



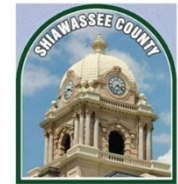
Department of Forensic Pathology

Office of the Medical Examiner

2024 Q2 (April 1 – June 30) Drug Report

Published August 29, 2024





Introduction

Drug-Related Deaths - Defined

We define drug deaths as those which result entirely or partially from the physiologic effects of acute toxicity. Therefore, included here are deaths which resulted from a combination of natural disease and acute intoxication (e.g. lung disease complicated by opioid intoxication). Our definition does not include deaths by violence, in which the violent behavior may have been caused or contributed to by intoxication (e.g. death due to injury from motor vehicle crash in which the at-fault driver was intoxicated). We also do not include deaths related to the effects of chronic substance use (e.g. deaths due to alcoholic liver disease or heart disease which may have been contributed to by chronic cocaine use) if not combined with acute toxicity.

Methods

The majority of the drug deaths reported are due to more than one substance, as you will see in the detailed tables that follow. Often, decedents have even more substances present in their body at the time of death or overdose incident than just the substances listed as having caused or contributed to death. After autopsy and review of records, including toxicology report, the medical examiner assigned to the case determines which of the substances present played a causal role in the death. Thus, there may be substances present in a given case which are not included in the cause of death statement.

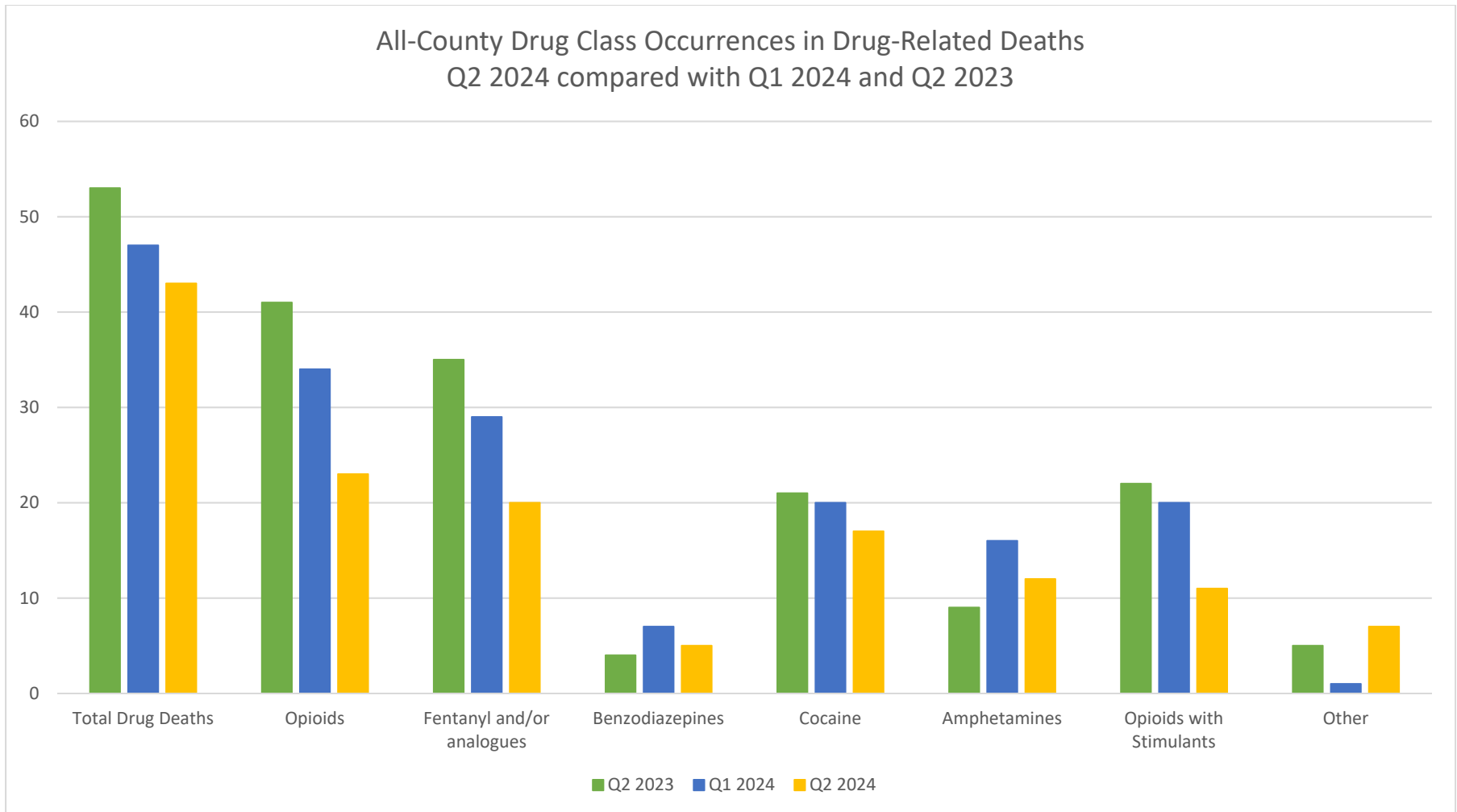
Occasionally, intoxicated decedents survive in the hospital for a time prior to death, following acute drug intoxication. In these cases, all efforts are made to obtain and test the earliest blood and urine available from their time in the hospital for the overdose incident, so that the toxicology results reflect what was in the body at the time the overdose occurred.

