

Laboratory Space Configuration and Storage Guidance Content Relevant to: CAHC and SWP Models

Federal and State requirements for medical areas, such as OSHA, MIOSHA, and CLIA, were utilized in the development of the following space configuration and storage recommendations for Child and Adolescent Health Centers (CAHC) and School Wellness Programs (SWP). For more information see the resources listed below.

NOTE: Immunizations and/or other medications storage and preparation often share lab space (immunization services are a CAHC model requirement MPR #1). If your site has shared lab space with immunizations and/or other medications, consider space requirements when planning.

Clean and Dirty Laboratory Areas

When performing lab tests, it is important to plan for a properly configured space to ensure prevention of infection and the safety of clients and staff. According to Clinical Laboratory Improvement Amendments (CLIA), there should be designated "DIRTY" and "CLEAN" areas. Best practice is to have enough space to have physical separation between the two areas.

The Centers for Disease Control and Prevention (CDC) defines a "DIRTY AREA" as an area where there is a potential for contamination with blood or body fluids and where contaminated or "used" supplies, equipment, specimens, or biohazard containers are stored or handled.

The "CLEAN AREA" is defined as an area designated only for clean and unused equipment, supplies, and other materials needed for lab function.

Considerations for the space needed for each area:

1. DIRTY AREA:

At minimum, this area will need a sink, adequate counter space for lab testing and lab equipment, a biohazard sharps box securely mounted to the wall (at or above hip level), space for locked storage of lab supplies, adequate electrical outlets for lab testing equipment, as well as a small refrigerator for lab test controls and specimen holding.

2. CLEAN AREA:

At minimum, a separate area with adequate counter space/workspace for computers etc., a sink for hand washing should also be accessible here, and secure, lockable cabinets and drawers for testing supplies and materials and confidential lab documents.

Ideally, the "CLEAN" and "DIRTY" areas will be two separate areas with a sink in each area. However, one sink in a shared lab space with separate "CLEAN" and "DIRTY" areas is acceptable. If there is only a single, long counter, a double sink could serve as a natural designation between "CLEAN" and "DIRTY" areas. An acrylic barrier on each side of the sink could prevent splashing from occurring between these two areas.

For safety and infection prevention, the "CLEAN" and "DIRTY" areas are labeled as such. Additional notices for non-laboratory restrictions should be posted, such as "No food, drink or application of cosmetics". "Do not unplug" signage is helpful to protect refrigeration contents.

Equipment and Secure Storage Space

The laboratory should contain enough space to house appropriate equipment, testing supplies and materials utilized for these services. If the site space is limited, this area may also store medical supplies, immunization and/or other medications (if applicable). It is advisable to have a separate storage space for medical supplies, when possible. Per Michigan pharmacy and OSHA guidelines, storage of testing supplies, medications, and medical waste need to be in secure, lockable cabinets.

NOTE: Space under sinks cannot be utilized for storage of any kind per OSHA rules.

Equipment (examples of commonly used lab equipment):

- Countertop testing instruments and other equipment (e.g., centrifuge, microscope, point-of-care test machines). NOTE: May vary by site and population needs
- Temperature and humidity gauge
- Dorm-style refrigerator for controls and specimens
- Laboratory timer
- Sharps containers
- Trash can for non-biohazard contents
- Waste container for biohazard material

Testing Supplies (examples of commonly used testing supplies):

- Space to store point-of-care (POC) tests and controls
- Space for collection devices (needles, lancets, urine cups, etc.)
- Space for PPE (glove boxes, goggles, face masks, disposable gowns, etc.)
- Space for client medical supplies (wipes, band aids, dressings, etc.)

Manuals/Resource Materials:

- Lab Manual
- References and resources for staff and clients

For more information about additional examples of equipment, supplies, and materials, refer to the resources below.

Safety Equipment

Per OSHA, an eyewash station, or equivalent, is required within 55 feet of all treatment areas where caustic chemicals or blood exposure is possible.

Medical Waste Management

A secure space for storage of medical waste container(s) is an OSHA requirement. A locked closet or a locked cabinet designated for storage of medical waste may be located within the lab space. The closet/cabinet must be of an appropriate size to store multiple locked, sharps containers with triple barrier protection (sharps boxes in a hazardous waste bag, in a hazardous waste box). As stated above, undercounter storage is not an acceptable area to store anything at any time, including hazardous materials awaiting pickup. Medical waste may be stored in a different area of the site using the same criteria as above.

Sharps Containers

According to OSHA, biohazard sharps containers must be securely mounted to the wall of the lab space, at hip level or higher. Regulations require labeling the container with an expiratory date no more than 90 days from date of initial use. When the sharps container is at the fill line or at 90 days, it is closed and removed to medical waste storage as above. All medical waste must be removed from the facility within 90 days.

Resources

For assistance with OSHA and MIOSHA requirements, see the following resources:

- Department of Labor, OSHA Standards for Medical and Dental Offices
- Michigan Occupational Safety and Health Administration (MIOSHA) Resources
- MIOSHA Standards for Doctor's/Dentist's Offices (Under "D" on A to Z Topics Index List)

For immunization administration space and equipment information, see the following resources:

- CDC Vaccines for Children Program (VFC)
- Michigan VFC Resources Guide (see VFC Provider Manual)

For medication and medical supply lists, see your fiduciary vendor supply lists available:

- School Health Vendor Supply List
- Laboratory Supplies Vendor

School-Based Health Alliance-Community Healthcare Provider Resources (Operations/Logistics) https://tools.sbh4all.org/merck-toolkit/community-healthcare-providers/

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