

The image features the OSHA logo prominently in the center. The logo consists of a stylized 'O' with a blue and white circular design inside, followed by the letters 'S', 'H', and 'A' in a white, serif font. A registered trademark symbol (®) is located to the upper right of the 'A'. The background is a close-up, slightly blurred view of the stars and stripes of the United States flag, with the stars appearing in the upper half and the stripes in the lower half.

OSHA[®]

**Occupational Safety
and Health Administration**


Application of OSHA Standards to Infectious Diseases

Gregory M. Thomas, CSP

Northeast Biological Safety Association

9th Annual Biosafety Symposium

April 26, 2017

- 
- Coverage
 - Infectious Diseases
 - Existing Standards
 - General Duty Clause
 - Inpatient Healthcare Memo
 - Ebola
 - Proposed Standard
 - Resources

Coverage

- To assure safe and healthful working conditions for working men and women;
- Protect employees of an employer from hazards
- Federal and private employees

Coverage cont.

- Workplaces, such as:
 - Health care facilities
 - Emergency response
 - Cleanup contractors
 - Laundries
 - Laboratories
 - Social service provider
 - Warehouses
 - Schools

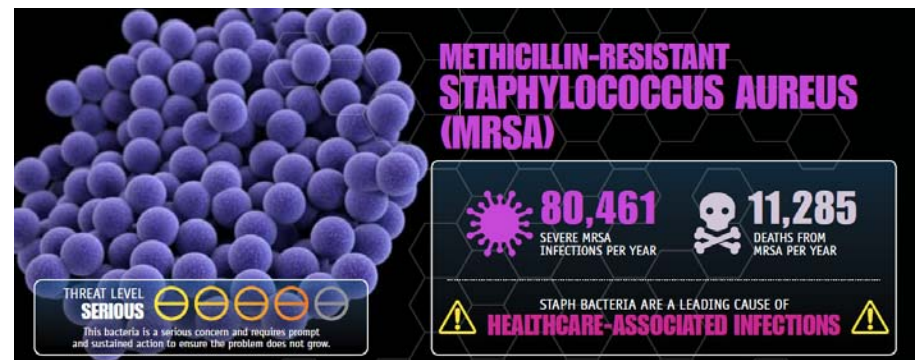
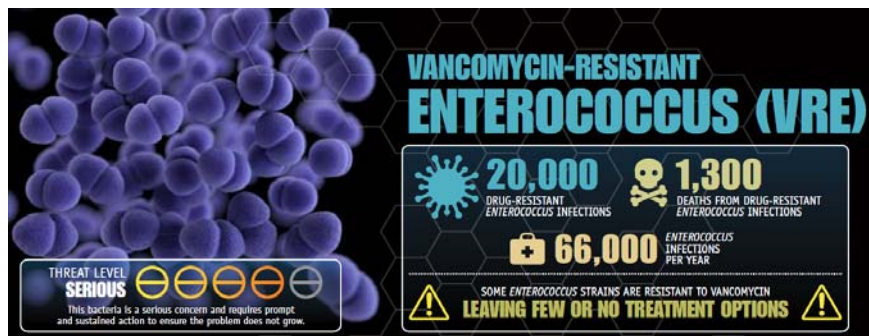
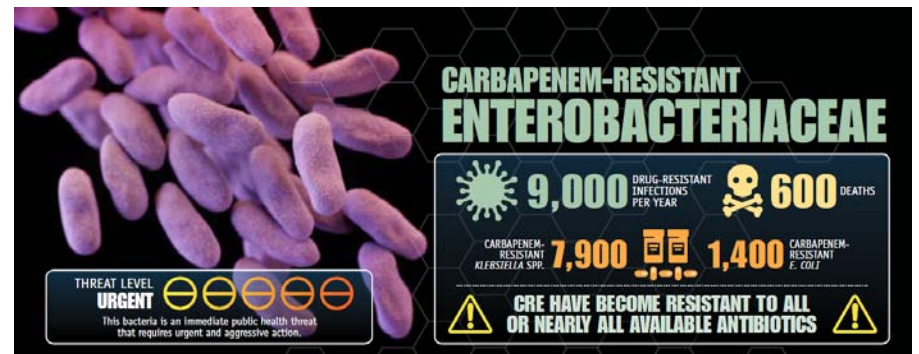
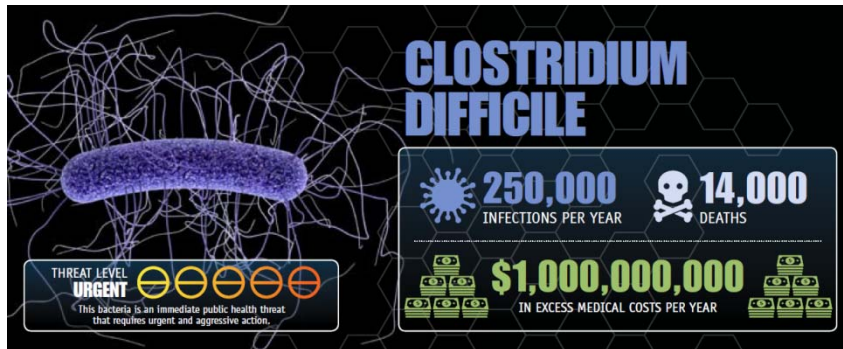
Infectious Diseases

