Samples of biological hazards

Biological hazards refer to biological substances that can pose a threat to human health or the environment. Here are some examples of biological hazards:

- 1. **Pathogenic Microorganisms**: Bacteria, viruses, fungi, and other microorganisms that can cause diseases in humans or animals. Examples include Escherichia coli (E. coli), Salmonella, HIV, Influenza virus, and Tuberculosis bacteria.¹⁾
- 2. **Toxins and Venoms**: Substances produced by certain organisms that can cause harm or illness. Examples include snake venom, botulinum toxin produced by Clostridium botulinum bacteria, and mycotoxins produced by molds. ²⁾
- 3. **Biological Waste**: Waste materials from biological sources, such as blood, bodily fluids, tissues, or laboratory specimens, which may contain infectious agents or harmful substances. ³⁾
- 4. **Allergens**: Substances that can trigger allergic reactions in susceptible individuals. Examples include pollen, dust mites, certain foods (e.g., peanuts, shellfish), and animal dander. 4)
- 5. **Biological Agents Used in Biowarfare or Bioterrorism**: Certain pathogens or toxins that can be intentionally used to cause harm or terror, such as anthrax, smallpox, or ricin toxin.⁵⁾
- 6. **Zoonotic Diseases**: Diseases that can be transmitted between animals and humans. Examples include rabies, avian influenza (bird flu), and Lyme disease.⁶⁾
- 7. **Biological Contaminants in Food**: Microorganisms or toxins that can contaminate food and cause foodborne illnesses. Examples include Salmonella, Campylobacter, and Staphylococcus aureus.⁷⁾

https://www.who.int/health-topics/

The Venomous Reptiles of the Western Hemisphere" by Jonathan A. Campbell and William W. Lamar. Published by Cornell University Press, 2004.

Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" by the Centers for Disease Control and Prevention (CDC). Published in 2012.

Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual, and Oral" by Richard F. Lockey and Dennis K. Ledford. Published by CRC Press, 2013.

The Demon in the Freezer: A True Story" by Richard Preston. Published by Random House, 2002.

Zoonoses: Infectious Diseases Transmissible from Animals to Humans" by J.S. Mackenzie, D.J. Jeggo, P.D. Daszak, J.E. Richt, and W.B. Karesh. Published by ASM Press, 2017

Food Microbiology: Fundamentals and Frontiers" by Michael P. Doyle and Robert L. Buchanan. Published by ASM Press, 2012.