KEY TERMS - SESSION 2: HEALTH OUTCOMES FROM EXPOSURE TO BIOAEROSOLS

Health Outcome



Health outcomes are changes in health that result from specific measures or exposures. For example, an adverse health outcome would be a negative change in a person's health as a result of an exposure (i.e. infection). In contrast, a favourable health outcome would be a positive change in health as a result from an exposure (i.e., to a medication that removes symptoms or disease)

Sensitisation



Sensitisation is the process of become more sensitive or prone to having a reaction to a particular agent. Sensitisation can occur from repeated exposure to an agent over time. In terms of allergy, you can become sensitised over time to allergens such as pollen, fungi or pet dander, which will result in you developing allergies or adverse health outcomes. However, sensitisation can also be good as it can be used to prime the immune system. For example, vaccines work by sensitising the immune system to a particular antigen. The immune system then creates antibodies to protect you from future infection.

Infection



Infection is the invasion of the human body by another organism. The organisms that cause infections are very diverse and can include viruses, bacteria, fungi, and parasites. Infections can be acquired directly from an infected person, animal, or insect or through contaminated air, water, soil, and food.

Hazard

A hazard is a potential source of harm or adverse health effect on a person



or persons. A hazard is not the same as a risk (see definition of risk) although the terms are often used interchangeably. For example, a chain saw is a hazard. It only becomes a risk when someone uses it. In terms of health, bacteria are a hazard but only become a risk if people are exposed to the bacteria.

Risk

Risk is the possibility or probability of something bad happening when exposed to a



hazard. In terms of health, a health risk is the potential for an adverse health outcome under conditions of exposure. This means that the hazard only becomes a risk when someone is exposed or comes into contact with the hazard.

Allergy



An allergy is an immune reaction your body has to a particular food or substance. Allergies are particularly common in children, but adults can get them too. Allergy symptoms include sneezing, wheezing, and itchy eyes. A life-threatening allergic reaction can also cause swelling and breathing difficulties. Allergies are caused by your immune system mistaking a harmless substance for something harmful. Common triggers include pollen, food, and animals.

Exposure



Exposure means to come into contact with or are near to something or lack protection from something. For example, you can become exposed to microbes (come into contact with them) through the air, soil, water, and food, and you can be exposed by being near areas where these organisms are present. You can also be exposed to infection when you lack a fully functioning immune system. You require exposure for a hazard to become a risk.



SESSION 3: LINKING EXPOSURE TO HEALTH OUTCOMES FROM EXPOSURE TO BIOAEROSOLS



Epidemiology is the study and analysis of the distribution, patterns, and determinants of health and disease. It is used to find the causes of health outcomes and diseases in populations and is a vital part of understanding disease.

Risk Assessment



Risk assessment is the process of characterising the nature and likelihood of a harmful effect to individuals or populations from certain activities. In terms of health and public health, a risk assessment will identify the hazards to health and assess the likelihood that people will be exposed, and the severity of the consequences should exposure occur. A health risk assessment is a questionnaire screening tool, used to provide individuals with an evaluation of their health risks and quality of life.



