

Standard precautions

Reviewed: June 14, 2019

Introduction

The Centers for Disease Control and Prevention (CDC) developed standard precautions to protect against the transmission of infection. CDC officials recommend that health care workers assume that all patients, regardless of their diagnosis, are potentially infected or colonized (carry an organism but not showing signs or symptoms of infection) with an organism that the patient could transmit in the health care setting.¹

Part of routine infection control practices, standard precautions include wearing gloves for situations involving known or anticipated contact with blood, body fluids, tissue, mucous membranes, or nonintact skin.¹ If the task or procedure you're performing may result in splashing or splattering of blood or body fluids to the face, you should also wear a mask and goggles or a mask with a face shield. If the task or procedure you're performing may result in splashing or splattering of blood or body fluids to the body, you should also wear a fluid-resistant gown or apron.^{1,2} Additional protective clothing, such as shoe covers, may be appropriate to protect your feet in situations that may expose you to large amounts of blood or body fluids (or both), such as when caring for a trauma patient in an operating room or emergency department.

You should combine standard precautions with transmission-based precautions for patients with confirmed or suspected infection with highly transmissible pathogens.^{1,3,4} (See [Transmission-based precautions](#).) (See the "[Airborne precautions](#)" and "[Contact precautions](#)" and "[Droplet precautions](#)" procedures.)

◆ **Clinical alert:** For information on Coronavirus disease (COVID-19), please refer to the latest recommendations from the CDC, located at https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%253A%252F%252Fwww.cdc.gov%252Fcoronavirus%252F2019-ncov%252Fhcp%252Finfection-control.html, when caring for a patient with known or suspected Coronavirus disease.◆

◆ **Clinical alert:** For information on Ebola virus disease, please refer to the latest recommendations from the CDC, located at <https://www.cdc.gov/vhf/ebola/clinicians/evd/infection-control.html>, when caring for a patient with known or suspected Ebola virus disease.◆

TRANSMISSION-BASED PRECAUTIONS		
These precautions may be necessary in addition to standard precautions, depending on the patient's condition.		
Precaution type	Indications	Nursing actions
Airborne	To prevent the spread of infection when a patient is suspected or known to have an infection that's spread by the airborne route	<ul style="list-style-type: none"> Place the patient in an airborne infection isolation room with monitored negative pressure if available. Caution all persons entering the room to wear a respirator mask (N95).¹ Staff who aren't immune to vaccine-preventable airborne diseases shouldn't care for the patient.¹
Contact	To prevent the spread of epidemiologically important infectious organisms through direct patient contact or indirect contact with the patient's environment	<ul style="list-style-type: none"> Place the patient in a single-patient room if possible. Wear a gown and gloves for all interactions with the patient or the patient's environment. Follow your facility's infection control plan to determine when to initiate contact precautions.³ Designate patient care equipment if possible.¹
Droplet	To prevent the spread of infectious organisms through close	

	respiratory or mucous membrane contact with respiratory secretions from an infected patient	<ul style="list-style-type: none"> Place the patient in a single-patient room if possible. Put on a mask before entering the patient's room if working within 3' (0.9 m) of the patient. Designate patient care equipment if possible.¹ The patient should wear a mask if transported outside of the room.¹
--	---	---

■ Equipment

- Gloves
- Mask and goggles or mask with face shield
- Gown
- Resuscitation bag
- Hospital-grade disinfectant
- Bags for specimens
- Optional: shoe covers, apron

