

Infectious Disease Investigation

Objective: the student will “investigate the world beyond their immediate environment, framing significant problems and conducting well crafter and age-appropriate research “ (Mansilla, V & Gardner, H. 2011, pg 11).

1. Students will break up into five groups. They will stay in the same group for the entire year. Students may pick their own members.
2. When a new virus or outbreak of a recurrent virus has been identified in the media (legitimate sources only), each group will have specific questions to research and share with the class. Class time will be utilized.
3. The information researched will be written on one poster by each group and will be displayed in the classroom for duration of outbreak/epidemic/pandemic.
4. As information changes, additions/corrections will be made to the poster.
5. 30 minutes will be utilized at least weekly to research updates.
6. It may be conceivable, that the class will be researching and reporting on several different outbreaks at the same time throughout the year.
7. Extra credit will be given to the first student who identifies a virus outbreak in the US **AND** FIRST reports it to the instructor at the beginning of class.
8. Extra Credit will be given to the first student who identifies a virus outbreak outside of the US **AND** FIRST reports it to the instructor at the beginning of class.

All Research will be done utilizing legitimate websites, ex: CDC, WHO, Mayo Clinic (and other medical websites), MSN, CNN, FOX News etc.

The following groups will have specific responsibilities. More questions may be added at a later date as more information becomes available regarding the outbreak.

Group A

- Geographical region it is occurring?
- Prevalence: how many are currently affected?
- Who is the most susceptible?
- What population/age of people are most affected?

To Keep an eye on and report:

- Is it spreading to other areas, states, countries, and continents?
- Are the numbers of people affected changing?
Decrease/increase?
- Is the population affected changing?
- Is culture play an issue for the increase/decrease prevalence of the disease (in your opinion and why)?

Group B

- What are the specific symptoms being experienced by the ill people?
- How severe are the symptoms? Require hospitalization?
- How long do the symptoms last? Do the symptoms change as the illness progresses?

To keep an eye on and report:

- Are long term complications being seen?

- Are the symptoms changing in anyway?
- Are the symptoms different in different ages of the population?

Group C

- How long is the incubation period? If MD's don't know it now, keep looking for the info.
- Looking at the symptoms and reviewing your infection control, what do YOU hypothesis as the mode (s) of transmission?
- What are the MD's saying?
- What methods should be used to stop the transmission of this virus?

To Keep an eye on and report:

- When does an individual become contagious?
- What are the very first symptoms experienced?
- When does an individual stop being contagious?

Group D

- What treatments are being used to care for the individual? Be specific for each symptom.
- Are the treatments different for different people? Explain.
- Is the treatment working?
- Are the methods of stopping transmission working?

To keep an eye on and report:

- Any changes in treatment?
- Any changes in transmission based precaution recommendations?

Group E

Some of this information may not be readily available at the beginning of an outbreak. Your job is to keep looking until you find it!

- What is the full name of the virus? Is it similar to anything the human population has experienced in the past?
- So far what is the mortality rate?
- Who are the most susceptible to die from this virus?
- What complications have been seen with this virus?

To keep an eye on and report:

- Are there any long term/residual problems for the survivors?
- Did/does the culture where the outbreak is occurring help or hinder the stop of transmission?
- Did/does the culture where the outbreak is occurring help or hinder the recovery of the sick (mortality rate)?
And if so, WHY?

Mansilla, V., & Grander, H. (2011). Educating for Global Competence: Preparing Our Youth to Engage the World. Retrieved July 11, 2015, from <http://www.asiasociety.org/education>.