New information occasionally becomes available after a “final” cause and manner of death was determined, which sometimes, albeit rarely, results in a change to the “final” cause or manner of death. As such, the statistics contained herein may be subject to change at any time.

The extent of toxicology testing is determined by the medical examiner assigned to the case, based upon the circumstances of death. During the period reported, our office used Axis Forensic Toxicology for toxicology testing.¹

¹ If you have questions about what drugs we are currently capable of detecting, please visit www.axisfortox.com or email michelle.fox@sparrow.org

All-County Drug Class Occurrences in Drug-Related Deaths
Q2 2024 compared with Q1 2024 and Q2 2023



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

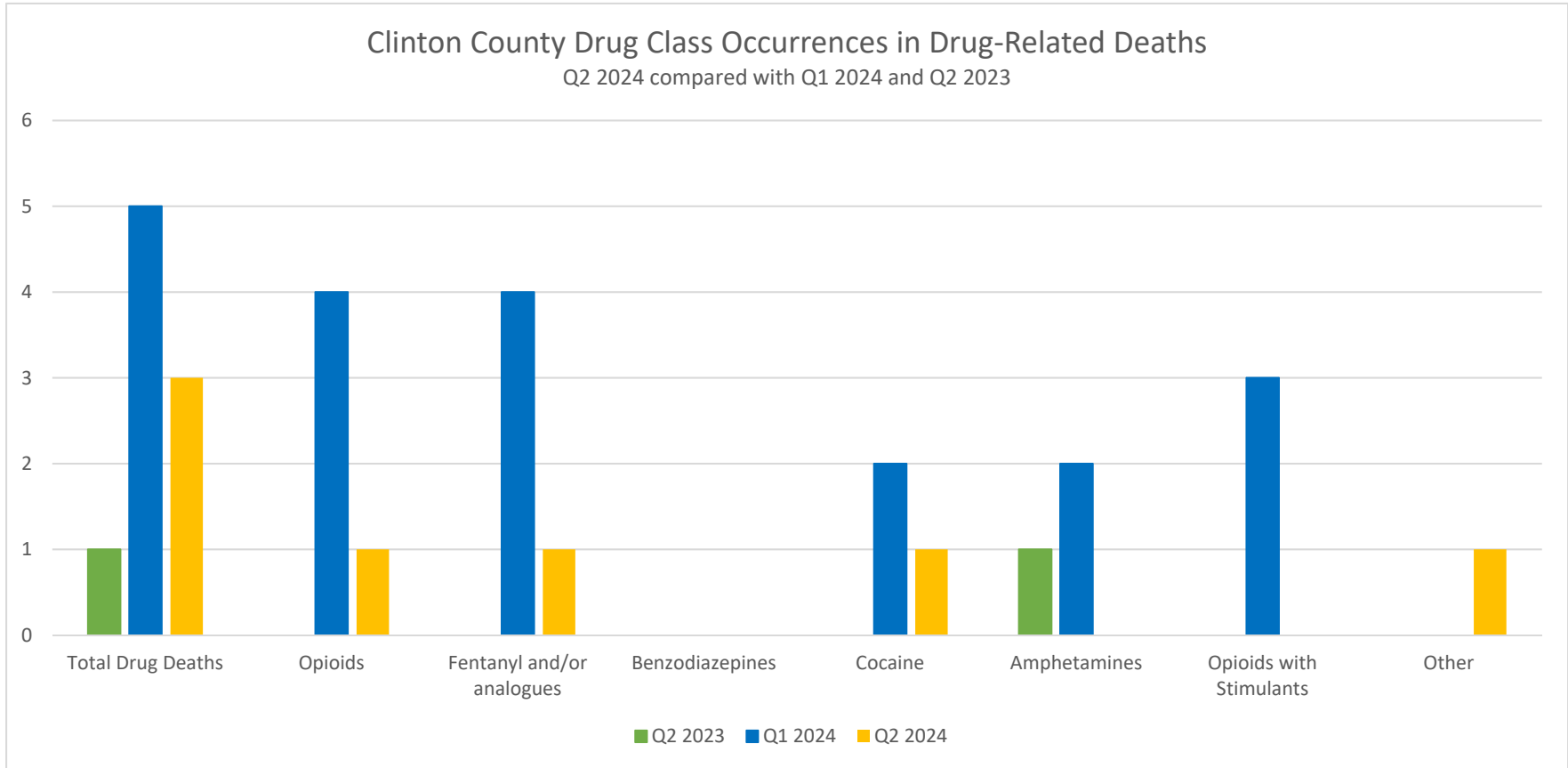
Clinton County

Drug-Related Deaths

| 2024 Q2 Clinton County Drug-Related Deaths | | | |
|--|-----|---|-----------------|
| Sex | Age | Substance(s) Causing Death | Manner of Death |
| Male | 43 | cocaine, ethanol | Accident |
| Female | 58 | amitriptyline, citalopram/escitalopram, cyclobenzaprine | Suicide |
| Male | 60 | ethanol, fentanyl, hydrocodone | Accident |