- Exposure to infectious agents is a hazard
- Wide range of serious health effects including permanent injury or death

Infectious Diseases

- Infectious agents could be spread by **blood**, **contact**, **droplets**, or **airborne**:
 - Hepatitis B
 - Ebola
 - Norovirus
 - SARS
 - Adenovirus infections
 - Influenza
 - Tuberculosis

Multi-drug resistant organisms



How can we control these hazards?

- Some existing OSHA standards can control these infectious agents
- Otherwise, there's the General Duty Clause

Existing Standards

- Personal Protective Equipment (PPE) – 29 CFR 1910.132
- Respiratory Protection – 29 CFR 1910.134
- Specifications for Accident Prevention Signs and Tags – 29 CFR 1910.145
- Bloodborne Pathogens – 29 CFR 1910.1030

PPE

Provides requirements for general PPE use:

- Requirement to assess the workplace for hazards to determine the need for PPE (29 CFR 1910.132(d)(1))
- Requirement to provide or ensure the use of PPE (29 CFR 1910.132(d)(1)(i))
- Requirement to provide training to each employee required to use the PPE (29 CFR 1910.132(f)(1))

Respiratory Protection

Provides specific requirements for the use of respirators:

- Written respiratory protection program
- Procedures for selecting respirators for use in the workplace;
- Medical evaluations of employees required to use respirators;
- Fit testing procedures for tight-fitting respirators;
- Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations;

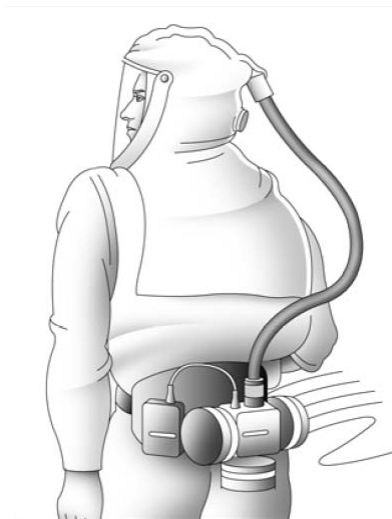
Respiratory Protection cont.

- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators;
- Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators;
- Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations;
- Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance; and
- Procedures for regularly evaluating the effectiveness of the program

Types of Respirators



**Half mask Filtering Facepiece
Dust mask**



**Hooded Powered Air-Purifying
Respirator
(PAPR)**



**Tight-fitting Self-Contained
Breathing Apparatus (SCBA)
pressure-demand mode**

Specifications for accident prevention signs and tags



Provides requirements for the design, application and use of signs or symbols, such as:

- BIOHAZARD signs outside TB rooms
- Biological hazard tags on air transport components

Bloodborne Pathogens Standard

- Only pertains to bloodborne diseases, such as
 - HBV
 - HIV
 - Hepatitis C
 - Any other pathogenic microorganism that is present in human blood or OPIM

Bloodborne Pathogen Standard cont.

