

Disclaimer: This document is an updated version of 2017 Annual report.  
This version reflects updated numbers that were provided to ICHD.

# Ingham County Opioid Surveillance

2017  
Annual Report

# Ingham County Opioid Surveillance

## Medical Examiner

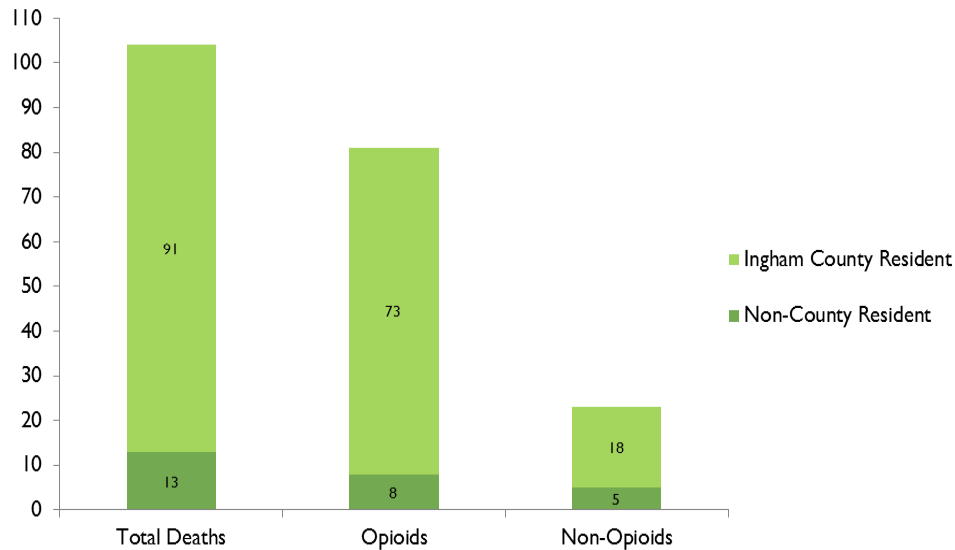
Source: Ingham County Medical Examiner, 2017

- 104 total drug-related deaths (Table 1 & Fig. 1)
  - 81 deaths were opioid-related
    - 73 opioid-related deaths were Ingham County residents
    - 8 opioid-related deaths were non-County residents
  - 23 deaths were non-opioid-related
    - 18 non-opioid deaths were Ingham County residents
    - 5 non-opioid deaths were non-County residents

Table 1: Number of drug-related deaths by related cause of death and county of residence, Ingham County 2017

| Related Cause of Death | Ingham County Resident | Non-County Resident | Total      |
|------------------------|------------------------|---------------------|------------|
| Opioids                | 73                     | 8                   | 81         |
| Non-Opioids            | 18                     | 5                   | 23         |
| <b>Total</b>           | <b>91</b>              | <b>13</b>           | <b>104</b> |

Figure 1: Drug-related deaths by related cause of death and county of residence, Ingham County 2017



# Ingham County Opioid Surveillance

Figure 2: Opioid-related deaths by month and county of residence, Ingham County 2017

