Plenary: Worksheet Answers

# Hazard Groups

**Hazard Group 1**

* Unlikely to cause harm to humans
* Very unlikely to spread to the community
* Cell lines that have been safely used for years
* Non-pathogenic strains of some bacteria/viruses
* Disabled strains of bacteria/viruses
* Attenuated strains of bacteria/viruses
* Examples: non-pathogenic *E. coli* K-12*,* a species of yeast, *Saccharomyces cerevisiae.*

**Hazard Group 2**

* Can cause human disease
* May be a hazard to lab workers
* Likelihood of infection spreading to the community is low
* There are usually effective vaccines or treatments available
* Examples: most strains of *E. coli*, streptococcus, measles, noroviruses, zika virus.

**Hazard Group 3**

* Can cause severe human disease
* Can be a serious hazard to lab workers
* Infection may spread to the community
* There are usually effective vaccines or treatments available
* Examples: HIV, Hepatitis-B and C SARS-Cov-2.

**Hazard Group 4**

* Causes severe human disease
* Is a serious hazard to lab workers
* Infection is likely to spread to communities
* No effective vaccines or treatments available
* No effective preventative methods
* This category of biohazard is only permitted in specialised labs
* Examples: rabies, Ebola, Lassa fever virus.