

OPIOID EPIDEMIC SIMULATION

Student Worksheet

Introduction:

In this activity, you will be exploring a simulation of how the availability of different treatments affects the number of people living with opioid use disorder (OUD) and the number of deaths from overdose. You will analyze data from a specific county in the U.S., looking at a five year period of time (2020-2024).

Go to the simulation website (https://fred.publichealth.pitt.edu/cdc_opioids) developed by the University of Pittsburgh Public Health Dynamics Laboratory and follow the analysis steps below.

Analysis:

1. Select a State and county to analyze and record it in the table below.
2. You will analyze EITHER the number of opioid use disorder (OUD) cases OR the number of overdose deaths. Circle the appropriate analysis in the table to indicate what your numbers represent.
3. On the simulation website, **start with both naloxone and buprenorphine at baseline levels** and click “play simulation.”
4. Record your baseline number of either OUD cases or overdose deaths (look below the map) in the table. You do not have to record the variance (+/- number).
5. **Increase naloxone one level at a time** and click “restart simulation” for each level. Record each number (again, look below the map) in the table.
6. **Reset naloxone** to baseline.
7. **Now increase buprenorphine one level at a time** and click “restart simulation” for each level. Record each number in the table.
8. **Reset buprenorphine** to baseline.
9. **Now increase both naloxone and buprenorphine one level at a time** and click “restart simulation” for each level. Record each number in the table.

State: _____ County: _____

(circle one)
Mean number of OUD cases
OR
Overdose Deaths

	<i>Baseline</i>	<i>+25% doses</i>	<i>+50% doses</i>	<i>+75% doses</i>	<i>+100% doses</i>
<i>Naloxone</i>					
<i>Buprenorphine</i>					
<i>Both</i>					