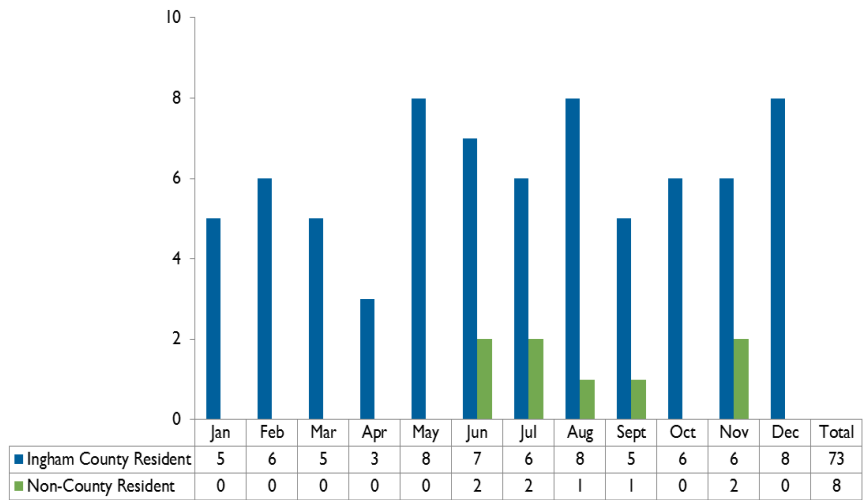
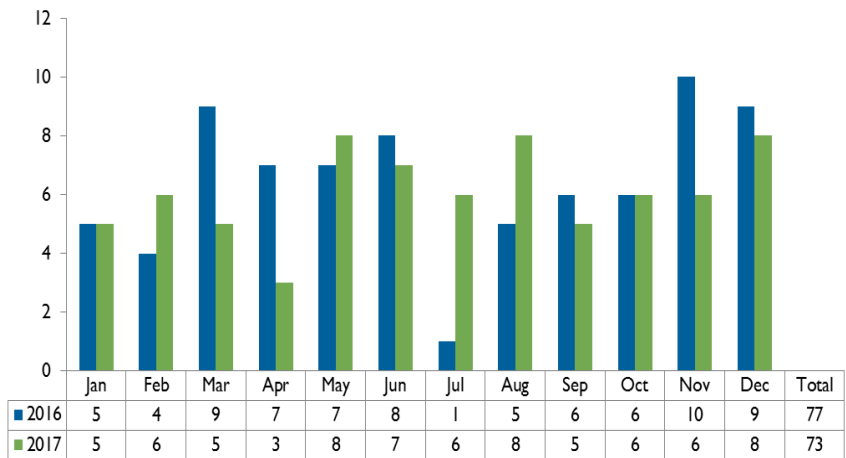
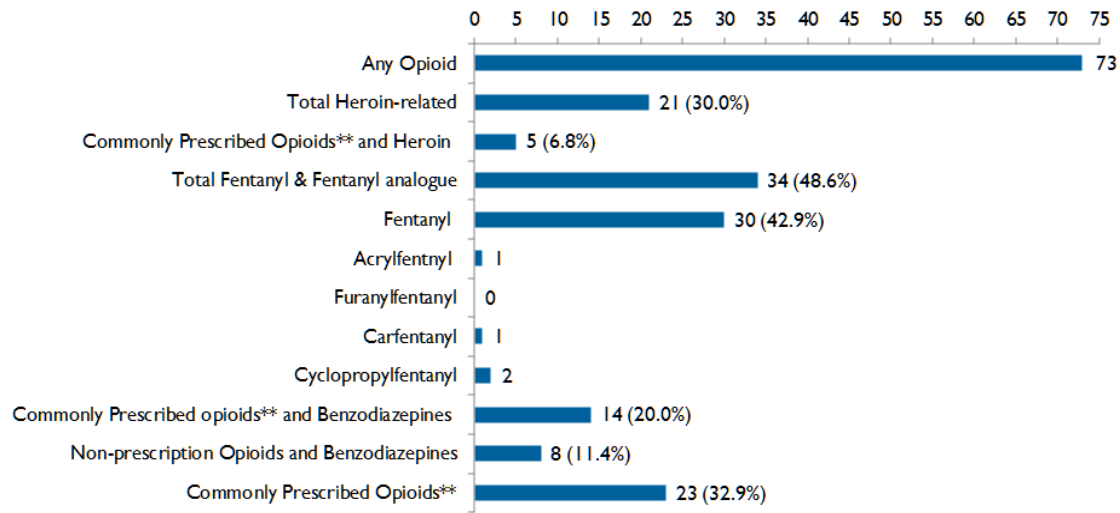


Figure 3: Number of opioid-related deaths among residents in Ingham County by month, Ingham County 2016-2017