Clinton County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

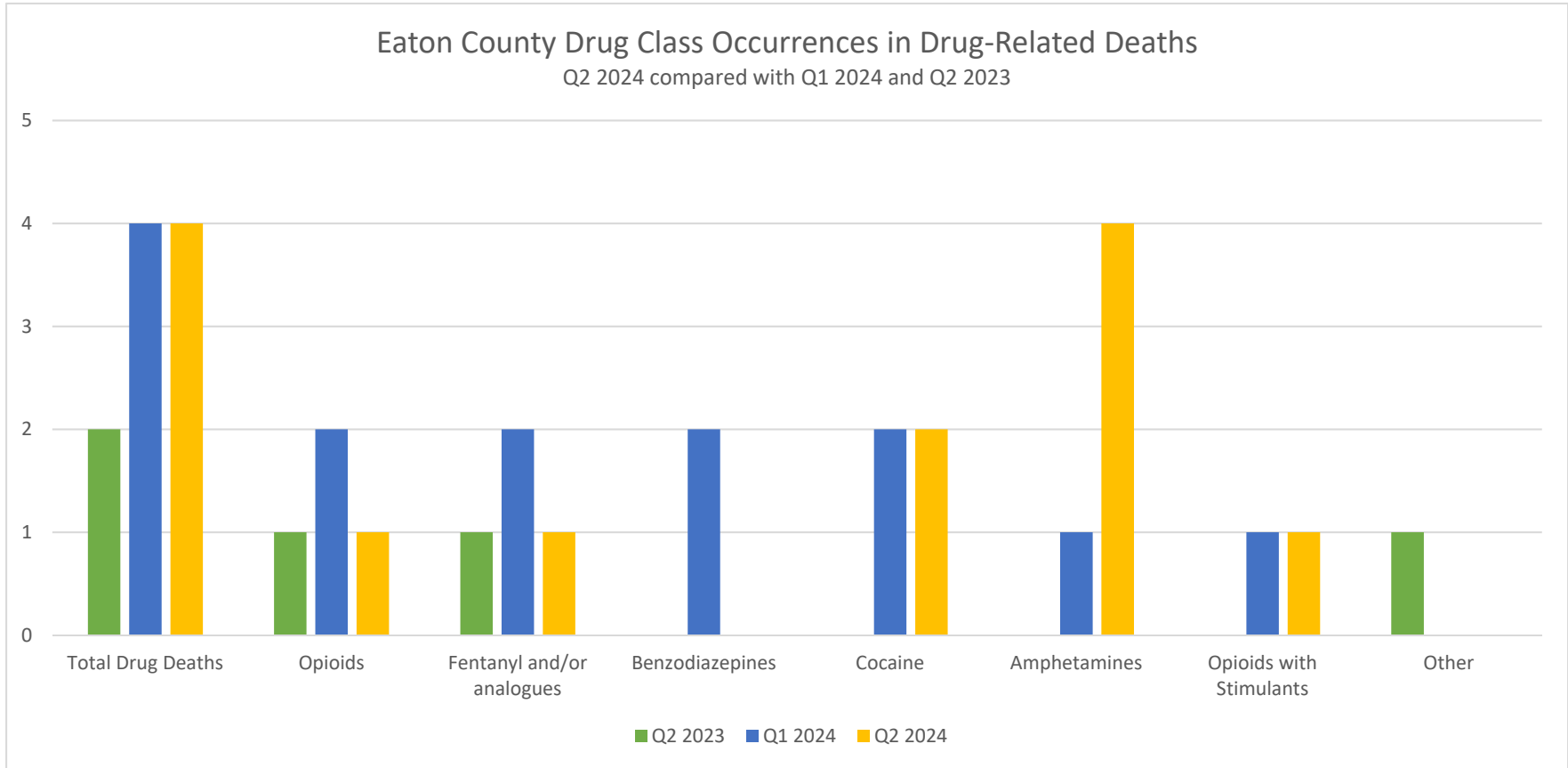
Eaton County

Drug-Related Deaths

| 2024 Q2 Eaton County Drug-Related Deaths | | | |
|--|-----|------------------------------------|-----------------|
| Sex | Age | Substance(s) Causing Death | Manner of Death |
| Male | 40 | methamphetamine | Accident |
| Male | 41 | cocaine, fentanyl, methamphetamine | Accident |
| Female | 56 | cocaine, methamphetamine | Accident |
| Female | 60 | amphetamine | Accident |