■ Implementation

- Gather the necessary equipment.
- Perform hand hygiene before and after patient care and before putting on and after removing gloves.⁵ *Hand hygiene removes microorganisms from your skin.*^{6 7 8 9 10 11} If your hands aren't visibly soiled, you may use an alcohol-based hand rub for routine decontamination.^{1 6 7 8 9 10 11}
- Wash your hands immediately if they become contaminated with blood or body fluids, excretions, secretions, or drainage.^{2 6 7 8 9 10 11}
- Wear gloves if you could or will come in contact with blood, specimens, tissue, body fluids, secretions, excretions, mucous membranes, broken skin, or contaminated surfaces or objects.^{1 2 3}
- Change your gloves and perform hand hygiene when moving from a contaminated to a clean site during patient care and between patient contacts to avoid cross-contamination.^{1 5 6 7 8 9 10 11}
- Wear a fluid-resistant gown and a mask with a face shield or a mask and goggles during procedures likely to generate splashing or splattering of blood or body fluids, such as surgery, endoscopic procedures, dialysis, catheter insertion and intubation, and manipulation of arterial lines.^{1 2 5}
- Wear a mask during lumbar puncture procedures, such as a myelogram and spinal and epidural anesthesia. The practitioner performing the procedure should wear a mask with a face shield.¹
- Follow safe injection practices. Whenever possible, use single-dose vials instead of multidose vials. Use a sterile, single-use disposable needle and syringe for each injection.¹ Use safety needles if available.²
- Handle used needles and other sharp instruments carefully. Don't bend or break them, reinsert them into their original sheaths, remove needles from syringes, or unnecessarily handle them. Activate any safety mechanisms immediately after use. Discard the instruments intact immediately after use into a puncture-resistant sharps disposal container. Use tools to pick up broken glass and other sharp objects. *These measures reduce the risk of accidental injury and infection.* Use a needleless IV system whenever possible.^{1 2}
- Immediately notify your employee health care provider (or the provider's designee) of all needlestick and other sharp object injuries, mucosal splashes, and contamination of open wounds or nonintact skin with blood or body fluids to allow investigation of the incident and appropriate care and documentation. Be sure to complete all follow-up screening and care, as recommended by your employee health care provider.²
- Properly label all specimens you've collected in the presence of the patient to prevent mislabeling and place them in plastic bags at the collection site.¹² Attach requisition slips to the outside of all bags.²
- Place all items that have come in direct contact with the patient's secretions, excretions, blood, drainage, or body fluids—such as nondisposable utensils or instruments—in a single impervious bag or container labeled BIOHAZARDOUS before removing them from the room. Place linens and trash in single bags of sufficient thickness to contain the contents.^{1 2}

- While wearing the appropriate personal protective equipment, promptly clean all blood and body fluid spills. Blot the spill with an absorbent material (such as a paper towel) first and then clean the area with detergent and water. Notify the environmental services department of the spill *so that they can properly clean the area.*²
- If you have an exudative lesion, avoid all direct patient contact until the condition has resolved and your employee health care provider has cleared you.¹³
- If you have dermatitis or another condition resulting in broken skin on your hands, avoid situations in which you may have contact with blood and body fluids (even though you should be wearing gloves) until the condition has resolved and your employee health care provider has cleared you.
- Following the manufacturer's instructions, properly clean and disinfect or sterilize reusable equipment using a hospital-grade disinfectant before reuse.^{1 14 15}
- Teach patients, families, and visitors about hand hygiene, respiratory hygiene, and cough etiquette. Instruct visitors to perform hand hygiene before and after visiting with a patient. Provide a mask for anyone who shows symptoms of a respiratory infection. Tell visitors to cover the mouth and nose with a tissue when coughing or sneezing, dispose of the tissue promptly, and then perform hand hygiene.^{1 6 7 9 10 11}
- Document the type of transmission-based precautions necessary, if applicable, in addition to standard precautions.^{16 17 18}

■ Special Considerations

- Keep mouthpieces, resuscitation bags, and other ventilation devices nearby *to eliminate the need for emergency mouth-to-mouth resuscitation, thus reducing the risk of exposure to body fluids.*
- Be aware that disposable food trays and dishes aren't necessary for standard precautions.¹

◆ **Clinical alert:** Because you might not always know which organisms are present in every clinical situation, you must use standard precautions for every contact with blood, body fluids, secretions, excretions, drainage, mucous membranes, and nonintact skin.¹ Use your judgment in individual cases about whether to implement transmission-based precautions, such as airborne, droplet, or contact precautions or a combination of them. In addition, if your work exposes you to blood, you should receive the hepatitis B virus vaccine series.◆

■ Complications

Failure to comply with standard precautions may lead to exposure to bloodborne pathogens and other infectious agents and to all of the complications that they can cause.

■ Documentation

Document any transmission-based precautions that may be required in addition to standard precautions. Record patient, family, and other visitor teaching, their understanding of your teaching, and any need for follow-up teaching.

This procedure has been reviewed by the Academy of Medical-Surgical Nurses.



■ Related Lexicomp and UpToDate Patient Teaching Handouts

- [How to Wash Your Hands Properly](#)

■ References

[\(Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions\)](#)

1. Siegel, J. D., et al. (2007, revised 2018). "2007 guideline for isolation precautions: Preventing transmission of infectious agents in healthcare settings" [Online]. Accessed April 2019 via the Web at <https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf> (Level II)
2. Occupational Safety and Health Administration. (2012). "Bloodborne pathogens, standard number 1910.1030" [Online]. Accessed April 2019 via the Web at https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=10051&p_table=STANDARDS (Level VII)
3. The Joint Commission. (2019). Standard IC.02.01.01. *Comprehensive accreditation manual for hospitals*. Oakbrook Terrace, IL: The Joint Commission. (Level VII)
4. Accreditation Association for Hospitals and Health Systems. (2018). Standard 07.01.10. *Healthcare Facilities Accreditation Program: Accreditation requirements for acute care hospitals*. Chicago, IL: Accreditation Association for

Hospitals and Health Systems. (Level VII)

