Hospital Operations Toolkit for COVID-19

Infection Prevention and Control:
Elimination and Substitution Controls

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The hierarchy of controls developed by the National Institute for Occupational Safety and Health offers a framework to protect those in a hospital from exposure to the SARS-CoV-2 virus.

The most effective control – elimination – has been implemented to a limited extent in hospitals responding to the COVID-19 pandemic.

- The expanded use of telehealth may partially eliminate the hazard for some patients by offering an option to receive care without entering a hospital.
- Many hospitals maximized the use of work from home to eliminate the workplace exposure risk of administrative and other staff able to work remotely.
- Web-based conferencing can be used to continue necessary meetings, site visits, or training while eliminating the need for staff to gather in person.
- Staff can reduce exposure risks by avoiding occupied public spaces and shared workspaces.
- Changes in staff responsibilities (e.g., not having dietary personnel deliver trays) can reduce exposures.
- Some jurisdictions and health systems have designated specific facilities for the care of COVID-19 patients. While these COVID-19-designated facilities do not eliminate the hazard of COVID-19 in other hospitals, they may reduce some transmission risk.
- Available vaccines continue to show effectiveness in eliminating some cases and decreasing hospitalizations.

The second most effective control – substitution – is not feasible for this situation.

A combination of engineering controls, administrative controls, and personal protective equipment may substantially decrease exposure risks in hospitals.

**Resources Related to Elimination and Substitution Controls**

- ASPR TRACIE:
  - [Acute Care Delivery at Home](#)
  - [COVID-19 Telemedicine/Virtual Medical Care Resources](#)

Information on the use of telehealth can be found in the Telehealth/Virtual Medicine section.
- COVID-19 Vaccine Planning and Considerations
- COVID-19 Vaccine Resources
- Designated COVID-19 Hospitals: Case Studies and Lessons Learned
- National Institute for Occupational Safety and Health: Hierarchy of Controls

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