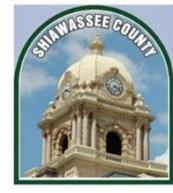




Department of Forensic Pathology
Office of the Medical Examiner

2023 Drug Report



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. heart disease complicated by stimulant 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 period of 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 eventually fatal overdose occurred.

New information occasionally becomes available after a “final” cause of death was determined, which sometimes, albeit rarely, results in a change to the “final” cause 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

Manner Determination

Drug-related deaths are conventionally certified as accidents (unless otherwise indicated by investigation on a case by case basis). A decedent’s intentions in the interval immediately preceding death may be impossible to ascertain. A common example is a person who has a well-documented history of suicidal ideation or attempts but also abuses drugs recreationally. In such cases a fatal overdose may be intentional or unintentional, and therefore may be best certified as indeterminate.

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

Clinton County

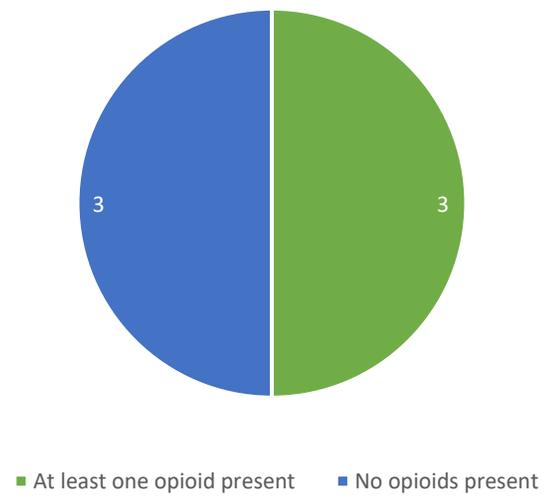
Drug-Related Deaths

2023 Clinton County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Male	24	bromazolam, ethanol	Accident
Male	37	fentanyl, fluorofentanyl	Accident
Male	39	cocaine, fentanyl	Accident
Male	47	amiodarone, duloxetine, gabapentin, methamphetamine, metoprolol	Accident
Female	62	methamphetamine	Accident
Male	62	cocaine, fentanyl	Accident

