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<b>Channel:</b> Devices	<b>FDA:</b> Not Specified	<b>Last Updated:</b> 04/21/2020
<b>[COVID-19] Failure to Routinely Clean CT Scanner or Fixed Radiology Equipment Surfaces between Patients Could Intensify Community Spread of COVID-19 [ECRI Exclusive Hazard Report]</b>		

## Product Identifier(s)

[Capital Equipment]

Device: (1) Computed Tomography (CT) Systems, (2) Radiographic Systems

## Problem

1. Using fixed radiology equipment, including CT, on contagious patients may lead to contamination.
2. If a contaminated CT is used, there is a:
  1. High risk of patient cross-contamination
  2. High risk of staff contamination
  3. Reduced availability of the CT scanner or fixed radiology equipment because of extended decontamination requirements

## ECRI Recommendations:

1. Use fixed radiology equipment only if necessary for patient care.
2. Use portable radiologic imaging if available and appropriate for patient care.
3. If you have to use fixed radiology equipment:
  1. Staff must wear PPE if coming into patient contact.
  2. Patients should wear surgical masks.
  3. Patient mattresses should be covered with sheets (reusable).
  4. The imaging room must be ventilated. Verify the frequency of air exchanges with facilities and wait this amount of time between patients.
  5. Remove all accessories and devices from the exam room (e.g., monitors, injectors, lead aprons) to avoid them being contaminated.
  6. Keep the control room clean.
    1. One radiologic technologist wears PPE, is responsible for the patient, and does not enter the control area if contaminated.
    2. A second radiologic technologist operates the CT scan from the control room and has not contact with the patient.
  7. If possible, group cases of COVID-19 patients at the end of the day. This will give more time for terminal cleaning and disinfecting.
  8. If needed, check the device instructions for use for recommended cleaners and disinfectants, as well as the recommended cleaning and disinfection procedures.
  9. Every surface of the CT scanner or fixed radiology equipment must be cleaned between patients.
    1. Cleaned with a recommended cleaner following the manufacturer-specified cleaning protocol
    2. Disinfected with a recommended disinfectant from [EPA's List N: Disinfectants for Use against SARS-CoV-2](#). Ensure that all surfaces remain wet for the contact time specified on the product label.

## Background:

- CT can demonstrate lung disease, including COVID-19; however, it has not been proven to improve COVID-19 patient outcomes. See [ACR Guidance](#).
- Decontaminating control consoles would be very difficult as they use standard computer keyboards, etc.
- Ventilation is essential to remove contaminated air.
- Patients may exhale droplets and aerosol that can contaminate any parts of the CT or fixed radiology equipment that are not wrapped in disposable covers (e.g., plastic enclosures, side of patient table).
- COVID-19 has been found to have a long life-span on surfaces (2 to 3 days for plastic).

- ECRI provided the disinfectant concentrations for each product in EPA's list of SARS-CoV-2 disinfectants [here](#).

**UMDNS Term(s)**

Radiographic Systems [18429]  
Radiographic Systems, Digital, Chest [18431]  
Scanning Systems, Computed Tomography [13469]

**Geographic Region(s)**

Worldwide

**Suggested Distribution**

Clinical/Biomedical Engineering, Infection Control, Oncology, Diagnostic Imaging, Risk Management/Continuous Quality Improvement, Radiation Oncology/Medical Physics

**Comment**

- This alert is a living document and may be updated when ECRI receives additional information.