Eaton County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

Ingham County

Drug-Related Deaths

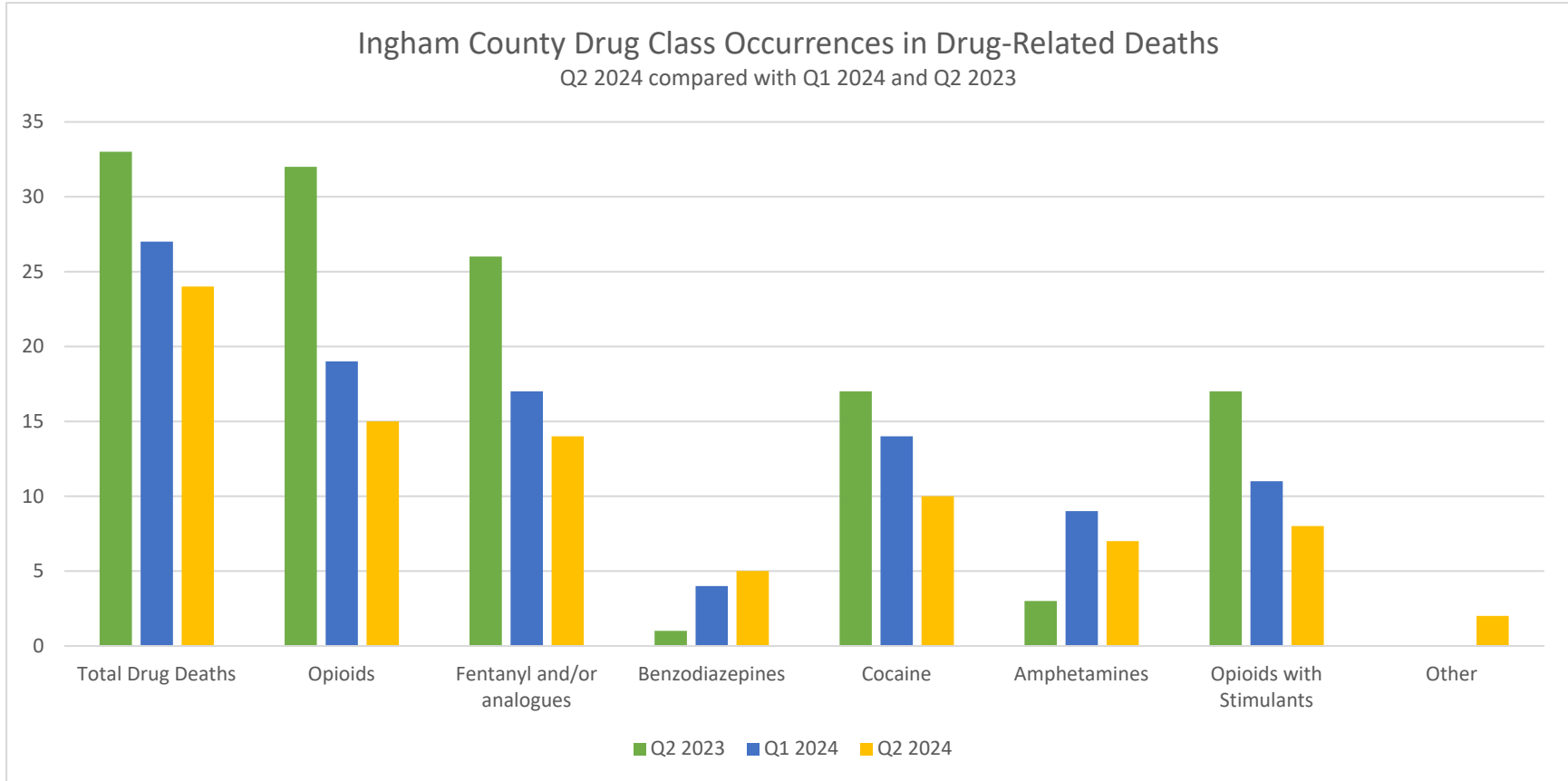
| 2024 Q2 Ingham County Drug-Related Deaths | | | |
|---|-----|---|-----------------|
| Sex | Age | Substance(s) Causing Death | Manner of Death |
| Female | 22 | amitriptyline, amphetamine, diphenhydramine, hydroxyzine, trazadone | Suicide |
| Male | 24 | fentanyl, methamphetamine | Accident |
| Female | 25 | amphetamine, clonazepam, cocaine, ethanol, fentanyl, fluorofentanyl | Accident |
| Male | 26 | acetyl fentanyl, alprazolam, cocaine, diazepam, fentanyl, fluorofentanyl, methamphetamine, xylazine | Accident |
| Female | 28 | diphenhydramine, mirtazapine, promethazine, propranolol | Suicide |
| Male | 30 | ethanol, fentanyl | Accident |
| Female | 31 | clonazepam, diazepam, fentanyl, gabapentin, mitragynine | Accident |
| Male | 34 | methamphetamine | Accident |
| Male | 38 | cocaine, ethanol, fentanyl | Accident |
| Male | 39 | cocaine | Accident |
| Male | 41 | fentanyl | Accident |
| Male | 43 | cocaine | Accident |
| Male | 43 | fentanyl | Accident |
| Female | 44 | mitragynine | Accident |
| Female | 45 | acetyl fentanyl, cocaine, fentanyl | Accident |
| Female | 47 | clonazepam, fentanyl | Accident |
| Male | 52 | fentanyl | Accident |
| Male | 54 | cocaine | Accident |
| Male | 56 | fentanyl, methamphetamine, venlafaxine | Accident |
| Male | 58 | cocaine, dihydrocodeine, fentanyl, hydrocodone | Accident |
| Male | 58 | methamphetamine | Accident |
| Male | 65 | cocaine, ethanol | Accident |
| Male | 69 | clonazepam, oxycodone | Accident |

