Protecting Employees

Pandemics and Biohazards
Introductions

Ryan Dobbins is a Safety Services Manager responsible for developing, managing and providing services in support of Safety Management Group’s (SMG) Columbus, Ohio division. Ryan joined SMG in 2014 and has held the positions of Safety Advisor and Senior Safety Advisor, supporting large owners’ and contractors’ safety and health programs in the manufacturing and construction industries. Ryan is a Certified Safety Professional (CSP), Construction Health & Safety Technician (CHST), Certified Instructional Trainer (CIT), Certified Utility Safety Professional (CUSP) and possesses a Bachelor of Science Degree in Occupational Safety & Health Management from Indiana University. Since 1991, Safety Management Group continues to be a nationally recognized occupational safety, health and environmental consulting and staffing firm with 225 team members.
**Topic Overview**

- Purpose and Scope
- Definitions and Common Terms
- Worker Rights
- How Biological Hazards Spread
- Hazard Identification and Signs/Symptoms
- Planning and Development
- Control and Prevention
- Conclusions
- Additional Resources
Purpose & Scope

**Purpose:** Due to the current global pandemic, humanity has been challenged to quickly respond to safety and health risks that are affecting our daily lives and activities. The United States and the American Workforce has not been immune to this crisis, affecting all industries including manufacturing, construction, maritime, healthcare, and all other general industries. No matter which industry your organization operates, all employers must be prepared to provide a safe and healthful work environment for their employees.

**Scope:** To help prepare American workers and employers stay safe and healthy as the country continues to open back up and return to “normal” operations, Safety Management Group developed this preparedness guidance to assist in helping to protect employees from being exposed to and spreading COVID-19 and other biological hazards during activities at work and home.
Definitions and Common Terms

**Biological Hazards:** any form of substances or agents that pose a threat to human health or the environment.

**Novel Coronavirus:** a family of viruses that circulate among animals and can cause illness in people. Several coronaviruses cause common colds but are not significant threats for most healthy people.

**SARS-CoV-2:** a distinct human coronavirus and the virus that causes COVID-19, thought to have jumped species from animals to infecting humans.

**SARS:** Severe Acute Respiratory Syndrome

**MERS:** Middle East Respiratory Syndrome

**COVID-19:** a respiratory disease that is spread from person to person currently affecting all 50 states of the United States and international countries.
Worker Rights

Employers are required to provide all associates with a place of employment free from recognized hazards, including hazards and exposure related to pandemics or other biological hazards.

Since the current pandemic has affected all industries and forms of business, many employees and employers have learned about relevant OSHA Regulations that may not have pertained to their business operations in the past. A few examples:

| PPE General Requirements | 29 CFR 1910.132 |
| Eye and Face Protection | 29 CFR 1910.133 |
| Respiratory Protection | 29 CFR 1910.134 |
| Bloodborne Pathogens | 29 CFR 1910.1030 |
| Recordkeeping | 29 CFR 1904 |
How do Biological Hazards Spread?

Viruses generally spread by droplets made when infected people cough, sneeze, or talk. These droplets can be inhaled into lungs or can land in the mouth, nose, face, or eyes of people around.

Common ways to spread:

- Physical contact
- Sharing surfaces
- Sharing paper, pens, other materials

Viruses are thought to spread mainly from person-to-person. Since we are continuing to receive new and updated guidance from government and regulatory agencies on the current pandemic, it is imperative that employers continue to monitor updates and guidance.
Hazard Identification and Signs / Symptoms

Know the Signs / Symptoms of Biological Hazards!

Cough  
Shortness of Breath  
Difficulty Breathing  
Fever

Symptoms can begin 1 – 14 days after exposure and people can be contagious and spread viruses prior to showing symptoms. Consider that the current pandemic virus typically causes mild respiratory illness, but can cause severe disease, including pneumonia-like illness (novel coronavirus-infected pneumonia or NCIP).

Most importantly, and since information is constantly changing, employers need to focus on training their employees to identify hazards and the best ways to control them rather than focusing on specific concerns with biological hazards.
Have a Plan

Just like any other standard operating procedure or written safety and health plan, employers need to focus on developing a written plan that aims to prevent illness and spread of biological hazards.

Consider the plans you already have, such as hazard communication (HAZCOM), PPE, fall protection, hearing conservation, etc.

This plan needs to be developed, incorporated into policies and procedures, most importantly, we need to focus on employee training and education.
Similar to performing any job, task, or activity, employers and employees should always begin their activities by performing a hazard assessment – at work, home, or in public places.

Remember: Basic safety management concepts, such as the the Hierarchy of Controls, are still an important and useful concept in preventing exposure to biological hazards and other pandemics.

Although PPE is a mandatory requirement for many establishments and places of business, there are more effective ways to prevent exposure!

