CSRT Rapid Response Return to Practice Toolkit – Infection Control and Personal Protective Equipment (PPE)

Resources (Basic Review):

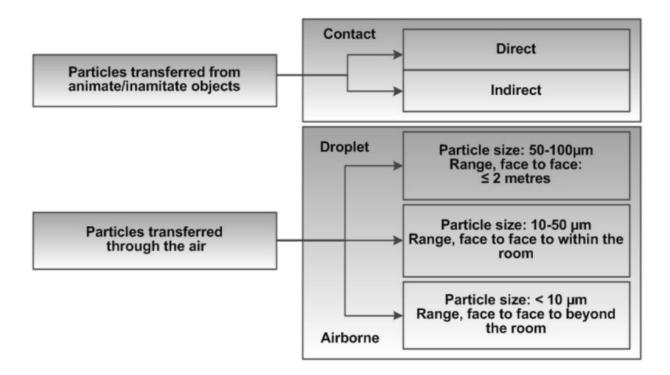
- Health Canada Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings: Click here
- Donning and doffing personal protective equipment: Novel pathogens: donning & doffing PPE for aerosol-generating procedures: <u>Click here</u>
- CSRT Position Statement on Procedures Creating a Heightened Risk of Infection During an Outbreak of a Communicable Respiratory Disease: <u>Click here</u>
- CSRT and CTS Position Statement on Resumption of Pulmonary Function Testing during the Post-peak Phase of the COVID-19 Pandemic: Click here
- CRTO Clinical Best Practice Guideline: <u>Click here</u>

Precautions

Various levels of precautions are applied to ensure the safety of healthcare personnel and patients, and to prevent the transmission of infection. The specific type of precaution applied depends on the mode of transmission of the pathogen in question. Standard precautions are applied to all patient care and include hand hygiene, appropriate use of personal protective equipment, respiratory/cough etiquette, appropriate patient placement, proper handling, cleaning and disinfection of equipment and environment, proper handling of textiles and laundry, safe injection practices and the proper handling of sharps

This following figure, taken from <u>Health Canada</u> resources, demonstrates the type of transmission of infectious agent exposure specific to the contact, droplet or airborne routes. Health Canada notes that "research has demonstrated that both droplet and airborne-sized particles can be found in the air at close proximity (up to two meters) to a coughing/sneezing source. In addition, a portion of larger particles (droplets) may desiccate (and so become smaller) while in the air and become, in effect, droplet nuclei".

The CSRT Rapid Response Refresher Resource is intended to provide respiratory therapists with review materials. For information specific to the management of Coronavirus disease, please refer to the CSRT COVID-19 resource page: https://www.csrt.com/csrt-novel-coronavirus-resources/.



Specific Transmission Precautions

Transmission precautions (contact, droplet, airborne) are used in addition to standard precautions as the second tier in a multi-tiered infection control strategy when a person has a known or suspected infection.

The US Centers for Disease Control has a succinct outline of specific transmission precautions on its webpage <u>Transmission Based Precautions</u>. It is important to take note of transmission precaution signage and requirements when working with patients. Samples of signs are provided below.







Images from: https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html

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Please refer to the above resources for more information on the specific requirements of standard and transmission-based precautions.

Aerosol generating procedures

- bronchoscopy
- cardiopulmonary resuscitation
- high flow nasal cannula
- intubation and extubation
- nebulization of respiratory medications,
- non-invasive positive pressure ventilation
- open suctioning
- sputum induction
- pulmonary function testing*

Airborne precautions are recommended when performing the above procedures during an outbreak of a communicable respiratory disease.

Airborne precautions require gloves, an isolation gown, a properly-fitted N95 mask and eye protection (goggles or face shield), and proper donning and doffing and handwashing protocols.

*The CSRT and Canadian Thoracic Society recently released a <u>position statement</u> on resumption of pulmonary function testing. The consensus of the team of authors is that pulmonary function testing presents a risk of aerosol production and that airborne precautions be applied.