

General Radiography Chest Imaging during COVID-19 Pandemic

If you have any questions or comments regarding this information sheet please contact DI.EmergencyResponse@ahs.ca

The purpose of this document is to outline general radiography chest imaging strategies that maximize compliance with Infection Prevention & Control (IPC) standards of practice while minimizing use of Personal Protective Equipment (PPE) and adhering to radiation protection principles during pandemic.

Principles

- Chest imaging cannot diagnose COVID-19, but may help with the diagnosis of Influenza Like Illness (ILI) and COVID-19 related respiratory complications.
- General radiography chest x-rays should only be ordered to assess for complications of COVID-19 (such as ARDS or bacterial superinfection) and other respiratory etiologies presenting to the ER
- During pandemic, chest radiography/x-ray orders should be performed using a mobile/portable machine to:
 - provide a single AP Projection of the chest to diagnose/rule-out respiratory complications
 - limit movement of ILI and COVID-19 + patients through the facility to minimize the risk of exposure to others
 - minimize the number of healthcare workers with direct patient contact while providing quality patient care
 - minimize the use of PPE required for each case

General Radiography Chest Imaging

For facilities with both dedicated Diagnostic Imaging General X-Ray departments AND mobile radiography units:

- Patients may be transferred to the general radiography imaging department when:
 - COVID-19 swab/lab test is negative, but patient is symptomatic with ILI
 - Patient must wear a face mask
 - Follow site process for advance communication with DI prior to movement of symptomatic patients
 - Request Chest-2 Projections
 - Imaging order should indicate patient isolation status
 - Wipe the handles of the bed before transport with disinfectant wipes. Designate one porter/assistant as 'clean' to open doors and touch elevator buttons.
 - Transport with minimum number of people necessary
- Patients should have chest x-rays performed portably when:
 - COVID-19 is confirmed (positive swab/lab results)
 - COVID-19 is suspected (pending swab/lab results)

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- Patients will have an AP chest x-ray performed via portable. Request Chest-1 Projection (Portable/Mobile)
 - Patient care staff will be required to assist x-ray technologist in positioning the patient and image receptor
 - Notify DI staff of request as per site process

For facilities with dedicated Diagnostic Imaging departments only:

- All patients may be transferred to the general radiography imaging department:
 - COVID-19 confirmed (positive swab/lab results), COVID-19 is suspected (pending swab/lab results) and ILI symptomatic patients must wear a face mask
 - Follow site process for advance communication with DI prior to movement of symptomatic patients
 - Request Chest-2 Projections
 - Imaging order should indicate patient isolation status
 - Wipe the handles of the bed before transport with disinfectant wipes. Designate one porter/assistant as 'clean' to open doors and touch elevator buttons.
 - Transport with minimum number of people necessary

For facilities with a dedicated COVID-19 + cohort space, assessment centers or treatment centers with mobile radiography units only:

- For stationary imaging set-ups using a portable/mobile:
 - Patients will have an AP or PA chest x-ray performed via portable. Request Chest-1 Projection (Portable/Mobile)
 - Patient care staff will be required to assist x-ray technologist in positioning the patient and image receptor
 - Notify DI staff of request as per site process
- For portable/mobile general imaging:
 - Patients will have an AP chest x-ray performed via portable. Request Chest-1 Projection (Portable/Mobile)
 - Patient care staff will be required to assist x-ray technologist in positioning the patient and image receptor
 - Notify DI staff of request as per site process

Definitions for the purpose of this information sheet:

Mobile/portable means that a portable radiographic unit will be used by the x-ray technologist(s) to come to the patient bedside to perform the imaging request and is designed for when patient transport is contraindicated.