

Institutional Biosafety Committee

OCCUPATIONAL HEALTH

APPROVED SEPTEMBER 2022

Authority

Authority for the Institutional Biosafety Committee (IBC) and its scope, purview, policies, and procedure are described in the [IBC Charter & Bylaws document](#).

Introduction

To protect the campus community, the IBC is tasked with evaluating research, teaching, and diagnostic testing involving biological hazards and monitoring safety and compliance. In support of this effort, the IBC will consult and coordinate with occupational health resources at the UTK-area campuses to establish strategies to prevent occupational illnesses associated with biological hazards and to ensure that health assessments, vaccinations, and medical surveillance measures are provided as necessary.

Occupational Health Resources

Whenever possible, the IBC will utilize occupational health programs and resources already established for the UTK-area campuses. These include the occupational health program coordinator established for the Institutional Animal Care & Use Committee (IACUC) and CVM*, the GSM University Occupational Health Services at UTMCK, or other services established through a University contract or agreement. The IBC may use occupational health resources to:

- Evaluate biological hazards and recommend appropriate occupational health measures, including but not limited to medical evaluations, vaccinations, serum surveillance, and post-exposure prophylaxis or treatment therapies.
- Write orders and coordinate appointments relative to the above.
- Advise or provide medical/health-related informational resources (pamphlets, guides, online references, etc.) to affected personnel as necessary.
- Maintain medical records or assure their maintenance as required by regulations and University policy.

At the discretion of the DO and IBC Chair, an occupational health liaison may be appointed to the committee as a non-voting *ex officio* member.

*Program covers UTK-area personnel working with live animals or animal blood, body fluids, and tissues and includes awareness/protective measures for animal allergens and zoonotic diseases.



Medical Evaluations

The IBC advises that those working with biological hazards disclose underlying medical conditions that may increase infection risk or exacerbate infection outcomes to an occupational health professional so that a medical evaluation and consultation can be coordinated. Representative medical conditions (or circumstances) include, but are not limited to:

- Pregnancy
- Diabetes
- HIV infection/AIDS
- Primary immunodeficiency syndromes and complement deficiencies
- Splenectomy
- Use of immunosuppressive drugs (e.g., treatment of autoimmune diseases or organ transplant therapies)
- Corticosteroid therapy >20 mg per day prednisone or equivalent for 2 weeks or more
- Leukemia, lymphoma, or myeloma
- Cancer chemotherapy (currently undergoing or <3 months after cancer chemotherapy)
- <2 years post-bone marrow transplant
- Graft versus host disease
- Treatment with TNF-inhibitor monoclonal antibodies
- Heart conditions (e.g., valve disease, heart failure)
- Iron-overload conditions (e.g., hemochromatosis)
- Chronic liver disease (e.g., cirrhosis, hepatitis, fatty liver disease)
- Hemoglobinopathies (e.g., sickle cell disease, beta thalassemia)
- Gastrointestinal conditions (or medications used to treat these)
- Eczema or other skin diseases which may present with open lesions

Any special precautions or work restrictions/limitations noted through the medical evaluation should be communicated, preferably in writing, to an occupational health professional, and through the appropriate supervisory channels. In consultation with an occupational health professional, the IBC will assist in identifying risk mitigation strategies or other protective measures as appropriate.

Vaccines

The IBC will consult with occupational health resources to identify any vaccines that may prevent (or reduce) job-related exposure risks, including type(s), dose, and frequency of administration. Agents/conditions for which protective vaccines are available include, but are not limited to:

- COVID
- Diphtheria
- Hepatitis A
- Hepatitis B (vaccine program in accordance with OSHA requirements, [29 CFR 1910.1030](#); see [UTK Bloodborne Pathogens Exposure Control Plan](#))



- Influenza (seasonal)
- Japanese encephalitis
- Measles/mumps/rubella
- Meningitis
- Pertussis (whooping cough)
- Pneumococcal pneumonia
- Poliovirus
- Rabies
- Rotavirus
- Tetanus
- Vaccinia (poxviruses)
- Varicella (chickenpox/shingles)
- Yellow fever

If protective vaccines are identified, the IBC will provide recommendations to eligible personnel in writing. For those opting to receive the vaccines, an occupational health professional will help coordinate a convenient time and location. Unless otherwise noted, vaccine costs are expected to be covered by the employing supervisor or department. * Those who opt out of receiving recommended vaccinations must indicate so in writing by completing a waiver/declination form.

*Coverage of vaccine costs does not extend to students or volunteers who are not employed by UTK-area campuses, though supervisors are encouraged to cover costs whenever feasible.

Serum Surveillance & Banking

The IBC does not typically require routine serum surveillance, particularly for biological agents that are endemic and/or prevalent in the community. If novel or exotic agents will be handled, or conditions exist where individuals may be exposed to the agent (e.g., fieldwork in exotic locations), the IBC will consult with occupational health programs to determine serum surveillance recommendations. When determined to be appropriate, an occupational health professional will provide written recommendations to affected personnel and help to coordinate appointments as necessary. Occupational health resources will communicate testing results, provide follow-up medical consultation as necessary, and maintain confidential records as required by regulations and University policy. Serum surveillance recommendations will also be documented in the respective registration(s).

The IBC does not require serum banking. Any exceptions will be documented in the respective registration(s).

Post-Exposure Consultation & Monitoring

Biological hazard exposures may require medical evaluation, diagnostic testing, and/or treatment. Occupational health resources will provide post-exposure consultation, including coordinating medical appointments, reviewing test results,



advising on post-exposure prophylaxis or treatment strategies, and answering any health-related questions the affected individual(s) may have. If determined to be necessary, post-exposure serum surveillance will be conducted as described above.

Respiratory Protection

In accordance with the OSHA requirements ([29 CFR 1910.134](#)) and [UTK safety procedure IH-003](#), respiratory protection is required when 1) harmful airborne contaminants, including infectious agents, are present, 2) those harmful contaminants pose a health risk through inhalation, and 3) other suitable controls (e.g., engineering controls such as biosafety cabinets, glove boxes, or exhaust ventilation) are not available or are ineffective. When the need for respiratory protection is identified, the IBC will utilize occupational health resources to coordinate or conduct health evaluations, spirometry, and any other necessary measures to ensure the medical fitness of those required to wear respirators. Once medical fitness has been confirmed, users will be fit-tested and trained as required.

Respiratory protection programs are overseen by UTK EHS and the UTIA Safety Office, respectively, by campus.