- Key concepts:
 - Exposure control plan
 - Universal Precautions
 - Use of Engineering Controls to reduce employee exposure
 - Hepatitis B vaccination and post exposure evaluation and follow-up
 - Training
 - Recordkeeping

General Duty Clause

- **SEC. 5. Duties**
- (a) Each employer --
- (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

What is a recognized hazard?

- Employer recognition
- Industry recognition
 - CDC/HICPAC Guidelines
 - CDC/NIH Guidelines
 - CMS
- Example:
 - CDC/HICPAC's *2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*

General Duty cont.

- Addresses those conditions that are not addressed by another standard:
 - Infection control program
 - Risk assessment
 - Medical surveillance
 - Case management of infected employees
 - Employee education and training
 - Engineering controls

Inpatient Healthcare Memo

- Issued in June 2015
- Hospitals and Nursing/Residential Care Facilities
- Addresses:
 - Musculoskeletal Disorders
 - Workplace Violence
 - Slips, trips and falls
 - Bloodborne Pathogens
 - Tuberculosis
 - Other hazards, such as multi-drug resistant organisms

Ebola

- Region 2 OSHA response during 2014 outbreak:
 - Investigated Complaints
 - Technical Assistance Visits
 - Limited Enforcement Action

Ebola complaints

- Alleged lack of preparedness from several healthcare facilities in NY and NJ
- Airport workers alleging lack of training and PPE
- Requests for general information taken from groups developing response plans

Ebola Technical Assistance Visits

- 13 Technical Assistance Visits to hospitals via Strike Teams
- Objectives
 - Assess the adequacy of healthcare worker training, including ability to practice skills in safe environment
 - Assess PPE ensemble and donning/doffing procedure
 - Assess decontamination (personnel and environmental) and waste management
 - Assess supply and adequacy of available PPE
 - Assess other engineering and administrative controls
 - Assess for other potential WSH hazards

Ebola Enforcement

- Result of a non-formal investigation for a records review of a cleanup contractor
- Falsification of training records and documents and other safety and health issues
- Formal investigation resulted in citations for:
 - Bloodborne Pathogen
 - HAZWOPER
 - PPE

Infectious Disease Standard

- Proposed to address occupational exposure to contact, droplet and airborne transmissible infectious agents in settings where:
 - Direct patient care is provided,
 - Contaminated materials originate from settings where direct patient care is provided,
 - Employees are working with human remains, or
 - Diagnostic, research and production laboratories
- As of Fall 2016, it's in Proposed Rule Stage

Resources

- OSHA Directives:
 - [CPL 02-00-158 \[CPL 02-00-120\] - Inspection procedures for the Respiratory Protection Standard](#)
 - [CPL 02-02-069 \[CPL 02-02-069\] - Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens](#)
 - [CPL 02-02-078 \[CPL 02-02-078\] - Enforcement Procedures and Scheduling for Occupational Exposure to Tuberculosis](#)
- CDC
 - [*2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*](#)

Conclusion

- Coverage
- Infectious Diseases
- Existing Standards
- General Duty Clause
- Inpatient Healthcare Memo
- Ebola
- Proposed Standard
- Resources

The logo for the Occupational Safety and Health Administration (OSHA) is centered on a background of a stylized American flag. The flag's stars and stripes are visible, with the stars in the upper left and the stripes extending across the bottom. The letters 'OSHA' are rendered in a bold, serif font. The 'O' is a large, circular emblem with a blue outer ring and a white inner ring. The letters 'S', 'H', and 'A' are white with a slight shadow effect. A registered trademark symbol (®) is located to the upper right of the 'A'.

OSHA[®]

**Occupational Safety
and Health Administration**