

Situation:

During COVID crisis a rise in the use of portable radiographs has been recommended to minimize risk of spread and equipment down time.

Background:

Portable chest imaging is a frequently ordered exam in the work-up of complicated pneumonia and may have a role in patients being admitted with suspected or known COVID infection to assess extent of lung disease. The standard work-flow for a portable chest radiograph for any suspected or known COVID patient would require full PPE use by the technologist and full equipment wipe down if brought into the patient room.

Assessment:

A modification to the portable chest radiograph process for suspected or known positive COVID patients in the Emergency Room may allow for less risk to staff and decreased use of PPE.

Recommendation:

Portable chest radiographs in the ED may be acquired at 72 inches source to detector distance with portable unit outside of patient room

- Patient must be able to sit upright
- RN should don full PPE (note in ED setting surgical mask may be used instead of N95)
- Technologist will wear surgical mask and gloves
- RN will be handed bagged detector and given instructions on proper placement
- RN will move stretcher closer to glass door and exit patient room
- Proper techniques to be set on Dart portable unit
 - Select “Covid chest” tile
 - with glass: 110 @ 6.4
 - without glass: 110 @ 4 for average size patient, or decrease mAs by two stations from what you would expect with the glass
- Exposure will be made with RN outside of room, technologist will stand six feet from where the x-ray beam intercepts the glass, but off to the side towards the wall.
- After exposure, RN will retrieve the bagged detector and slide it partially out of bag
- Tech will grab detector from inside of bag and disinfect detector with cavi wipes
- RN will then dispose of bag in trash in room
- Tech labels film as 72” on PACS