Male 73 cocaine, fentanyl

Accident

Ingham County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

Ionia County

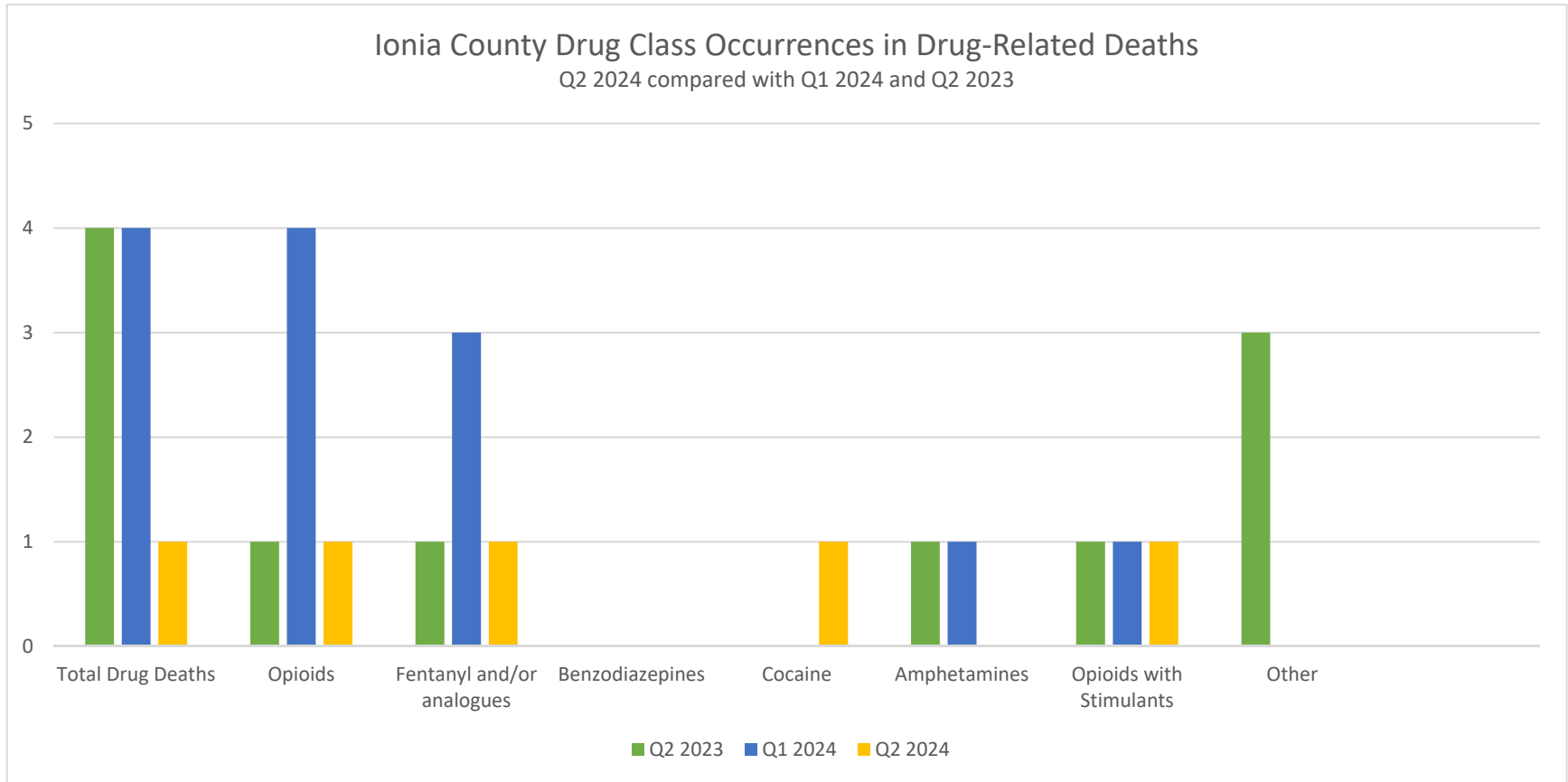
Drug-Related Deaths

2024 Q2 Ionia County Drug-Related Deaths

| Sex | Age | Substance(s) Causing Death | Manner of Death |
|------|-----|----------------------------|-----------------|
| Male | 43 | cocaine, fentanyl | Accident |

