

# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

WAC 296-823-180

## Summary

### YOUR RESPONSIBILITY:

To implement and enforce these additional rules in research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV



**Exemption:**

- This section does **not** apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs.



**Note:**

- Production and research facilities:
  - Hepatitis C (HCV) is the virus involved in most cases of parenterally transmitted (bloodborne) non-A, non-B hepatitis in the United States. Most individuals who contract HCV become chronically infected (85%) and develop chronic hepatitis (70%). It is recommended that you also follow these requirements for HCV production and research facilities.

### You must

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Follow these special practices for the work area WAC 296-823-18010 .....	180-3
Make sure these practices for contaminated material and waste are followed WAC 296-823-18015 .....	180-4
Make sure these special practices for personal protective equipment (PPE) and other safe guards are followed WAC 296-823-18020 .....	180-5

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# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

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## Summary

### WAC 296-823-180 (Continued)

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Use and handle hypodermic needles and syringes appropriately and safely WAC 296-823-18030 .....	180-6
Handle all spills and accidents properly WAC 296-823-18035 .....	180-7
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# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

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## Rule

### WAC 296-823-18005

#### Prepare, review, and update a biosafety manual

##### You must

- Prepare or adopt a biosafety manual. This manual must be:
  - Periodically reviewed
  - Updated at least annually or more often, if necessary.
- Make sure employees are:
  - Advised of potential hazards
  - Required to read and follow instructions about practices and procedures.
- Establish written policies and procedures where only authorized persons can enter work areas and animal rooms.

### WAC 296-823-18010

#### Follow these special practices for the work area

##### You must

- Make sure only authorized persons are allowed to enter the work areas and animal rooms. Authorized persons must:
  - Have been advised of the potential biohazard
  - Meet any specific entry requirements
  - Comply with all entry and exit procedures.
- Keep laboratory doors closed when work involving HIV or HBV is in progress.



# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

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## Rule

### WAC 296-823-18015

#### Make sure these practices for contaminated material and waste are followed

##### You must

- Incinerate or decontaminate all regulated waste by a method known to effectively destroy bloodborne pathogens, such as autoclaving
- Make sure to place materials to be decontaminated away from the work area in a container that is:
  - Durable
  - Leakproof
  - Appropriately labeled, or color-coded
  - Closed before being removed from the work area.



##### Reference:

- You can find additional requirements for appropriate labels and color-coding in WAC 296-823-14025.

##### You must

- Incinerate or decontaminate **all** waste from work areas and from animal rooms before disposal.
- Make sure an autoclave is available for decontamination of regulated waste.



# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

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## Rule

### WAC 296-823-18020

#### Make sure these special practices for personal protective equipment (PPE) and other safe guards are followed

#### You must

- Make sure appropriate personal protective clothing is used in work areas and animal rooms. Examples of appropriate personal protective clothing include:
  - Laboratory coats
  - Gowns
  - Smocks
  - Uniforms.
- Decontaminate protective clothing before it is laundered
- Make sure employees remove protective clothing before leaving their work area
- Take special care to avoid skin contact with other potentially infectious materials (OPIM)
- Wear gloves when handling infected animals and when you can't avoid making hand contact with OPIM
- Conduct all activities involving OPIM in biological safety cabinets or other physical-containment devices within the containment module. No work with OPIM must be conducted on the open bench.
  - Appropriate certified biological safety cabinets (Class I, II, or III) or personal protection or physical containment devices must be used for all activities with OPIM that pose a threat of exposure to droplets, splashes, spills, or aerosols. Appropriate personal protection and physical containment devices include:
    - Special protective clothing
    - Respirators
    - Centrifuge safety cups
    - Sealed centrifuge rotors
    - Containment caging for animals
  - Biological safety cabinets must be certified when installed or moved, and at least annually.



# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

WAC 296-823-180

## Rule

### WAC 296-823-18025

#### Protect vacuum lines

##### You must

- Protect vacuum lines with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of same or greater efficiency. Make sure filters are checked routinely and maintained or replaced as necessary.

### WAC 296-823-18030

#### Use and handle hypodermic needles and syringes appropriately and safely

##### You must

- Use hypodermic needles and syringes only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles.
  - Use only needle-locking syringes or disposable syringe-needle units (when the needle is integral to the syringe) for the injection or aspiration of other potentially infectious materials (OPIM)
  - Use extreme caution when handling needles and syringes
  - The needle must not be bent, sheared, replaced in the sheath or guard, or removed from the syringe after use
  - Place the needle and syringe promptly in a puncture-resistant container and autoclave or decontaminate before reuse or disposal.



# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

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## Rule

### WAC 296-823-18035

#### Handle all spills and accidents properly

##### You must

- Make sure appropriate professional staff or others, properly trained and equipped to work with concentrated potentially infectious materials, immediately contain and clean up all spills.
- Make sure that employees report a spill or accident that results in an exposure incident immediately to the laboratory director or other responsible person.

### WAC 296-823-18040

#### Post signs

##### You must

- Post signs at the entrance to work areas and all access doors when other potentially infectious materials (OPIM) or infected animals are present in the work area or containment module.
- Make sure signs:
  - Contain the following symbol and information:



(Name of the infectious agent)  
(Special requirements for entering the area)  
(Name, telephone number of the laboratory  
director or other responsible person)

- Are all or mostly fluorescent orange-red with lettering and symbol in a contrasting color.



# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

WAC 296-823-180

## Rule

### WAC 296-823-18045

#### Provide additional training for facility employees

##### You must

- Provide initial training to employees in HIV or HBV research laboratories or production facilities in addition to the training required in WAC 296-823-120.
- Make sure that employees demonstrate proficiency in the following:
  - Standard microbiological practices and techniques
  - The practices and operations specific to the facility **before** being allowed to work with HIV or HBV.
- Provide a training program to employees working with HIV or HBV who have no prior experience in handling human pathogens.
  - Initial work activities must not include the handling of infectious agents
  - A progression of work activities must be assigned as techniques are learned and proficiency is developed.
- Make sure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

### WAC 296-823-18050

#### Furnish a sink for washing hands and a readily available eye wash facility

##### You must

- Make sure each work area contains a sink for handwashing and an eyewash facility is readily available.
  - For HIV and HBV production facilities, the sink must be operated automatically or by foot or elbow and must be located near the exit door of the work area.



##### Reference:

- Requirements for emergency eyewash stations can be found in WAC 296-800-15030.



# Additional Requirements for HIV and HBV Research Laboratories and Production Facilities

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## Rule

### WAC 296-823-18055

#### Make sure these additional criteria are followed for HIV and HBV production facilities

#### You must

- Separate the HIV and HBV work areas from areas that are open to unrestricted traffic flow within the building
- Use 2 sets of doors to separate HIV and HBV work areas from access corridors or other contiguous areas.



#### Note:

- You may provide a physical separation of the high-containment work area from access corridors or other areas or activities by providing:
    - A double-doored clothes-change room (showers may be included)
    - Airlock
- or**
- Other access facilities that require passing through 2 sets of doors before entering the work area.

#### You must

- Make sure the surfaces of doors, walls, floors, and ceilings in the work area are water resistant so they can be easily cleaned. These surfaces must be sealed or capable of being sealed to facilitate decontamination
- Make sure access doors to the work area or containment module are self-closing
- Provide a ducted exhaust-air ventilation system. This system must create directional airflow that draws air into the work area through the entry area and you must verify this airflow. The exhaust air must:
  - **Not** be recirculated to any other area of the building
  - Be discharged to the outside
  - Be dispersed away from occupied areas and air intakes.
- Make sure an autoclave for decontamination of regulated waste is available within or as near as possible to the work area.

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# Notes

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