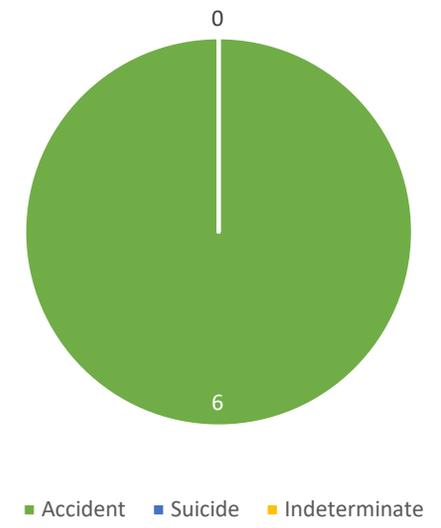
Clinton County

Drug-Related Deaths

2023 Clinton County Drug-Related Deaths
Opioid vs. Non-opioid

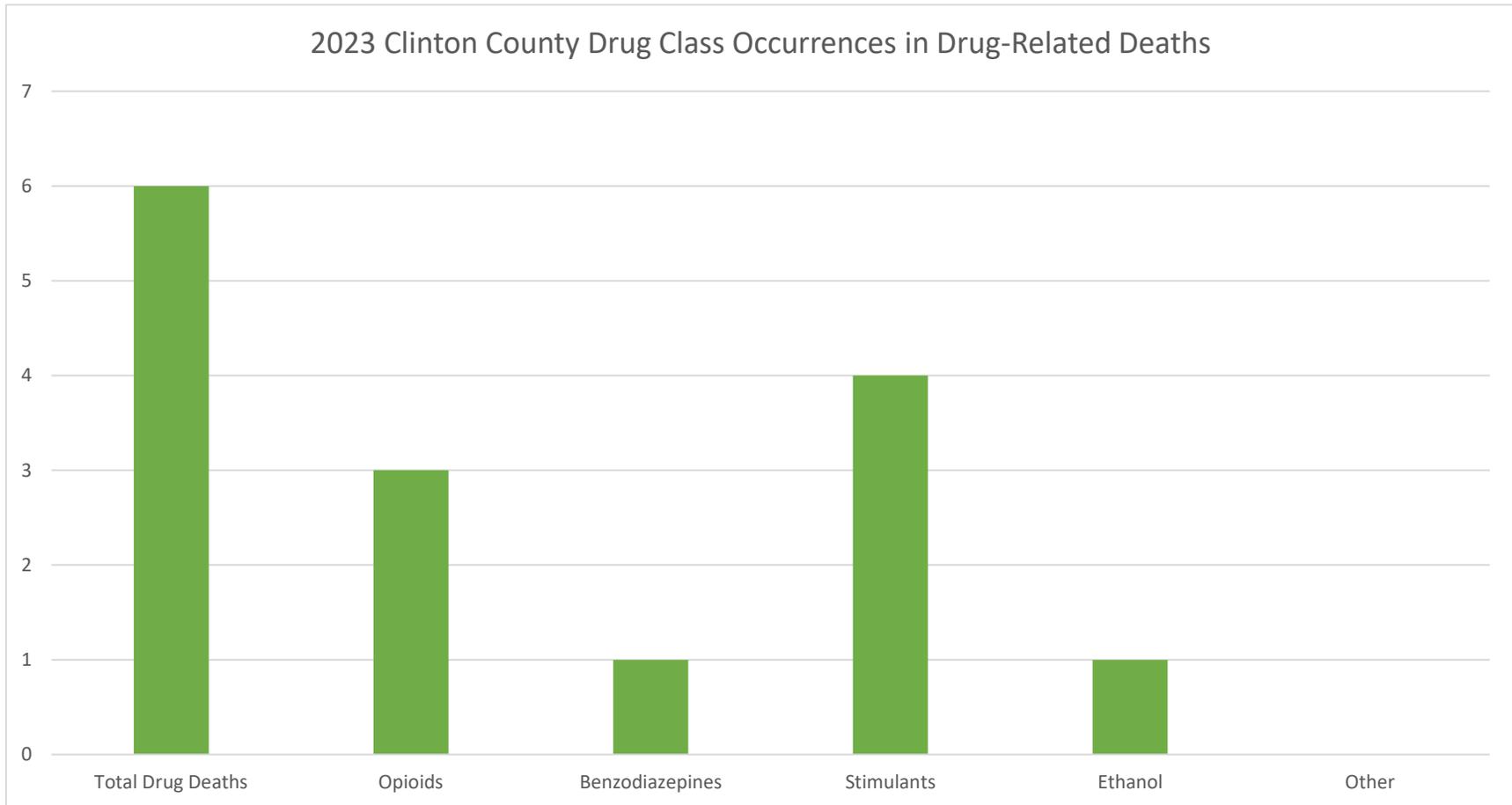


2023 Clinton County Drug-Related Deaths
Manner of Death



Clinton County

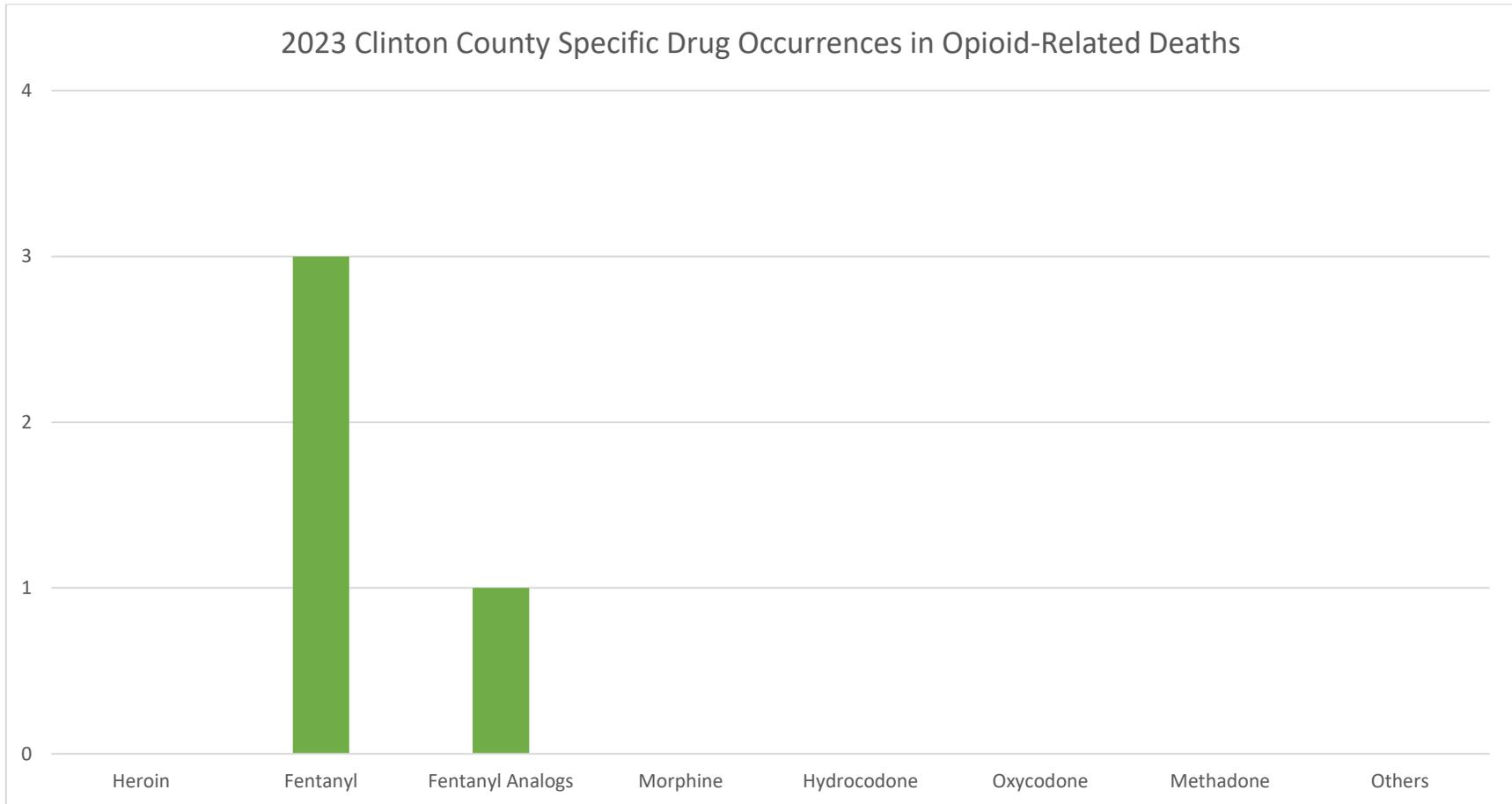
Drug-Related Deaths