Ionia County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

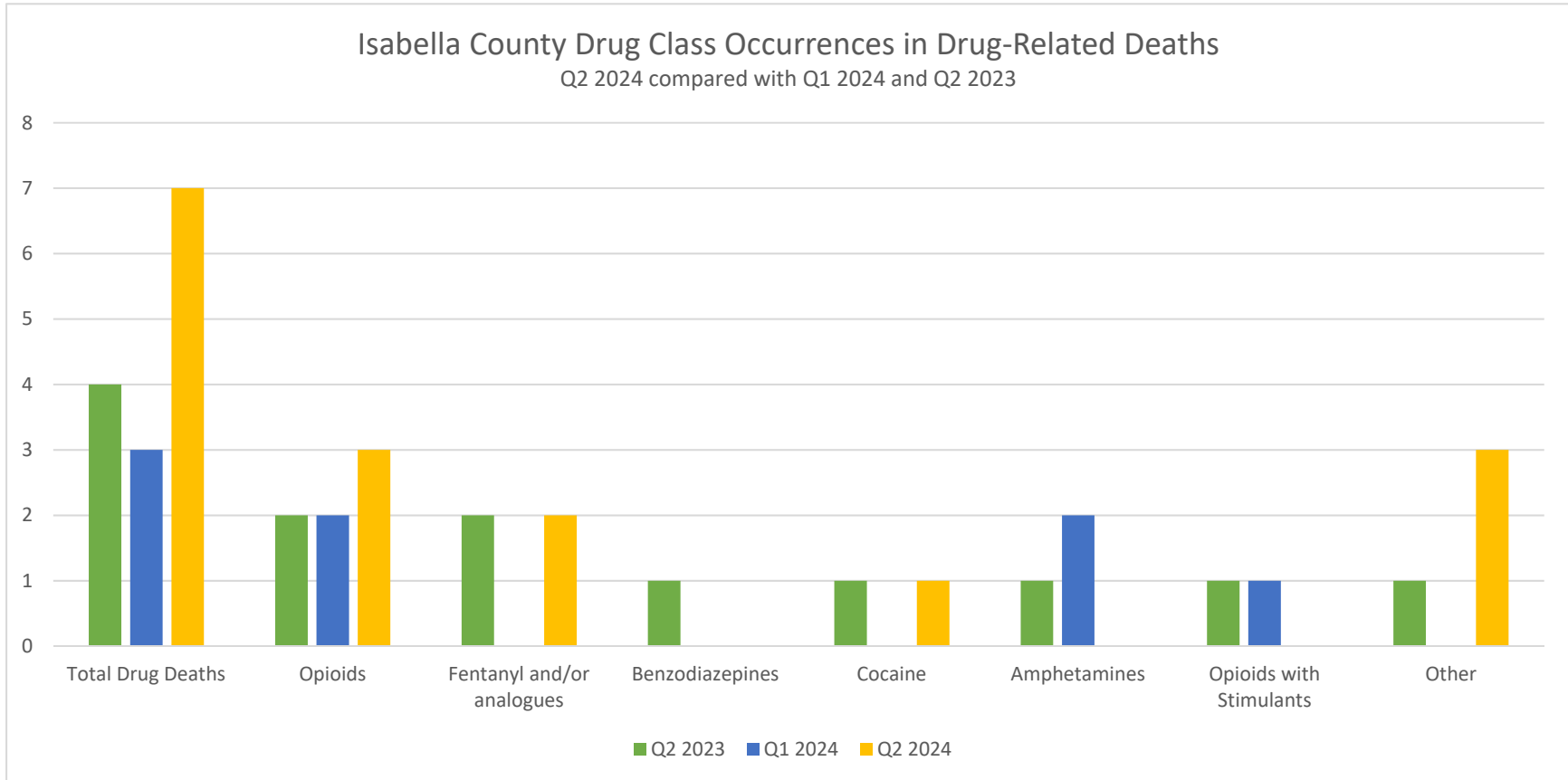
Isabella County

Drug-Related Deaths

| 2024 Q2 Isabella County Drug-Related Deaths | | | |
|---|-----|---|-----------------|
| Sex | Age | Substance(s) Causing Death | Manner of Death |
| Male | 22 | ethanol, methadone | Accident |
| Male | 34 | fentanyl | Accident |
| Male | 49 | fentanyl | Accident |
| Female | 53 | cocaine | Accident |
| Male | 54 | hydroxyzine, nortriptyline, sertraline | Accident |
| Male | 59 | gabapentin | Suicide |
| Female | 70 | gabapentin, mirtazapine, quetiapine, zolpidem | Suicide |