# Ingham County Opioid Surveillance

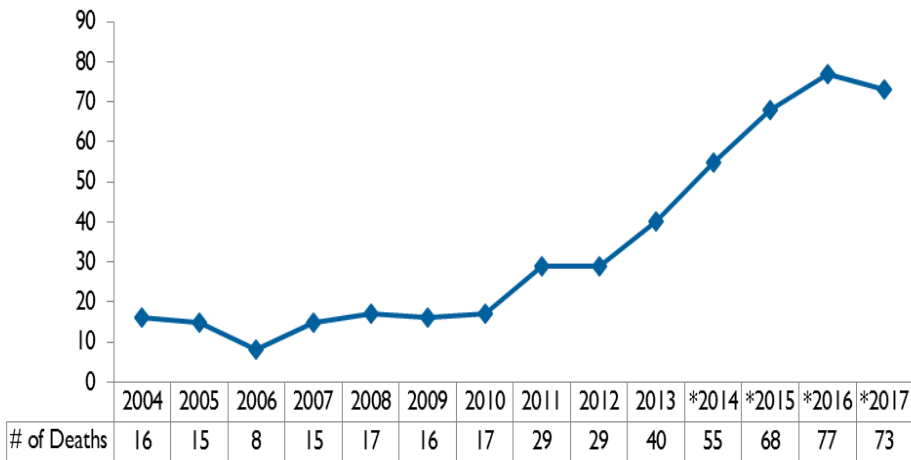
Figure 4: Opioid-related deaths by selected type of opioid among Ingham County residents, Ingham County 2017



Note: Deaths by type of drug are not mutually exclusive. Often multiple drugs are identified as a related cause of death in a single case.

\*\*Morphine, Codeine, Methadone, Oxycodone, Hydrocodone, Hydromorphone, and Oxymorphone.

Figure 5: Number of opioid-related deaths among residents in Ingham County, 2004-2017



Source: Michigan Resident Death Files

\*Source: Ingham County Medical Examiner Records 2014 - 2017

# Ingham County Opioid Surveillance

Table 2: Characteristics of Opioid-related deaths among residents in Ingham County, 2017

| <b>Decedent Characteristic</b> | <b>Number</b> | <b>Death Rate†</b> | <b>95% CI for Calculated Rate</b> |
|--------------------------------|---------------|--------------------|-----------------------------------|
| <b>Total Deaths</b>            | <b>73</b>     | <b>25.5</b>        | <b>(19.7 - 30.2)</b>              |
| <b>Sex</b>                     |               |                    |                                   |
| Male                           | 46            | 33.1               | (22.3 - 41.1)                     |
| Female                         | 27            | 18.3               | (10.9 - 24.4)                     |
| <b>Age Group</b>               |               |                    |                                   |
| <15                            | 0             | 0.0                |                                   |
| 15-24                          | 5             | *                  |                                   |
| 25-34                          | 19            | 47.9               | (26.4 - 69.5)                     |
| 35-44                          | 9             | *                  |                                   |
| 45-54                          | 17            | 52.7               | (23.0 - 70.0)                     |
| 55-64                          | 20            | 56.8               | (31.3 - 82.4)                     |
| ≥65                            | 3             | *                  |                                   |
| <b>Race</b>                    |               |                    |                                   |
| White                          | 66            | 30.1               | (21.6 - 35.8)                     |
| Black                          | 5             | *                  |                                   |
| Other                          | 2             | *                  |                                   |
| <b>Hispanic Ethnicity</b>      |               |                    |                                   |
| Hispanic or Latino             | 1             | *                  |                                   |
| Non-Hispanic or Latino         | 32            | 12.1               | (7.6 - 15.9)                      |
| Unknown/Missing                | 40            | *                  |                                   |
| <b>Other characteristic</b>    |               |                    |                                   |
| <b>Age</b>                     |               |                    |                                   |
| Median                         | 47            |                    |                                   |
| Mean                           | 44.6          |                    |                                   |
| Range                          | 15 - 65 yrs   |                    |                                   |
| <b>Manner of death</b>         |               |                    |                                   |
| Accident                       | 65            |                    |                                   |
| Indeterminate                  | 4             |                    |                                   |
| Suicide                        | 4             |                    |                                   |

Source: Ingham Medical Examiner Records 2017

†All rates are per 100,000 Ingham County residents. Rate for less than 20 deaths are considered statistically unreliable .

