COLORADO
Department of Public Health & Environment

Infection prevention
Glucometer assessment checklist

May 2025

Glucometers are used to test a person's blood sugar levels. These devices are used in all types of healthcare settings. When improperly used, glucometers can spread bloodborne diseases such as hepatitis B, hepatitis C, and human immunodeficiency virus (HIV).

Health care facilities should routinely and consistently monitor infection prevention practices and requirements related to glucometer use. Audits are an important means of noting when additional training in response to lapses may be needed. Efforts should be made to assess the practices of all health care personnel (HCP) responsible for glucometer use.

Standardized procedures (i.e., following the same patterns and processes each time) assist in achieving accuracy, efficiency, and continuity among team members. Studies of human error have shown that many errors involve a deviation from routine practice. **Require all HCPs to perform their job duties in accordance with the standardized procedures and as outlined by the CDC**.

The Healthcare-Associated Infections and Antimicrobial Resistance (HAI/AR) Program at the Colorado Department of Public Health and Environment (CDPHE) developed a checklist to assist facilities with assessing their glucometer practices. The checklist represents best practices for infection control during glucometer use. Instructions for use include:

1. Ensure personnel responsible for performing assessments are adequately trained and competent in these areas being assessed and the use of this tool, as well as any assessment tool.
2. Observe glucometer use from start to finish, including collection of supplies, transportation, and storage.
3. Indicate whether practices were appropriately performed (yes or no).
4. Note when the recommended practice was not assessed or when there are deviations from best practices.
5. Provide prompt feedback in response to recognized lapses and guidance given for immediate mitigation.

Infection prevention glucometer assessment checklist

Name of health care professional: Date of assessment:

Name of auditor: Date of feedback:

Recommended practice	Yes	No	N/A	Notes
Glucometer selection				
1. Glucometers were dedicated to a single patient and properly labeled to prevent sharing.	☐	☐	☐	
2. Glucometers were shared between patients (i.e., multi-patient use), which is allowed per the manufacturer's instructions (verified by reviewing the instructions for use [IFU]). **Not all glucometers are approved for multi-patient use.**	☐	☐	☐	
a. The manufacturer's instructions specify that the device is approved for health care settings and multi-patient use.	☐	☐	☐	
b. The manufacturer's instructions specify how the device should be cleaned and disinfected between patients (using an EPA-registered disinfectant).	☐	☐	☐	
3. The manufacturer's instructions (for all glucometers in use) were stored with the glucometer and/or easily accessible to health care personnel responsible for their use.	☐	☐	☐	
4. Health care personnel responsible for glucometer use have reviewed and are familiar with the manufacturer’s instructions.	☐	☐	☐	

Recommended practice	Yes	No	N/A	Notes
Storage, collection, and transport				
1. Glucometers and necessary testing supplies (e.g., lancets, testing strips, alcohol wipes, cotton balls, etc.) were stored in a clean, centralized location.	☐	☐	☐	
a. Glucometers were kept separate from other supplies and equipment.	☐	☐	☐	
2. The glucometer and necessary testing supplies were gathered before entering the patient's room or treatment area.	☐	☐	☐	
a. The glucometer was properly cleaned/disinfected following the manufacturer's instructions before use.	☐	☐	☐	
b. Hand hygiene was performed immediately before accessing/handling clean supplies.	☐	☐	☐	
c. Supplies were gathered on a clean surface.	☐	☐	☐	
3. Only the clean glucometer and necessary testing supplies needed for the care of that patient were gathered.	☐	☐	☐	
a. Supplies intended for use on other patients (including bottles of testing strips and stocked baskets/bins/carrying cases) were left in the centralized location, never to enter patient rooms or care areas to prevent cross-contamination.	☐	☐	☐	

