# Assisted Blood Glucose Monitoring Safety

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| Initial Effective Date  | mm/dd/yyyy  |
| Most Recent Revision Date  | mm/dd/yyyy  |
| Authorized/Reviewed By  | [Insert name of department or individual who has that authority for the policy] |

# Definitions

**Fingerstick devices (lancing devices)**: Devices that are used to prick the skin to obtain drops of blood for testing. There are two main types of fingerstick devices: 1) those that are designed for reuse and 2) those that are disposable and designed for single use.

**Reusable lancing devices**: Fingerstick devices that can be shaped like a pen that hold removable/replaceable lancets, allowing the device to be used more than once. These devices should **never** be used for more than one patient/resident because of the risk for infection transmission. If these devices are used, they should *only* be used by persons performing self-monitoring of blood glucose and are following the manufacturer’s instructions for use. They should also be clearly labeled and stored to prevent accidental use on another patient/resident.

**Safety lancets:** Single-use fingerstick devices that are disposable and prevent reuse through an auto-disabling feature. In settings where assisted monitoring of blood glucose is performed, **only** single-use, safety lancets should be used.

# Purpose

An overlooked risk of point of care (blood) testing with assisted blood glucose monitoring is the opportunity for exposure to bloodborne pathogens such as hepatitis B virus (HBV), hepatitis C virus (HCV), and HIV. This policy is meant to outline the recommended practices to reduce the risk of these exposures in settings where blood glucose testing is performed.

# Responsibility

This policy is for healthcare personnel who have had training and competency validations for assisted blood glucose monitoring and/or anyone who performs assisted blood glucose monitoring. This may apply to a variety of healthcare professionals such as nurses, certified nursing assistants (CNAs), medical technicians, medical assistants, EMTs, paramedics, and/or patient care associates. Blood glucose monitoring should only be performed if within an individual’s scope of practice.

# Policy

All healthcare personnel who perform assisted blood glucose monitoring will follow Centers for Disease Control and Prevention (CDC) recommendations for safe injection practices, the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogen Standard, and the manufacturer’s instructions for all equipment and supplies used during the procedure.

All healthcare personnel performing testing are provided training and directly observed for competency upon hire, on an annual basis, and as needed (e.g., with policy changes, deviations in practice).

# Performing Assisted Blood Glucose Monitoring

Materials:

* Blood glucose meter
	+ *Note: If possible, a blood glucose meter should be assigned to an individual person and not shared. If the manufacturer does not have instructions on how the device should be cleaned and disinfected, then it should not be shared.*
* Test strips
* Single-use safety lancet
* Alcohol-based hand rub (at least 60% alcohol)
* Alcohol swab
* Disposable latex-free gloves
* Gauze/Band-Aid
* Disinfectant wipes (for disinfecting the blood glucose meter and the surface where the test is performed)

## Follow these steps to perform assisted blood glucose monitoring safely

1. Store, keep, and use all equipment (e.g., blood glucose meter, test strips, controls) as instructed by the manufacturer.
2. Collect materials needed to perform the procedure.
	1. Note: If it is not known whether the blood glucose meter has been cleaned or is potentially contaminated from storage, clean according to manufacturer’s instructions for use. If no instructions are provided, then the device should not be shared.
	2. Verify expiration dates of test strips and controls.
	3. Perform quality controls as needed.
3. Take items to the patient/resident’s room or to a designated procedure area. Do not carry supplies in pockets.
4. Perform appropriate hand hygiene.
5. Identify the patient/resident and check test orders (if applicable) according to the facility policy.
6. Place supplies on a clean, solid surface. Testing should occur on a clean surface; a clean barrier can be used.
7. Put on gloves.
8. Load a clean test strip into the meter.
9. Select a puncture site (e.g., finger) using site rotation principles.
10. Clean the patient/resident’s skin with an alcohol swab. Allow skin to air dry; do not blow on the site.
11. Perform the stick, using a new, single-use safety lancet, on the selected fingertip (do not milk the finger).
12. Place blood droplet on testing strip.
13. Apply pressure on the puncture site with gauze or provides patient/resident with sterile gauze/bandage to ensure bleeding has stopped (do not wipe the site with an alcohol swab)
14. Dispose used lancet in a sharps container. Dispose used gauze and alcohol wipe in a waste container.
15. Remove and discard gloves and perform appropriate hand hygiene.
16. Put on new gloves to clean and disinfect the blood glucose meter according to manufacturer’s instructions for use.
17. Clean any other surfaces that could possibly have been contaminated, either by the patient/resident and their blood or by used equipment.
18. Remove gloves and perform hand hygiene.
19. Store the blood glucose meter in a clean, dry space according to manufacturer’s instructions for use.
20. Record and take proper action for blood glucose results, according to facility policy.

# Guidelines and Resources

* Infection Prevention
	+ Centers for Disease Control and Prevention- Infection Prevention During Blood Glucose Monitoring and Insulin Administration: <https://www.cdc.gov/injectionsafety/blood-glucose-monitoring.html>
* Testing
	+ Laboratory Quality – Waived Testing: <https://www.cdc.gov/labquality/waived-tests.html>
	+ Clinical and Laboratory Standards Institute GP42 Collection of Capillary Blood Specimens: <https://clsi.org/standards/products/general-laboratory/documents/gp42/>
	+ Division of Laboratory Systems – Self-Assessment Checklist for Good Testing Practices: <https://www.cdc.gov/labquality/docs/waived-tests/self-assessment-checklist-good-testing-practices.pdf>
	+ Virginia Board of Nursing Medication Aide Curriculum for Registered Medication Aides: <https://townhall.virginia.gov/l/GetFile.cfm?File=meeting%5C27%5C32375%5CAgenda_DHP_32375_v1.pdf>
	+ BCCampus *Clinical Procedures for Safer Patient Care*, Chapter 9.2 Glucometer Use: <https://opentextbc.ca/clinicalskills/chapter/8-2-glucometer-use/>