\*Data suppressed due to insufficient numbers

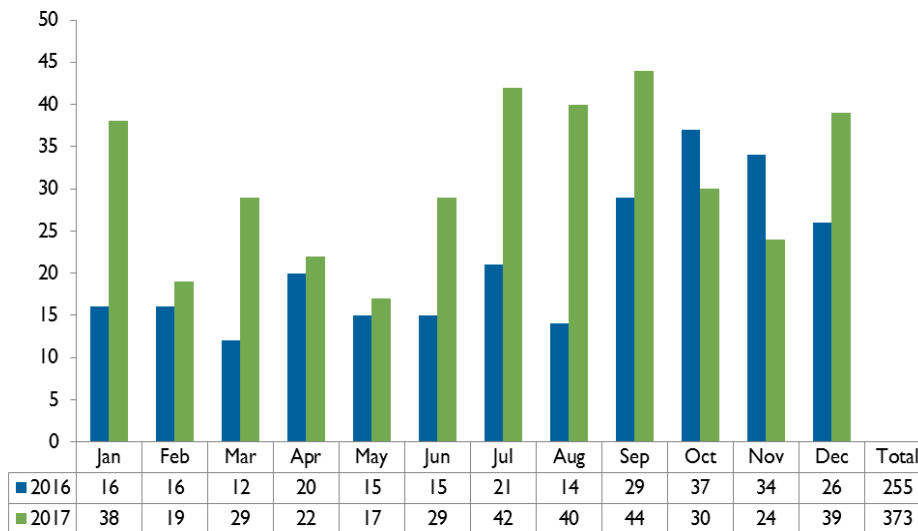
# Ingham County Opioid Surveillance

## EMS/ Fire Department

Source: City of Lansing Fire Department/EMS, 2017

- Naloxone Incidence is a record from EMS where Naloxone was administered to a person at a specific place and time excluding repeated doses.
- Total number of Naloxone incidences 373
  - Number of Naloxone incidences (1 dose administered per person) 231
  - Number of Naloxone incidences (2 doses administered per person) 106
  - Number of Naloxone incidences (3 doses administered per person) 26
  - Number of Naloxone incidences (4 or more doses administered per person) 10
  - Average age: 40 years
  - Median age: 37 years
- Number of recurrent cases 27

Figure 6: Number of Naloxone incidences by month in Ingham County, 2016 - 2017



Source: City of Lansing Fire Department/EMS 2016 - 2017

# Ingham County Opioid Surveillance

Table 3: Naloxone incidence by Demographic Characteristics, City of Lansing 2017

| <b>Characteristic</b> | <b>Count</b> | <b>Percent</b> |
|-----------------------|--------------|----------------|
| <b>Sex</b>            |              |                |
| Male                  | 214          | 57.4%          |
| Female                | 100          | 26.8%          |
| Missing               | 59           | 15.8%          |
| <b>Age Group</b>      |              |                |
| <15                   | 2            | 0.5%           |
| 15-24                 | 42           | 11.3%          |
| 25-34                 | 111          | 29.8%          |
| 35-44                 | 70           | 18.8%          |
| 45-54                 | 58           | 15.5%          |
| 55-64                 | 58           | 15.5%          |
| ≥65                   | 22           | 5.9%           |
| Missing               | 10           | 2.7%           |
| <b>Race</b>           |              |                |
| White                 | 133          | 35.7%          |
| Black                 | 48           | 12.9%          |
| Other Race            | 7            | 1.9%           |
| Missing               | 185          | 49.6%          |
| <b>Total</b>          | <b>373</b>   | <b>100.0%</b>  |

