



Agent Impact

STEM Sims

Lesson 1: Radiological Warfare

Radiological weapons are weapons designed to spread radioactive material with the intention of harm or disruption. Are you ready to see the amount of damage a radiological weapon can cause?

Doing the Science

1. Start the Agent Impact Simulation by clicking on the “Sim” tab.
2. Click on “Low” for the population density.
3. Click on “Radiological” for the type of agent.
4. Click on “Min Impact” for the impact.
5. Click “Start” to begin the simulation of the radiological warfare.
6. After the effects of the agent have worn off, record the casualties in Table 1 below for low population density and in Table 2 for high population density.
7. Repeat steps 2 - 6 except with “Max Impact” for the impact instead of “Min Impact” in step 4.
8. Click on “High” for the population density.
9. Repeat steps 3 - 7 for the high population radiological warfare.

Table 1. Low Population Density.

	Hospital	Clinics	Drug Stores	Morgue
Minimum Impact				
Maximum Impact				

Table 2. High Population Density.

	Hospital	Clinics	Drug Stores	Morgue
Minimum Impact				
Maximum Impact				

Do You Understand?

1. Does a higher population or lower population have a higher number of casualties? Why?
2. How much worse is the maximum impact compared to that of the minimum impact? Provide statistics to justify your statements.