

# Laboratory Biosafety Refresher

## Links and Resources

### General:

NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules

[https://osp.od.nih.gov/wp-content/uploads/2019\\_NIH\\_Guidelines.htm](https://osp.od.nih.gov/wp-content/uploads/2019_NIH_Guidelines.htm)

National Select Agent Registry

<https://www.selectagents.gov/PermissibleToxinAmounts.html>

Recognizing Biosafety Levels

<https://www.cdc.gov/training/quicklearns/biosafety/>

Contact EHS biosafety team

[biosafety@harvard.edu](mailto:biosafety@harvard.edu)

### Bloodborne Pathogens:

OSHA Bloodborne Pathogens Standard

[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_id=10051&p\\_table=STANDARDS](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=10051&p_table=STANDARDS)

Pathogen Safety Data Sheets

<https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment.html#e>

Disinfectant Chart

<https://www.ehs.harvard.edu/node/8780>

Revised Estimates for the Number of Human and Bacteria Cells in the Body

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4991899/>

Changes in Chemical Permeation of Disposable Latex, Nitrile and Vinyl Gloves Exposed to Simulated Movement

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4177299/>

Guideline for Disinfection and Sterilization in Healthcare Facilities

<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html>

Bio Sharps Disposal Guide

<https://www.ehs.harvard.edu/node/8014>

Lab waste management

<https://www.ehs.harvard.edu/programs/lab-waste-management>

Guidelines for Safe Work Practices

<https://www.cdc.gov/mmwr/pdf/other/su6101.pdf>

Guidelines for Managing Occupational Exposures to HBV, HCV, and HIV

<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm>

CDC Hepatitis B Overview

<https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>

Hepatitis B Vaccination Acceptance/Declination Form and further information

<https://www.ehs.harvard.edu/node/7804https://www.ehs.harvard.edu/node/7804>

Hepatitis B Q&A

<https://www.cdc.gov/hepatitis/hbv/bfaq.htm>

Hepatitis B Treatment

<https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#treatment>

Hepatitis C Q&A

<https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm>

Hepatitis C Treatment

<https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section4>

CDC's Stop Sticks Campaign

<https://www.cdc.gov/nora/councils/hcsa/stopsticks/default.html>

HIV and AIDS Overview and Symptoms

<https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/symptoms-of-hiv>

HIV Pathogen Safety Data Sheet

<https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/human-immunodeficiency-virus.html>

Exposure Control Plan Template

<https://www.ehs.harvard.edu/node/7895>

## **Harvard Specific:**

Biosafety at Harvard

<http://www.ehs.harvard.edu/services/biosafety>

Incident Reporting

<https://www.ehs.harvard.edu/programs/accident-reporting-investigation>

Lab Emergency Response Guide

<https://www.ehs.harvard.edu/secure/node/8414>

Biosafety Manual

<https://www.ehs.harvard.edu/node/7523>

Biological Project Registration

<https://www.ehs.harvard.edu/programs/biological-project-registration>

Emergency Numbers for Cambridge/Allston/SPH

<https://www.ehs.harvard.edu/node/8207>

Emergency Numbers for HMS

<https://www.ehs.harvard.edu/node/8208>

Emergency Numbers for 4 Blackfan

<https://www.ehs.harvard.edu/node/8424>

COMS

<https://hms.harvard.edu/departments/committee-microbiological-safety>

Unofficial Guide to eCOMS

<https://www.ehs.harvard.edu/sites/default/files/eCOMS-unofficial-guidance-2020.pdf>

Lentiviral Vector Policy

<https://hms.harvard.edu/departments/committee-microbiological-safety/registering-coms/coms-policies/coms-lentiviral-vector-policy>

Minimum BL1 Laboratory Requirements for COMS-Approved Projects

<https://hms.harvard.edu/departments/committee-microbiological-safety/registering-coms/coms-policies/minimum-biosafety-level-1-laboratory-requirements-coms-approved-projects>

Minimum BL2 Laboratory Requirements for COMS-Approved Projects

<https://hms.harvard.edu/departments/committee-microbiological-safety/registering-coms/coms-policies/minimum-biosafety-level-2-laboratory-requirements-coms-approved-projects>

