Simulating the Spread of Yellow Fever

1. Previous to the start of class, teachers should cut the attached Yellow Fever Simulation squares apart and place them into a container. (Another option involving less preparation is to use small Post-It notes of two different colors.) As students enter class, have them draw a square of paper from a container (ensure students cannot see what they are drawing out.) Project the attached image of Yellow Fever and tell students who drew a paper with a mosquito on it to stand. Tell these students that you are very sorry, but due to having been bitten by a mosquito, they are now infected with the virus that they are looking at, Yellow Fever.

2. Explain to students what to expect as the virus takes hold:

• Generally there is an incubation period of three to six days.

• The first signs of yellow fever include muscle pain (with prominent backache),

headache, shivers, loss of appetite, and nausea and/or vomiting. (Tell students to

remember a time when they have had the flu. Tell them to remember how bad they

felt, and to imagine feeling worse than that!)

• Depending on how many students are standing, tell most of them to sit so that only

15 percent of those infected are still standing. Tell those who sat that thought they

experienced great sickness, they are lucky. After three to four days most patients

improve and their symptoms disappear.

• However, 15 percent of patients enter a toxic phase within 24 hours. Tell the students

still standing that unfortunately, this is the situation they are in.

• In the toxic phase, your fever reappears.

• The patient rapidly develops jaundice and complains of abdominal pain with vomiting.

• Bleeding can occur from the mouth, nose, eyes and/or stomach.

• Once this happens, blood appears in the vomit and feces.

• Kidney function deteriorates; this can lead to complete kidney failure with no urine

production.

• Generally half of patients recover from the toxic phase with no significant organ

damage (tell half of the students still standing to sit). Most unfortunately however,

the other half die within ten to fourteen days. Tell the student(s) still standing that you

are very sorry, but they have passed away, dying a gruesome death, of yellow fever.

https://civics.sites.unc.edu/files/2012/05/Fever1793.pdf