Source: City of Lansing Fire Department/EMS 2017

# Ingham County Opioid Surveillance

## Law Enforcement Data

Sources: East Lansing Police Department, Drug Overdose Incidents Tri -County Area and Lansing Police Department (Lansing only), 2017

- 281 drug overdose incidents:
  - 255 survived
  - 26 died
- Average age: 35 years
- Median age: 33 years

Table 3: Number of drug overdose-related cases (including overdose-related deaths) by law enforcement jurisdiction and month of incident, Tri-County Area 2017

| Jurisdiction            | Jan       | Feb      | Mar       | Apr       | May       | Jun       | Jul       | Aug       | Sep       | Oct       | Nov       | Dec       | Year to Date |
|-------------------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| Bath Twp                |           |          |           |           | 2         |           |           |           |           |           |           |           | 2            |
| Charlotte PD            |           |          |           |           |           |           |           |           |           |           |           |           | 0            |
| CCSD                    |           |          |           | 1         |           |           |           |           |           |           |           | 1         | 2            |
| Delhi Twp               |           |          |           |           |           |           |           |           | 1         |           |           |           | 1            |
| DeWitt Twp PD           | 1         |          | 1         |           | 1         |           |           |           |           |           |           |           | 3            |
| ECSD                    | 1         |          |           |           |           |           |           |           |           |           |           |           | 1            |
| ECSO                    |           |          |           |           |           |           |           |           |           |           |           |           | 0            |
| E. Lansing PD           | 3         | 1        |           |           | 1         | 1         |           | 2         | 2         |           | 1         |           | 11           |
| ICSO                    | 1         |          |           |           |           |           |           |           |           |           |           |           | 1            |
| ICSD                    |           |          | 4         | 1         | 1         | 2         | 1         | 4         | 1         | 3         |           | 1         | 18           |
| ICSO/ Leslie            |           |          |           |           |           |           |           |           |           |           |           |           | 0            |
| Lansing PD              | 26        | 8        | 20        | 11        | 12        | 25        | 24        | 22        | 30        | 19        | 21        | 22        | 240          |
| Lansing Charter Twp PD  |           |          |           |           |           |           |           |           |           |           |           |           | 0            |
| Mason/ICSO Assist       |           |          |           |           |           |           |           |           |           |           |           |           | 0            |
| Meridian Charter Twp PD |           |          |           |           |           |           |           |           |           |           |           |           | 0            |
| MSU PD                  |           |          | 1         | 1         |           |           |           |           |           |           |           |           | 2            |
| <b>Total</b>            | <b>32</b> | <b>9</b> | <b>26</b> | <b>14</b> | <b>17</b> | <b>28</b> | <b>25</b> | <b>28</b> | <b>34</b> | <b>22</b> | <b>22</b> | <b>24</b> | <b>281</b>   |

Source: Ingham County law enforcement jurisdictions

Note: ICSO - Ingham County sheriff's office, ECSO - Eaton County sheriff's office, MTPD - Meridian Township Police Dept.

MSU PD - Michigan State University Police Dept.

Table 4: Number of drug overdose-related deaths by law enforcement jurisdiction and month of incident, Tri-County Area 2017

| Jurisdiction  | Jan      | Feb      | Mar      | Apr      | May      | Jun      | Jul      | Aug      | Sep      | Oct      | Nov      | Dec      | Year to Date |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|
| Bath Twp      |          |          |          |          | 1        |          |          |          |          |          |          |          | 1            |
| DeWitt Twp PD |          |          |          |          | 1        |          |          |          |          |          |          |          | 1            |
| ECSD          | 1        |          |          |          |          |          |          |          |          |          |          |          | 1            |
| ELPD          | 1        |          |          |          |          |          |          |          |          |          | 1        |          | 2            |
| ICSD          |          |          |          |          |          | 1        |          |          |          |          |          | 1        | 2            |
| Lansing PD    | 2        | 2        | 1        |          | 3        | 2        | 4        | 3        |          | 1        |          | 1        | 19           |
| <b>Total</b>  | <b>4</b> | <b>2</b> | <b>1</b> | <b>0</b> | <b>5</b> | <b>3</b> | <b>4</b> | <b>3</b> | <b>0</b> | <b>1</b> | <b>1</b> | <b>2</b> | <b>26</b>    |

