

BIOAEROSOLS: HOW CAN WE HELP MITIGATE THE RISKS?



RESOURCES

3 x PowerPoints (What is the difference between hazard, risk and exposure? What is the source-pathway-reception model? How to communicate risk)

2 x handouts (Why do we assess risk? The source-pathway-receptor-model)

Scenarios

1 x poster



SESSIONS

Session 1: Introduction to risk assessment and mitigation

Session 2: The source-pathway-receptor model

Session 3: Using communication to reduce risk



OBJECTIVES AND LEARNING OUTCOMES

Introducing students to mitigating the risks from potentially harmful bioaerosols. Students will recap how exposure could lead to adverse health outcomes in some populations, and learn how we can use certain tools to mitigate these risks.

KEY STAGES 1-2 (AGE 5-11)

Students will be able to:

- Identify two ways to reduce exposure to potentially harmful bioaerosols
- Describe at least one way to communicate the risks of bioaerosols to others

KEY STAGES 3-4 (AGE 11-16)

Students will complete all learning outcomes for Key Stages 1-2 and be able to:

- Explain the terms 'mitigation' and 'risk reduction'
- Identify the sources, pathways, and receptors in an exposure scenario

Session 1: Introduction to risk assessment and mitigation

- Go through the PowerPoint: **What is the difference between hazard, risk and exposure?** (Note: This content is also covered in Part 4: What effects can bioaerosols have on health?)
- Watch the YouTube video on slide 4: **Hazard vs. Risk - What's the difference?**
- Go through PowerPoint slides 5-10
- Using the shark image as an example, students draw a picture presenting a hazard, exposure, and risk (slide 10, activity 2)

Extended activities for Key Stages 3-4:

- Give out handouts: **Why do we assess risks?**
- Go through slides 11-16
- Direct students to the poster of **Key Terms**

- Discuss allergens and ask students to come up with actions to reduce the risk of allergies from indoor and outdoor allergens (slide 17)
- Go through the plenary (slide 18)

Session 2: The source-pathway-receptor model (Key Stages 3-4)

- Open PowerPoint: **What is the source-pathway-receptor model?**
- Give out handout: **The source-pathway-receptor model** (slide 6)
- Give out **scenarios** (slide 7)

Session 3: Using communication to reduce risk

- Open PowerPoint: **Using communication to reduce risk**
- Go through activities 1 and 2 (slides 6 and 8)