

Definitions for Biological Materials  
(A12 on Hazard Identification Checklist)

The “Biohazardous Materials” hazard identification includes two separate categories of hazard. Either or both may apply to any given activity. To facilitate database searches, please indicate the applicable element in the title of the hazard management statement.

1) *Activities for which OSHA’s bloodborne pathogen standard applies.* These are defined as activities in which there may be occupational exposure to blood or potential infectious materials.

*Occupational Exposure* means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

*Blood* means human blood, human blood components, and products made from human blood.

*Bloodborne Pathogens* means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

*For further information on Bloodborne Pathogens, please see [OSHA's Bloodborne Pathogen Standard](#).*

2) *Research activities involving potential animal, human, or plant pathogens.* All such work must be conducted in accordance with the applicable sections below:

a. The NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecule (<http://osp.od.nih.gov/office-biotechnology-activities/biosafety/nih-guidelines>),

b. Exempt work: Certain work with recombinant or synthetic nucleic acid molecules is defined to be exempt from the NIH Guidelines. See the [FAQ about this exemption](#). If you believe this exemption applies to the activity under review, please submit a specific written statement supporting the exemption.

c. Work with plant or animal pathogens requires approval by the Iowa State University Office for Responsible Research [ORR], which acts as the Institutional Biosafety Committee. For a general outline of the requirements for such work, please see the guidance provided by the CDC in Biosafety in Microbiological and Biomedical Laboratories ([BMBL](#)).