Recommended practice	Yes	No	N/A	Notes
4. The glucometer and necessary testing supplies were transported in such a way as to prevent contamination.	☐	☐	☐	
a. Supplies were carried away from the body of the health care personnel (never being transported in pockets).	☐	☐	☐	
b. If the facility uses a clean, disposable cup to help safely transport necessary testing supplies, the supplies and the cup were disposed of immediately at the point of use and a new cup was used each time.	☐	☐	☐	
Glucose testing				
1. The glucometer and testing supplies were placed on a clean surface.	☐	☐	☐	
a. The surface was prepared in advance, removing clutter (e.g., patient's personal items, food/drinks, stored medical supplies, etc.).	☐	☐	☐	
b. The surface was cleaned and disinfected using an EPA-approved product, or a protective barrier was placed (e.g., clean paper towel or chux).	☐	☐	☐	
2. A new pair of gloves were worn for each test, and hand hygiene was properly performed.	☐	☐	☐	
a. Hand hygiene was performed immediately before clean gloves were donned.	☐	☐	☐	

Recommended practice	Yes	No	N/A	Notes
b. Hand hygiene was performed immediately after gloves were doffed.	☐	☐	☐	
3. Glucose testing was properly performed.	☐	☐	☐	
a. The patient's sample collection site (i.e., finger) was cleaned with an alcohol wipe and allowed to dry without assistance (e.g., without fanning or blowing).	☐	☐	☐	
b. Specimen collection and glucose testing were performed according to the facility's standardized procedures and the glucometer's manufacturer's instructions.	☐	☐	☐	
4. All testing supplies were disposed of immediately at the point of use, in the patient's room or care area.	☐	☐	☐	
a. Lancets were disposed of in a sharps container **and never saved or reused**. This also applies to lancets used with lancing devices.	☐	☐	☐	
b. The remaining testing supplies (non-sharps) were disposed of in the regular trash.	☐	☐	☐	
5. The glucometer was cleaned and disinfected according to the manufacturer's instructions after each use, before returning it to storage.	☐	☐	☐	

Feedback and additional comments

1. Ideally, each patient should have their own dedicated glucometer. If a glucometer is shared between patients (i.e., multi-patient use), ensure the manufacturer's instructions allow for it. **Not all glucometers are approved for multi-patient use**.
    a. If the manufacturer does not specify how the device should be cleaned and disinfected between patients (using an EPA-registered disinfectant), it is likely not intended for multi-patient use and should not be shared.
    b. Glucometers with cleaning instructions that require the use of a mild detergent, soap and water, or isopropyl alcohol are not appropriate for multi-patient use.
2. All glucometers (dedicated and shared) should be cleaned and disinfected (following the manufacturer's instructions) **after every use, before storing, and before use on a patient**.
    a. Ensure the test strip is removed before cleaning/disinfection occurs, and never store the glucometer with the testing strip still intact.
3. A new single-use lancet should be used every time. This also applies to lancets used with lancing devices.
    a. Fingerstick lancing devices are not approved for multi-patient use. These devices should be dedicated to a single patient and treated as a personal item. **They should never be used on more than one patient**, even if the needle is changed.
4. Proper hand hygiene is that which occurs at the right time, uses the right method, and uses the correct technique and duration. Follow the CDC Guidelines for Hand Hygiene in Healthcare Settings.
    a. Alcohol-based hand rub (ABHR) is the preferred method for hand hygiene in healthcare settings, except when hands are visibly soiled, before eating, after using the restroom, and after caring for a patient with *Clostridioides difficile*, norovirus, or other diarrheal illness.
5. Clean supplies should never be accessed while wearing gloves or without performing hand hygiene first to prevent cross-contamination.
6. Supplies intended for multi-patient use should be stored in a centralized location and never enter a patient's room or care area to prevent cross-contamination. This reiterates the importance of collecting all supplies before beginning glucometer care.

7. In addition to reusable medical equipment, any surface in the patient's immediate care area contaminated during glucose testing should be cleaned and disinfected using an EPA-registered disinfectant.
    a. Any visible blood or body fluid should be removed with a wet, soapy cloth before disinfection occurs.
    b. Surfaces/equipment should be visibly saturated with solution and allowed to dry for proper disinfection before reuse (e.g., contact time).
8. The EPA website has a list of hospital-labeled disinfectants.

Visit us at HAIs: Resources for professionals for additional information. Send us your questions about glucometer safety or infection prevention and control at cdphe_hai_ar@state.co.us.

Resources

- CDPHE | Fingerstick device and lancet 60-second safety check
- CDPHE | Glucometer 60-second safety check
- CDPHE | Insulin Pen 60-second safety check