**Greater Lowell Questions and Observations 1/4/16**

1. **How many opioid overdoses occurred in 2014 in the greater Lowell area?** There were a total of 1,231 documented overdoses, 33 of which were fatal, in the greater Lowell area in 2009.[[1]](#footnote-1) Using these numbers, we can estimate that the probability of death given an overdose is 2.68%. We can also narrow down rates to towns, as shown in the following table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **City** | **2009 Deaths** | **2014 Deaths** | **2009 Overdoses** | **2009 OD Death Rate** |
| Lowell | 20 | 29 | 638 | 3.135% |
| Billerica | 5 | 9 | 188 | 2.660% |
| Chelmsford | 1 | 3 | 96 | 1.042% |
| Dracut | 1 | 5 | 95 | 1.053% |
| Tewksbury | 6 | 5 | 143 | 4.196% |
| Tyngsboro | 0 | 1 | 41 | 0.000% |
| Westford | 0 | 2 | 30 | 0.000% |
| **Total** | **33** | **54** | **1,231** | **2.681%** |

The number of opioid overdose deaths increased by 64% between 2009 and 2014, in the greater Lowell area. Assuming the OD death rate stayed consistent at 2.681%, we can estimate that there were 2,014 overdoses in 2014. If the death rate from overdoses decreased, then then number of ODs was even higher.

1. **What were the OD rates by town?** The table below shows what the OD rates were by town but does not take into account the possibility of the same individuals overdosing multiple times.

|  |  |  |  |
| --- | --- | --- | --- |
| **City** | **2010 Population** | **2009 Overdoses** | **2009 OD Rate** |
| Lowell | 106,519 | 638 | 0.599% |
| Billerica | 40,243 | 188 | 0.467% |
| Chelmsford | 33,802 | 96 | 0.284% |
| Dracut | 29,457 | 95 | 0.323% |
| Tewksbury | 28,961 | 143 | 0.494% |
| Tyngsboro | 11,292 | 41 | 0.363% |
| Westford | 21,951 | 30 | 0.137% |

1. **How many people are prescribed opioids each day? What is the distribution of the length of these prescriptions?** We can currently get some Medicare data from pgAdmin.
2. **Can we get raw data of the BSAS admissions? It would be interesting to know how long patients have been using opioids and how they started. This would allow us to better understand which which transitions lead to addiction.**
3. **Do the high schools or colleges have students fill out anonymous surveys about substance abuse? This may help provide a rough estimate of the number of teenagers who are misusing opioids.**
4. **Can the police departments provide us with the number of opioid related arrests made and the nature of the arrests? This will allow us to better understand how many people are being caught and what stage they are at when they are getting caught. It would also be interesting to know how often police find opioids at underage drinking parties.**
5. **Do we have the names and/or stories of the 54 individuals in greater Lowell who overdosed in 2014? This would help us better understand what transitions are leading to ODs.**

1. <http://www.mass.gov/eohhs/docs/dph/injury-surveillance/overdose/opioid-nf-related-cases-town-fy09.pdf> [↑](#footnote-ref-1)