

Guidance on reducing contamination risk for patients and providers

I. Hand Hygiene Information

- [CDC guidelines and recommendations for hand hygiene](#)
- [CDC guidelines on the use of hand sanitizer](#)
- [3M™ Avagard™ \(Chlorhexidine Gluconate 1% Solution and Ethyl Alcohol 61%, w/w\) surgical hand antiseptic application video](#)

II. Isolation room procedures

Standard Precautions include hand hygiene, use of gloves, gown, mask, eye protection and safe injection practices.¹ For contact precautions, the CDC strongly recommends using disposable noncritical patient-care equipment or implement patient-dedicated equipment.²

When the infectious agent is spread by contact through close respiratory or mucous membrane contact with respiratory secretions, Droplet Precautions are implemented.² Placing the patient in a single room and having visitors and healthcare providers wear a mask are recommended practices for Droplet Precautions.²

Airborne Precautions are implemented when the infectious agent is small enough to remain suspended in the air.² Patients should be placed in a single room with negative air flow and healthcare providers should wear respirators when caring for these patients.²

It is important to note that the CDC states “In all healthcare settings, providing patients who are on Transmission-Based Precautions with dedicated non-critical medical equipment (e.g., stethoscope, blood pressure cuff, electronic thermometer) has been beneficial for preventing transmission.”²

1. Centers for Disease Control and Prevention. Standard precautions for all patient care. <https://www.cdc.gov/infectioncontrol/basics/standard-precautions.html>. Updated January 16, 2017. Accessed February 1, 2018.
2. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. <https://www.cdc.gov/infectioncontrol/guidelines/isolation/>. Updated October 2017. Accessed December 12, 2017.

III. Single-patient use product considerations

Single-patient stethoscopes

Patients in isolation are among the most infectious and can be vulnerable and susceptible to infection. Using a single-patient stethoscope is a recommended isolation precaution that helps lower the risk of cross-contamination.¹ A single-patient stethoscope should be used with patients under isolation precautions, stay in the patient’s room while the patient is in isolation, and be disposed of when no longer needed.¹

1. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. <https://www.cdc.gov/infectioncontrol/guidelines/isolation/>

Single-patient use medical tapes and wraps

Single-patient use rolls (typically 1-2 yds) are a recommended alternative to long rolls (typically 5-10 yds). And, if available, individually-packaged single-patient use rolls can help reduce cross-contamination risk beyond unpackaged single-patient use rolls, by helping prevent tape from being exposed to environmental contaminants, minimize contact with hospital surfaces and equipment, and minimize exposure to healthcare worker hands.

If you don't have access to individually-packaged or unpackaged single-patient use rolls, keep new rolls as clean as possible (in original box), use clean gloved hands, avoid putting tape on surfaces, and discard any unused portion of tape after use on your patient.

Since medical tapes are widely used in health care settings, come in direct contact with patient skin, are typically unpackaged, and cannot be decontaminated, they serve as a potential source of cross-contamination for health care workers and patients. One study, in a 16-bed ICU at a 560-bed teaching hospital, sampled 24 bedside tape rolls at 1, 5 and 7 days and found that 100% of the tape rolls sampled were contaminated.¹ A survey by the American Journal of Infection Control attributed the contamination risk to: (1) lack of policies or standards of care relating to tape storage and use; (2) tape stored in open bins in clean supply rooms which are not regularly cleaned; (3) staff members carrying rolls of tape in pockets or on stethoscopes; and (4) only 61.5% of staff discarding unused tape at patient discharge.²

Additional resources on medical tape contamination:

- [Watch a video on how contamination from tape may occur](#)
- [Evidence Summary: This brochure includes an evidence summary.](#)
- [Blog Post: Feb 2020 Transforming Outcomes post by 3M Senior Technical Service Engineer, Kimberly Schommer, RN, BSN, VA-BC.](#)

1. Berkowitz DM, Lee WS, Pazin GJ, Yee RB, Ho M. Adhesive Tape: Potential Source of Nosocomial Bacteria. *Appl Microbiol.* 1974;28(4):651-4.
2. McClusky J, Davis M, Dahl K. A gap in patient tape storage and use practices puts patients at risk for cutaneous fungal infections. *Am J Infect Control.* 2015;43(2):182-4.

Single-patient use disposable ECG leadwires

Using single-patient use disposable leadwires in place of reusables can eliminate a potential source of cross-contamination.¹ 3M advocates the use of single-patient use disposable ECG leadwires, especially in critical care areas, including the ED, OR, ICU and burn unit. One study has shown that 38% of cleaned reusable ECG leadwires tested were still contaminated with at-risk or potential-risk bacteria known to cause human infections.²

1. Scott RD II. The direct medical costs of healthcare-associated infections in U.S. hospitals and the benefits of prevention. Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention. March, 2009. Available at cdc.gov/hai/pdfs/hai/scott_costpaper.pdf
2. Albert NM, Hancock K, Murray T, et al. Cleaned, ready-to-use, reusable electrocardiographic lead wires as a source of pathogenic microorganisms. *Am J Crit Care.* 2010;19(6):e73-80.