## **Harvard Specific (continued):**

Minimum BL2+ Laboratory Requirements for COMS-Approved Projects

<https://hms.harvard.edu/departments/committee-microbiological-safety/registering-coms/coms-policies/minimum-biosafety-level-2-laboratory-requirements-coms-approved-projects-0>

BL2+ Policy Update

<https://hms.harvard.edu/departments/committee-microbiological-safety/registering-coms/coms-policies/coms-bl2-policy>

COMS Policy Manual

<https://hms.harvard.edu/sites/default/files/assets/Sites/COMS/COMS%20Policy%20Manual%20Approved%20at%20COMS%20Meeting%20December%2016%202017.pdf>

HCCM Injury Protocols

<https://hccm.med.harvard.edu/injury-job>

Office of Animal Resources

<https://oar-public.fas.harvard.edu>

Can I Keep Plants in my Lab?

<https://www.ehs.harvard.edu/node/8776>

## **Shipping, Receiving, and Permitting:**

Shipping and Transporting Research Materials at Harvard

<https://www.ehs.harvard.edu/programs/shipping-transporting-research-materials>

Biological Material Shipping Classification Table

<https://www.ehs.harvard.edu/node/7561>

Biological Materials, Infections Substances, and Dry Ice Local Transport

<https://www.ehs.harvard.edu/node/8419>

Shipping Biological Materials and Dry Ice Training

[https://trainingportal.harvard.edu/Saba/Web\\_spf/NA1PRD0068/common/ledetail/cours00000000003256](https://trainingportal.harvard.edu/Saba/Web_spf/NA1PRD0068/common/ledetail/cours00000000003256)

Shipping Excepted Quantities: Flammables, Corrosives, and Common Fixatives Training

[https://trainingportal.harvard.edu/Saba/Web\\_spf/NA1PRD0068/common/ledetail/cours00000000003257](https://trainingportal.harvard.edu/Saba/Web_spf/NA1PRD0068/common/ledetail/cours00000000003257)

Shipping Non-Regulated Materials and Dry Ice Training

[https://trainingportal.harvard.edu/Saba/Web\\_spf/NA1PRD0068/common/ledetail/cours00000000003259](https://trainingportal.harvard.edu/Saba/Web_spf/NA1PRD0068/common/ledetail/cours00000000003259)

FDA Import Permit

<https://www.fda.gov/ForIndustry/ImportProgram/default.htm>

Biological Import and Transport Permits Training

[https://trainingportal.harvard.edu/Saba/Web\\_spf/NA1PRD0068/common/ledetailcours00000000028722](https://trainingportal.harvard.edu/Saba/Web_spf/NA1PRD0068/common/ledetailcours00000000028722)

US Fish and Wildlife Service Import and Export Permits ePermits

[U.S. Fish & Wildlife Service ePermits \(servicenow.com\)](http://www.servicenow.com)

CDC's Import Permit Program

<https://www.cdc.gov/cpr/ipp/etool.htm>

HYPERLINK "https://www.cdc.gov/cpr/ipp/etool.htm"USDA APHIS Import Permits

<https://www.aphis.usda.gov/aphis/resources/permits>

Harvard Material Transfer Agreements

<https://otd.harvard.edu/faculty-inventors/resources/material-transfer-agreements/>

MTA Contact for SPH and HMS:

[hms\\_materialtransfer@harvard.edu](mailto:hms_materialtransfer@harvard.edu)

MTA Contact for Cambridge Campus:

[materialtransfer@harvard.edu](mailto:materialtransfer@harvard.edu)

## **Incidents:**

Coverage of 2010-2011 outbreak: Salmonella hits US teaching labs

<https://www.nature.com/news/2011/110510/full/473132a.html>

2014 outbreak

<https://www.cdc.gov/salmonella/typhimurium-labs-06-14/index.html>

2017 outbreak

<https://www.cdc.gov/salmonella/typhimurium-07-17/index.html>

University of Pittsburgh Zika LAI

<https://library.harvard.edu/services-tools/new-york-times>

2002 Anthrax Shaving Incident

<http://www.cidrap.umn.edu/news-perspective/2002/06/cdc-confirms-cutaneous-anthrax-case-reported-lab-worker-april>