

UNIVERSITY OF HOUSTON – DOWNTOWN

ENGR 4310 - INDUSTRIAL HYGIENE INSTRUMENTATION

LECTURE NOTE OUTLINE – BIOLOGICAL HAZARDS – CHAPTER 14

WEEK 6

- I. Biological Safety
- II. Hazard Identification
 - A. Microorganisms
 - B. Infection
 - C. Epidemiology
 - D. Potential Hazardous Workplaces
 - E. Agriculture
- III. Risk Assessment Factors
 - A. Modes of Transmission
 - B. Routes of Entry
 - C. Infectious Dose
 - D. Agent Viability and Virulence
 - E. Host Susceptibility
 - F. Other Factors
- IV. Hazard Classification
 - A. Hazard Categories
 - 1. Biosafety Containment Levels
 - 2. Interpretation of Guidelines
- V. Hazard Control
 - A. Containment
 - 1. Facility Design
 - 2. Safety Equipment
 - 3. Work Practices
 - 4. Decontamination
 - 5. Infectious Waste

- VI. Biosafety Program Management
 - A. Elements
 - B. Compliance Assessment

- VII. Current Biosafety Topics
 - A. Bloodborne Pathogens
 - B. Tuberculosis
 - C. Bioterrorism
 - D. Legionella
 - E. Building-Related Bioaerosols
 - F. Biological Hazards for Noninfectious Agents
 - 1. Endotoxins
 - 2. Organic Dust Toxic Syndrome
 - 3. Mycotoxins

- VIII. Regulations and Guidelines