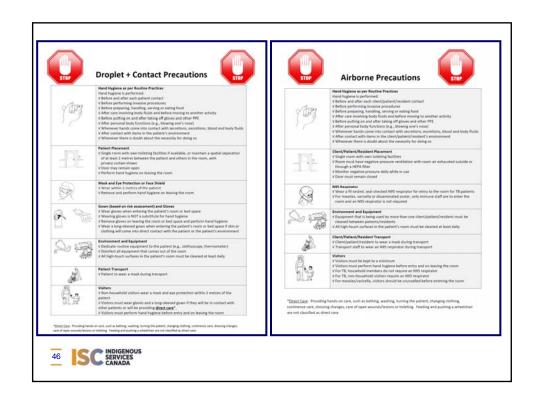












WHO: Coronavirus



- https://www.who.int/emergencies/diseases/novel-coronavirus-2019
- https://www.youtube.com/watch?time continue=7&v=mOV1aBVYKGA&feat ure=emb logo

(Youtube link, which may make it easier to share on social media sites)



Additional Materials:

Companion Manual for Environmental Cleaning

The policies and procedures in Section 8.0 (Environmental Cleaning) of this manual should be used in conjunction with the companion manual, FNIHB-OR *Environmental Cleaning Procedure Manual*. The companion manual provides step-by-step procedures for cleaning shared non-critical medical equipment such as blood pressure cuffs, stethoscopes, otoscopes, ophthalmoscopes, oximetry monitors, crutches, basins, k - basins, stretchers, walkers, and wheel chairs that may be used by nurses and other HCPs during client care within the health facility.



48 SC INDIGENOUS SERVICES CANADA

Reference the IPAC Policy & Procedure Manual- 2017

Additional Materials:

All CD Unit Coronavirus material & resources can be found on Onehealth.ca

- -Public Health
- -Communicable Disease Unit
- -Other Communicable Disease

Links to other relevant

Infection Prevention and Control guidelines:

- · Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings
- · See the below resources issued for further information and support
 - CD Unit- Coronavirus Preparation Information Sheet Jan 30 2020
 - CD Unit- Coronavirus Case Definition (as of most recent release date)
 - FNIHB-OR: Nursing Policies (IPAC: Hand Hygiene, Routine Practices including Risk Assessment, PPE, Additional Precautions, etc.) (Available on Onehealth.ca)
 - Novel Coronavirus (2019-nCoV) Guidance for Primary Care Providers in a Community Setting
 - Public Health Ontario: Novel Coronavirus (2019-nCoV)
 - Public Health Agency of Canada: 2019 Novel Coronavirus infection (Wuhan, China): for health professionals
 - https://www.publichealthontario.ca/-/media/documents/mers-cov-preparedness-tools.pdf?la=en
 - Public Health Ontario: Tools for Preparedness: Triage, screening and patient management for Middle East Respiratory Syndrome Coronavirus (MERS-CoV) infections in acute care settings



References

- Ministry of Health (2019). Wuhan Novel Coronavirus (2019-nCoV). Available at, https://www.ontario.ca/page/wuhan-novel-coronavirus-2019-ncov
- PHO (2012). Routine Practices and Additional Precautions. Available at,
- PHO (2013). Best Practice for Prevention of Transmission of Acute Respiratory Infection. Available at,
- https://www.publichealthontario.ca/-/media/documents/bp-prevention-transmission-ari.pdf?la=en
- PHO (2016) Tools for Preparedness MERS-CoV. Available at, https://www.publichealthontario.ca/media/documents/mers-cov-preparedness-tools.pdf?la=en

Resources:

- Public Health Agency of Canada Novel Coronavirus Update (2019). Available at, https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html
- Public Health Agency of Canada Novel Coronavirus Symptoms (2019). Available at, https://www.canada.ca/en/public-health/services/diseases/coronavirus.html
- Public Service Occupational Health Program (2019). Occupational Health Advisory: Novel Coronavirus General Information.