Isabella County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

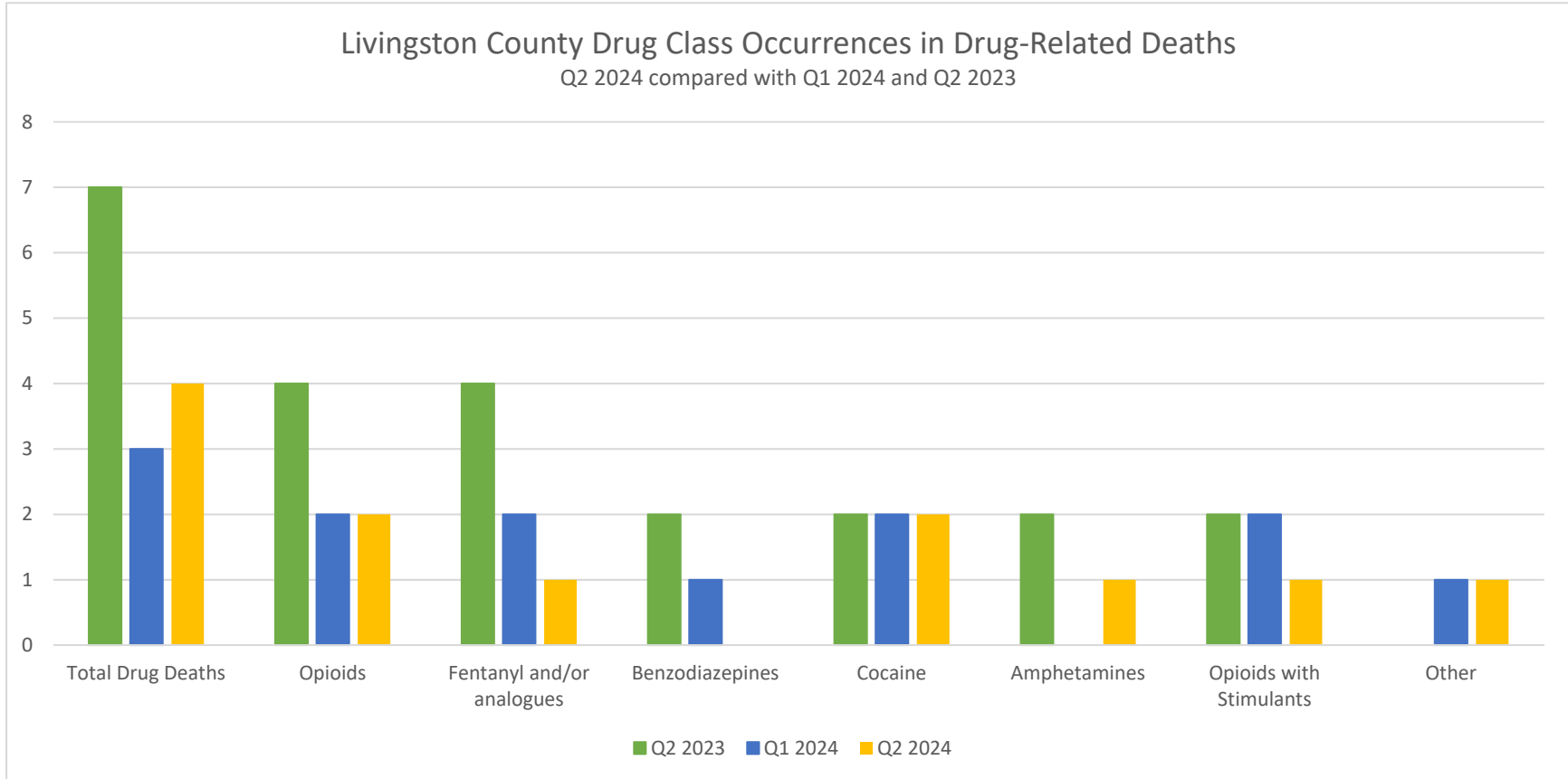
Livingston County

Drug-Related Deaths

| 2024 Q2 Livingston County Drug-Related Deaths | | | |
|---|-----|--|-----------------|
| Sex | Age | Substance(s) Causing Death | Manner of Death |
| Male | 33 | cocaine, ethanol, fentanyl, mitragynine | Accident |
| Female | 50 | bupropion, ethanol | Suicide |
| Female | 51 | bupropion, duloxetine, gabapentin, hydrocodone, mitragynine, methylphenidate, topiramate | Accident |
| Female | 51 | cocaine, methamphetamine | Accident |

Livingston County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories.