Let’s look into these…
Elimination and Substitution

Tasks should be evaluated for the possibility of working remotely or isolated

Meetings / conferences and trainings should be done virtually

Client / patient services should be done virtually

Employee-to-employee contact should be eliminated by spreading out workstations where possible

Employees should be encouraged to stay home if they feel ill in any way, including symptoms not associated with COVID-19
**Engineering Controls**

Physical barriers to prevent the spread of hazards
- For example, sneeze guards or enclosures to isolate stations on process lines, operator cabs or any other workstations

Isolation of tasks should be considered where possible

If working in an enclosed space, open windows/doors and utilize fans to change ventilation and air patterns
Administrative and Work Practice Controls

Utilize social distancing techniques! Maintain a minimum of 6 feet apart from others

Personal Hygiene: Wash or disinfect your hands frequently! Have a hand washing station or sanitizer readily available at all work stations

Work Surface Cleanliness: Regular clean or disinfect your work surfaces and tools! This includes gauges and switches, desks, doorknobs, keyboards, machinery, locking stations, etc.
Incorporate signage throughout the workplace and facility that are distinctive from all other process or safety signage.

Consider Human Performance Improvement Tools and anything that might stick out to the workforce.

These indicators should be included in your plan and training program during return-to-work orientation.
Facility Logistics and Control

Visitors should be considered at risk similar to all other employees preparing to return to work and operations. The number of visitors should be limited and controlled as much as possible.

Consider maintaining a log and processes for tracking who is going in and out of the facility or work environment. Those individuals should receive an orientation of new guidelines and directives.

Additionally, visitors should be screened for signs, symptoms or any other noticeable concerns related to biological hazards.
Worker Behaviors

Common worker behaviors should be modified as best and quickly as possible to protect them.

Traditional greetings like handshakes or fist bumps should be eliminated or avoided.

Workers should be required to park safe distances from others, which may require employers to provide extra parking or designated areas.

Discourage ridesharing or use of public transit.

If workers have to be bussed, separate them by using every other seat to attempt social distancing.
Daily Screening and Checks

Consider that daily screening for biological hazards should be considered as a variation for “Fit for Duty”. Screening for signs and symptoms may not always put that particular employee at risk, but it is creating an unsafe work environment for everyone else around.

Example Screening Questions:

- Do you have a cough, fever, difficulty breathing, chest pain?
- Are you experiencing signs of a runny nose?
- Generally, are you feeling healthy?
- Have you been tested or someone in your household been tested for COVID-19 or flu-related symptoms in the last 14 days?

Depending on the results, you may consider preventing access to the facility.
Prior to selecting PPE, conduct an assessment to understand what could be used most effectively in conjunction with engineering and administrative controls.

Some examples of common PPE associated with prevention of COVID-19 are:

- **Face Coverings:** Gaiters, N95 respirators, dust masks, surgical masks, face shields, safety glasses, goggles, etc.

- **Gloves:** Disposable latex or nitril gloves, etc.

- **Note:** Use of some PPE can cause a “false sense of security”. Always remember to practice proper hygiene and refrain from touching your face where feasible.
Working Remotely

Encourage your organization and management to develop Work From Home Guidelines where possible or feasible.

If you are feeling sick or are showing symptoms of being sick (fever, cough, shortness of breath, etc.) stay home and contact your supervisor for ways to stay productive.

If you or someone in your household has tested positive for COVID-19, stay home and quarantine for 14 days.
Social Distancing means keeping space between yourself and other people outside of your home and is an effective means of protection from exposure and spread of any biological hazards and viruses.

Stay (at a minimum) 6 feet from other people.

Do not gather in groups. Consider morning huddles or briefings. Always follow CDC guidelines and limit gatherings to 10 people or less.

Any face-to-face contact less than 6-feet should only take place in conjunction with wearing a mask or face covering.
Proper Cleanliness and Hand Washing

Hand washing / disinfecting is one of the best ways to protect yourself and your employees from getting sick.

For all employees, regardless of specific risk exposure:

- Practice good and frequent hand hygiene
- Follow cough and sneeze etiquette (into your elbow)
- Avoid touching your eyes, nose, and mouth with unwashed hands
- Avoid close contact with people who are sick
- Use hand sanitizer when you cannot use soap and water, but always designate and implement adequate hand washing stations or a process for decontamination prior to entering lunch areas or cafeterias.
Proper Cleanliness and Hand Washing

For proper hand washing, follow these steps:

1. **Wet** your hands with clean, running water (warm), turn off the tap, and apply soap.
2. **Lather** your hands by rubbing them together with soap. Lather the backs of your hands, between your fingers, and under your nails.
3. **Scrub** your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
4. **Rinse** your hands well under clean, running water (warm).
5. **Dry** your hands using a clean towel.

This should be included on signage and in your training.

Source: CDC
Masks and Face Coverings

Masks are an important tool in protection from the spread of biological hazards. The CDC recommends wearing cloth face coverings or masks in public/work settings or where social distancing measures are difficult to maintain.

Masks and Face Coverings must cover your nose and mouth when in the presence of others.

You may consider updating or revising your facilities’ respiratory or PPE Programs.

Source: CDC
Response and Prevention Plan

Employee Training: Continue to update and train all employees on updated hazards, new guidelines and recommendations as they become available.

Communication: Continuously monitor and update your organizations’ guidance and action plans related to pandemic awareness and other biological hazards. Additionally, please make sure to check state and local guidelines as your region of operation may have specific guidance.

Daily Screening Questionnaire: Prior to leaving your home for company business, complete the SMG Baseline and Daily Screening Questionnaire. This should include taking temperature readings using non-touch infrared thermometers.

Have a Plan!
Work from Home Guidelines
Social Distancing
Cleanliness and Isolation
Face Coverings and PPE
Additional Resources


NIOSH COVID-19 | https://www.cdc.gov/niosh/index.htm


Thank you!