



Supplement I: Infection Control in Healthcare, Home, and Community Settings

VIII. Infection Control for Laboratory and Pathology Procedures

Despite the processing of several thousand diagnostic specimens from patients with SARS-CoV disease in routine clinical laboratories around the world, to date there have been no reported clusters of SARS-CoV disease among laboratory workers. To date, the only confirmed episode of SARS-CoV transmission to a laboratory worker occurred in a research laboratory. The risk of transmission to laboratory personnel is most likely during specimen processing and handling of virus cultures.

A. *Specimen Collection and Handling*

Objective: Safely collect and handle specimens from SARS patients to prevent transmission of SARS-CoV.

Activities

- Healthcare workers who collect specimens from SARS patients should wear PPE as appropriate for Standard, Contact, and Air Precautions (www.cdc.gov/ncidod/hip/ISOLAT/isopart2.htm).
- Standard facility procedures for specimen collection and transport to the clinical laboratory should be followed.
- All specimens should be appropriately contained (bagged if necessary) and have a completed laboratory requisition slip attached. Information on the requisition slip should indicate that the patient is or could be infected with SARS-CoV. Laboratory personnel should be alerted to the possibility of SARS-CoV to ensure safe handling procedures.

B. *Laboratory Procedures*

Objective: Safely process SARS-CoV specimens to prevent transmission.

Activities

- Biosafety levels 2 and 3, according to specimen type, are recommended for processing SARS-CoV specimens. The specifics of these recommendations are provided in Supplement F.

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C. *Postmortem Handling of Human Remains*

Objective: Safely handle human remains during autopsy procedures to prevent transmission of SARS-CoV.

Activities

In general, safety procedures for human remains infected with SARS-CoV should be consistent with those used for any autopsy procedure. However, additional respiratory protection is needed during an autopsy procedure that generates aerosols (e.g., use of oscillating saws).

Personal protective equipment (PPE)

- Wear standard autopsy PPE, including a scrub suit worn under an impervious gown or apron, eye protection (i.e., goggle, face shield), double surgical gloves with an interposed layer of cut-proof synthetic mesh gloves, surgical mask or respirator, and shoe covers.
- Add respiratory protection if aerosols might be generated. This includes N-95 or N-100 disposable particulate respirators or PAPR. Autopsy personnel who cannot wear a disposable particulate respirator because of facial hair or other fit limitations should wear a loose-fitting (i.e., helmeted or hooded) PAPR.
- Remove PPE before leaving the autopsy suite and disposed in accordance with facility policies and procedures.

Engineering controls

- Whenever possible, perform autopsies on human remains infected with SARS-CoV in autopsy settings that have adequate air-handling system. This includes a minimum of 6 (old construction) to 12 (new construction) ACH, negative pressure relative to adjacent areas as per recommendations for AIIRs, and direct exhaust of air to the outside or passed through a HEPA filter if air is recirculated. Exhaust systems around the autopsy table should direct air (and aerosols) away from healthcare workers performing the procedure (e.g., exhaust downward).
- Use containment devices whenever possible. Use biosafety cabinets for the handling and examination of smaller specimens. When available, use vacuum shrouds for oscillating saws to contain aerosols and reduce the volume released into the ambient air environment.

Prevention of percutaneous injuries

- Follow standard safety procedures for preventing percutaneous injuries during autopsy.

For more information, visit www.cdc.gov/ncidod/sars or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)