Shiawassee County

Drug-Related Deaths

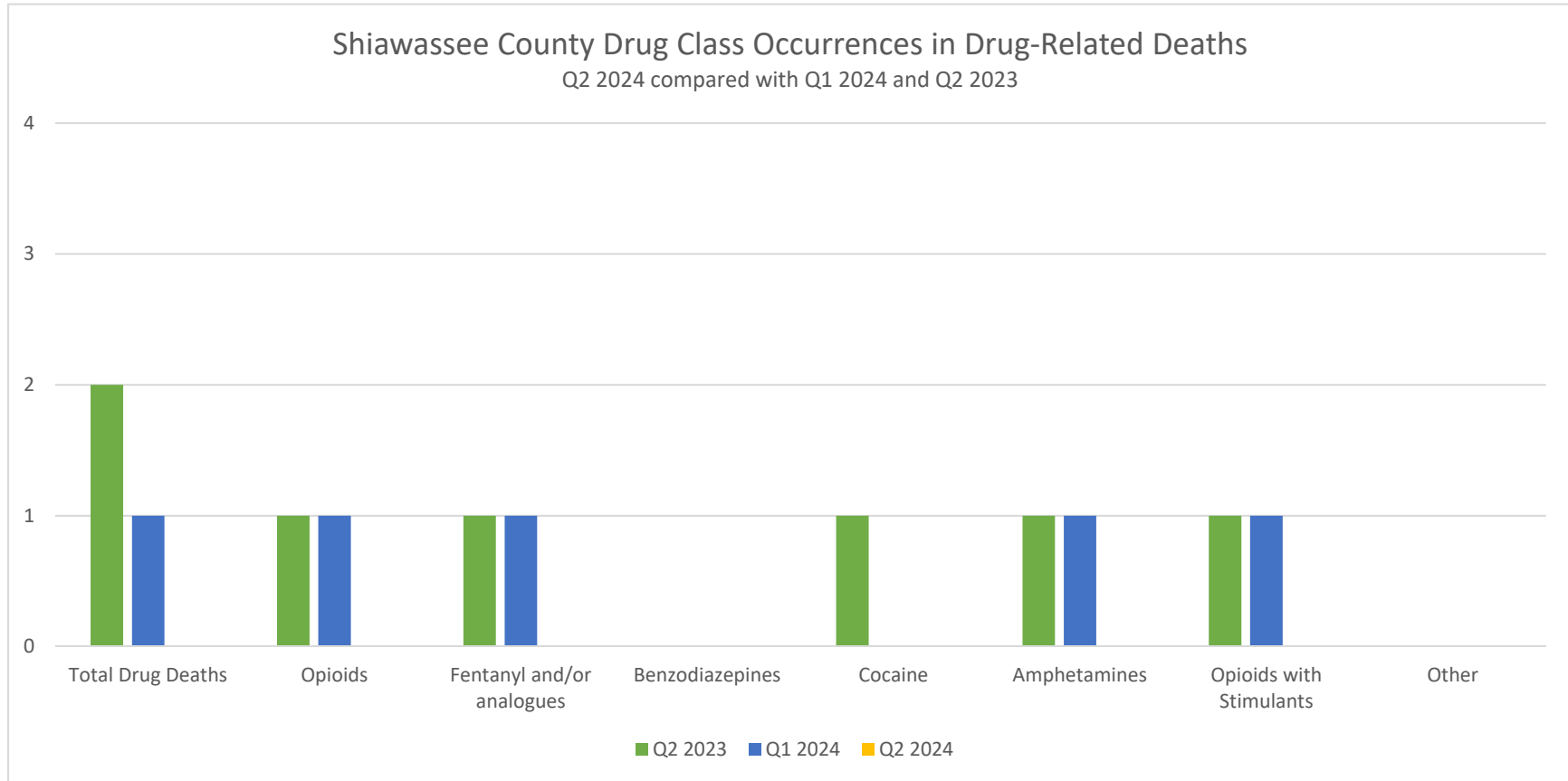
2024 Q2 Shiawassee County Drug-Related Deaths

| Sex | Age | Substance(s) Causing Death | Manner of Death |
|-----|-----|----------------------------|-----------------|
|-----|-----|----------------------------|-----------------|

No Drug Related Deaths

Shiawassee County

Drug-Related Deaths



This chart describes occurrences in one death of a given class of drug. As most drug-related deaths are due to two or more substances, the same death may fall into multiple categories (e.g. death due to fentanyl and alprazolam intoxication falls into the opioids, benzodiazepines, fentanyl and/or analogues, and opioids with benzodiazepines categories). Multiple of the same class of drug in the same death counts as only one occurrence of that class of drugs (e.g. death due to heroin and hydrocodone intoxication – both of these are opioids so this death falls only in the opioids category, as one occurrence). The “other” category is for occurrences of drug-related deaths due *solely* to drugs which do not fall into the other listed categories

Historical Data