Source: Ingham County law enforcement jurisdictions



# Ingham County Opioid Surveillance

## Emergency Department Visit Data

Source: Michigan Syndromic Surveillance System, 2017

- Total of 544 drug overdose-related visits
  - Average age : 36.1 years
  - Median age: 32 years

Figure 7: Number of Overdose-related emergency department visits\* by month, Ingham County 2016 - 2017

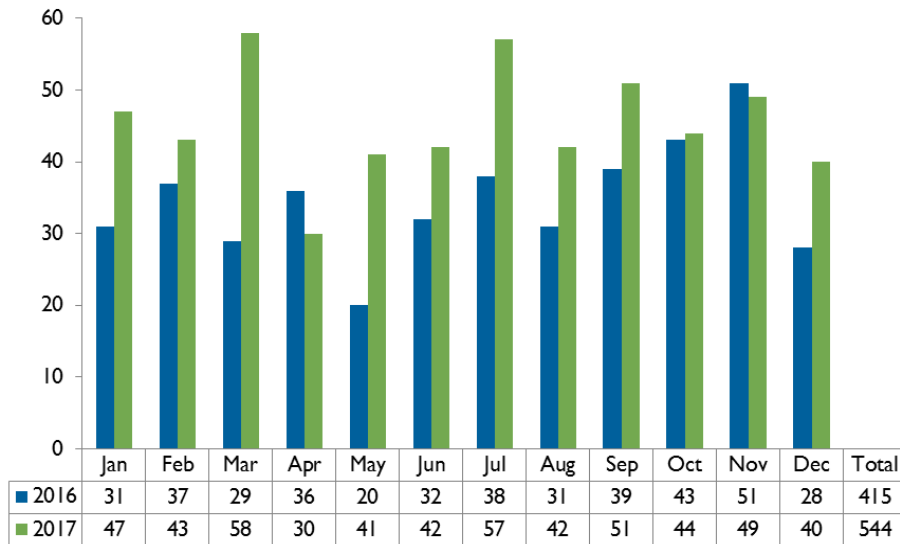
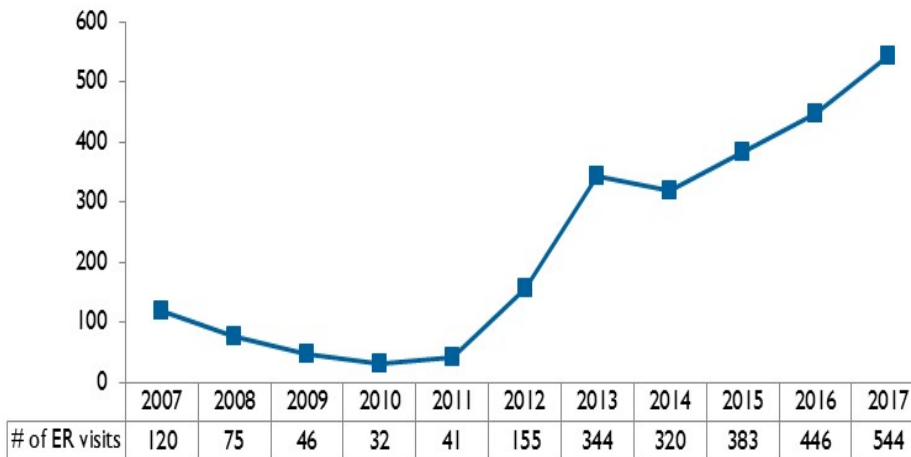
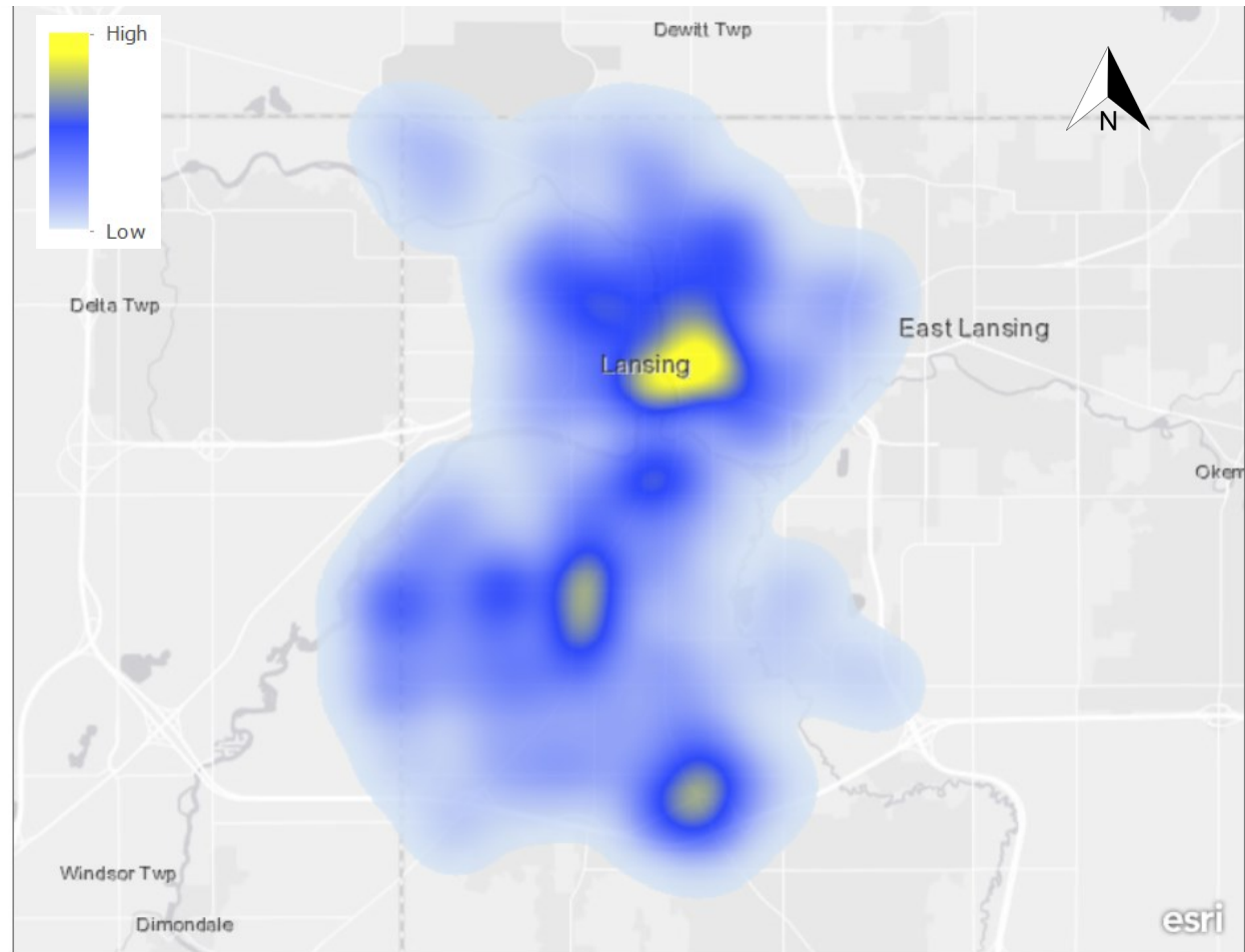


Figure 8: Number of Overdose-related Emergency Department Visits Ingham County, 2007-2017



# Ingham County Opioid Surveillance

Figure 6: Density Heat map of Administered Naloxone Doses in Ingham County, 2017



Esri, HERE, Garmin, NGA, USGS, NPS | Esri, HERE, NPS