

Outbreak!

A role playing activity for 1st year Microbiologists

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1. Introduction

We wanted to show how the microbial science taught in class is applied in real life. Outbreak! is a role playing activity for 1st year Microbiologists which teaches them the steps taken by epidemiologists when investigating infectious disease outbreaks.

2. What we did

We created a role playing activity within a 1st powerpoint frame for year BS1040 microbiology students which demonstrates the appliance of the science they learn in lectures.

In their role as Chief Medical Officer of the WHO, the mission of the student is to investigate the cause of a deadly infectious disease outbreak in the African country of Ziberia. Updates of information prepared for the CMO are provided who also orders tests, receives lab results and has to interpret the experimental data (which students realize are techniques they have carried out intheir practical classes). Students can access side information which explain terminology & the underlying science of modern epidemiology.

The Outbreak! finale is the assessment. The CMO has to write a 300 word report to the World Press on the identity & cause of the Ziberia outbreak. To encourage independent research the press release requires additional information on hemorrhagic virus origins for completion.

3. Outbreak excerpts





- Your role as Chief Medical Officer of the WHO is to identify and so contain infectious disease outbreaks.
- You have received a report of what may be a new infectious agent causing a rapid onset infection characterised by high transmissibility and exceptionally high mortality.
- The source of the infection is not stated in the report but the person-person infection rate is high and fears are a pandemic might develop due to the close proximity of an international airport
- · Your mission is to travel to the outbreak location and identify the causative agent of the infection.



Outbreak is a term used in epidemiology to describe an occurrence of disease

greater than would otherwise be expected at a particular time and place

You order a range of additional tests:

Epidemiology explained

World Health Organization

ostic Laboratory

NHO | Ziberia N

4. Evaluation & next steps

Reviews by teachers & ex-BS1040 students were all positive; the students suggested replacing Outbreak! for the module essay. In creating Outbreak! our initial lack of multimedia experience was an issue, but improved significantly during its production. Our next step is to embed Outbreak! within Blackboard.

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