

# WHSE TOOLBOX TALKS

### #1 Biological Hazards

#### **BACKGROUND**

Biological hazards are organic substances that present a threat to the health of people and other living organisms. <sup>[1]</sup> Employers must identify whether there is a risk to health of employees from exposure to biological hazards at their workplace. Where a risk to health is identified employers must, so far as is reasonably practicable, eliminate or reduce the risk. <sup>[2]</sup>

#### **Definitions**

Bacterial infections include whooping cough, strep throat, ear infection and urinary tract infection (UTI)

Human bodily matter such as blood, tissues, saliva, mucous, urine and faeces

Viruses include COVID-19, hepatitis, common cold, flu, most coughs and bronchitis, chickenpox and HIV/AIDS

Sharps is a medical term for devices with sharp points or edges that can puncture or cut skin such as needlesticks

Vulnerable Workers are groups of individuals who are at a higher risk of more serious illness

#### TYPES OF BIOLOGICAL HAZARDS

Biological hazards include:

viruses & bacterial diseases | animals & animal products | moulds & yeasts | human bodily matter | organic matter [4]

#### POTENTIAL SCHEME EXPOSURE RISKS

#### **Handling of Containers**

Biological hazards pose risks for many workers in a wide variety of ways, primarily being handling of containers and sharps that have been exposed to human bodily matter during the separation of plastic, glass and cans by hand.

#### **Sharps and Broken Glass**

During container handling and sorting, exposure to sharps and broken glass can occur. If skin is punctured by a sharp medical tool, it is called a 'needlestick injury'. [3]

#### **Vulnerable Workers**

Pregnant women, elderly people, people with pre-existing diseases such as lung diseases, allergies, asthma and diabetes (because of the increased risk of infections) and people who have undergone immunosuppression as a treatment for chronic diseases, are also considered vulnerable. Trainees and workers in their first jobs, as well as temporary workers, are also considered vulnerable groups, because they have less practical experience and are generally less aware of the risks. [6]

#### **TOOLBOX TIPS**

- Print copies of this sheet for yourself and each of the workers
- Lead a discussion with your workers about the materials on this sheet at a location that is appropriate to the topic
- Be sure to give real life examples whenever possible.
- Ask your workers for their experiences
- Have each worker sign your sheet to confirm their attendance

- Conclude with a brief review of the main points or a summary based on the discussion
- File your sheet in your worker training records to document the training experience
- Fill in your operation name, location and the date on your sheet
- Be open to questions



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#### POTENTIAL CONTROLS

Exposure to biological hazards may be prevented and managed by following the principles of a three-step risk management process:

Hazard identification Risk assessment Risk control [7]



#### **Hazard Identification**

Hazard identification includes identifying potential sources of infection; identifying activities where hazards exist, and potential means of transmission. [7]

#### Risk Assessment

- type and frequency of exposure
- workplace layout and design including poor
   lighting and crevices that can conceal needlesticks
- availability, suitability and use of personal protective equipment (PPE)
- level of knowledge and training of employees
- individual risk factors for each worker, such as damaged / broken skin, dermatitis and eczema;
- availability of vaccines and post exposure treatment
- access to relevant medical and first aid services. [8,9,10,11,12]

#### Risk Control

Upon completion of a risk assessment, consideration must be given to controlling risks. Practical prevention and control strategies appropriate to the workplace may include:

- safe work procedures,
- personal hygiene
- infection control programs such as regular cleaning of equipment and handwashing/sanitizing
- post-injury testing, counselling and follow-up
- PPE such as puncture and moisture resistant gloves / pierce-proof safety boots
- supervision, particularly of new employees and vulnerable workers
- well-designed equipment and work premises including needlestick disposal containers
- workers are appropriately educated and trained
- ✓ first aid kits and trained first aid personnel
- an immunisation program. [8,9,10,11,12]

#### Resources/References

[1] Biological Hazards - WHSQ [2] WHS Regulation Qld 2011, Ch 3 General risk and workplace management - Qld Legislation [3] Bacterial Infections - Health Direct Aust [4] Biological Hazards - Comcare [5] National audit of community needle and syringe disposal - Dept Health Aust [6] Exposure to biological agents and related health effects in the waste management and wastewater treatment sectors - EU OSHA [7] How to manage health & safety risks COP - WHSQ [8] Management of occupational exposure to blood and body fluids - Qld Health [9] National Hazard Exposure: Worker Surveillance - SafeWork Aust [10] National Code of Practice Hepatitis & HIV - SafeWork Aust [11] Australian Immunisation Handbook: Vaccine Preventable Diseases - Dept Health Aust [12] Industry Code of Practice for Managing Biohazardous Waste (Including Clinical and Related Wastes) – WMRR