5. World Health Organization. (2007). "Standard precautions in healthcare" [Online]. Accessed April 2019 via the Web at http://www.who.int/csr/resources/publications/EPR_AM2_E7.pdf
6. Centers for Disease Control and Prevention. (2002). Guideline for hand hygiene in health care settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR Recommendations and Reports*, 51(RR-16), 1–45. Accessed April 2019 via the Web at <https://www.cdc.gov/mmwr/pdf/rr/rr5116.pdf> (Level II)
7. The Joint Commission. (2019). Standard NPSG.07.01.01. *Comprehensive accreditation manual for hospitals*. Oakbrook Terrace, IL: The Joint Commission. (Level VII)
8. Centers for Medicare and Medicaid Services, Department of Health and Human Services. (2018). Condition of participation: Infection control. 42 C.F.R. § 482.42.
9. DNV GL-Healthcare USA, Inc. (2019). IC.1.SR.1. *NIAHO® accreditation requirements, interpretive guidelines and surveyor guidance – revision 18.2*. Milford, OH: DNV GL-Healthcare USA, Inc. (Level VII)
10. World Health Organization. (2009). "WHO guidelines on hand hygiene in health care: First global patient safety challenge, clean care is safer care" [Online]. Accessed April 2019 via the Web at http://apps.who.int/iris/bitstream/10665/44102/1/9789241597906_eng.pdf (Level IV)
11. Accreditation Association for Hospitals and Health Systems. (2018). Standard 07.01.21. *Healthcare Facilities Accreditation Program: Accreditation requirements for acute care hospitals*. Chicago, IL: Accreditation Association for Hospitals and Health Systems. (Level VII)
12. The Joint Commission. (2019). Standard NPSG.01.01.01. *Comprehensive accreditation manual for hospitals*. Oakbrook Terrace, IL: The Joint Commission. (Level VII)
13. The Joint Commission. (2019). Standard IC.02.03.01. *Comprehensive accreditation manual for hospitals*. Oakbrook Terrace, IL: The Joint Commission. (Level VII)
14. Rutala, W. A., et al. (2008, revised 2017). "Guideline for disinfection and sterilization in healthcare facilities, 2008" [Online]. Accessed April 2019 via the Web at <https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf> (Level I)
15. The Joint Commission. (2019). Standard IC.02.02.01. *Comprehensive accreditation manual for hospitals*. Oakbrook Terrace, IL: The Joint Commission. (Level VII)
16. Accreditation Association for Hospitals and Health Systems. (2018). Standard 10.00.03. *Healthcare Facilities Accreditation Program: Accreditation requirements for acute care hospitals*. Chicago, IL: Accreditation Association for Hospitals and Health Systems. (Level VII)
17. Centers for Medicare and Medicaid Services, Department of Health and Human Services. (2018). Condition of participation: Medical record services. 42 C.F.R. § 482.24(b).
18. DNV GL-Healthcare USA, Inc. (2019). MR.2.SR.1. *NIAHO® accreditation requirements, interpretive guidelines and surveyor guidance – revision 18.2*. Milford, OH: DNV GL-Healthcare USA, Inc. (Level VII)

■ Additional References

- Centers for Disease Control and Prevention. (2004). "Guidance for the selection and use of personal protective equipment (PPE) in healthcare settings" [Online]. Accessed April 2019 via the Web at <https://www.cdc.gov/HAI/pdfs/ppe/PPEslides6-29-04.pdf>
- Powers, D., et al. (2016). Factors influencing nurse compliance with standard precautions. *American Journal of Infection Control*, 44, 4–7. (Level VI)
- Valdez, A. M. (2015). Are you covered? Safe practices for the use of personal protective equipment. *Journal of Emergency Nursing*, 41, 154–157. (Level VII)

Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions

The following leveling system is from *Evidence-Based Practice in Nursing and Healthcare: A Guide to Best Practice* (2nd ed.) by Bernadette Mazurek Melnyk and Ellen Fineout-Overholt.

Level I: Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials (RCTs)

Level II: Evidence obtained from well-designed RCTs

Level III: Evidence obtained from well-designed controlled trials without randomization

Level IV: Evidence from well-designed case-control and cohort studies

Level V: Evidence from systematic reviews of descriptive and qualitative studies

Level VI: Evidence from single descriptive or qualitative studies

Level VII: Evidence from the opinion of authorities and/or reports of expert committees

Modified from Guyatt, G. & Rennie, D. (2002). Users' Guides to the Medical Literature. Chicago, IL: American Medical Association; Harris, R.P., Helfand, M., Woolf, S.H., Lohr, K.N., Mulrow, C.D., Teutsch, S.M., et al. (2001). Current Methods of the U.S. Preventive Services Task Force: A Review of the Process. American Journal of Preventive Medicine, 20, 21-35.