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, cocaine, and alprazolam intoxication falls into the opioids, stimulants, and 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 fentanyl 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

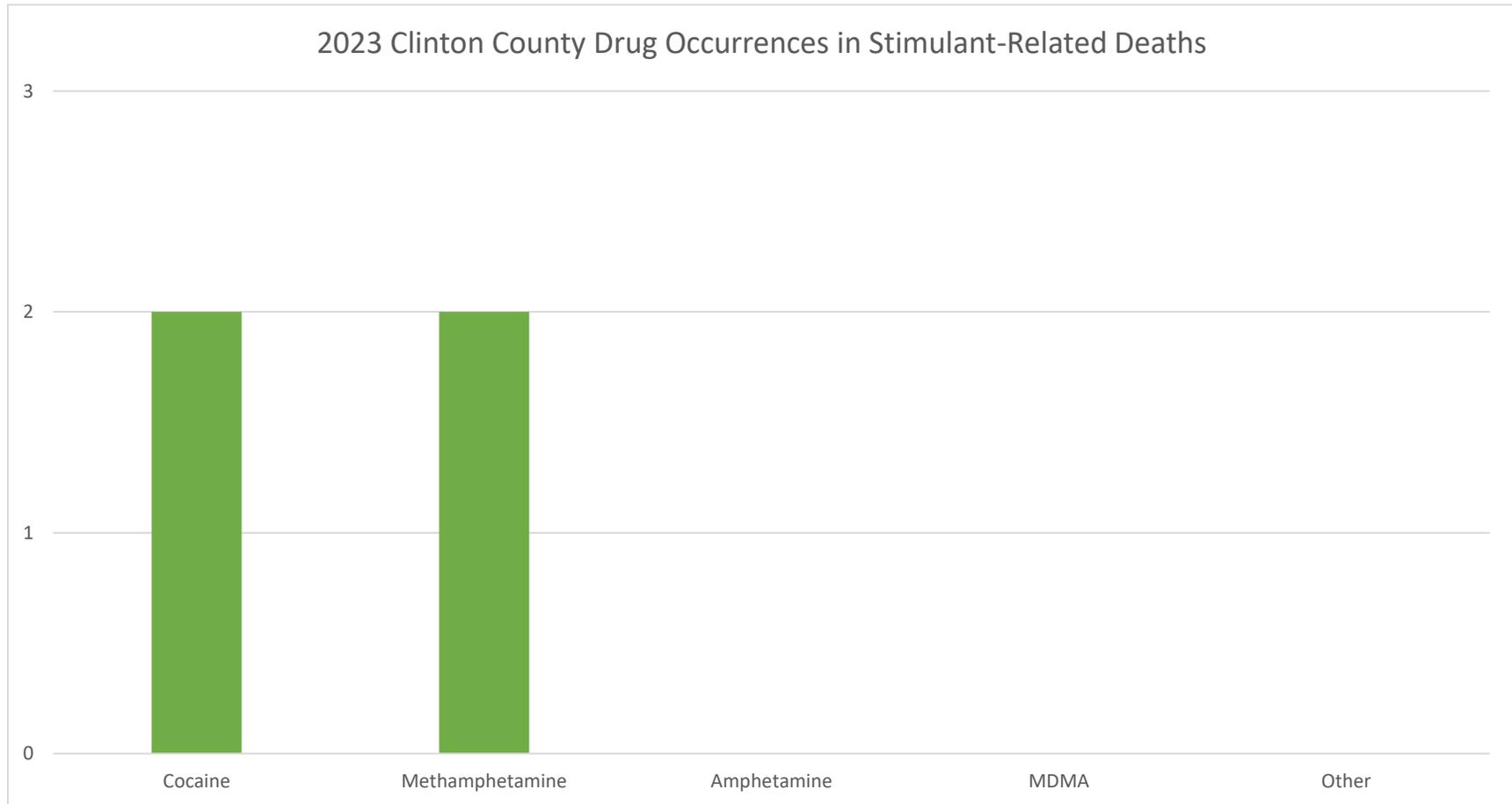
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, and the opioid-like substance metonitazene.

Clinton County

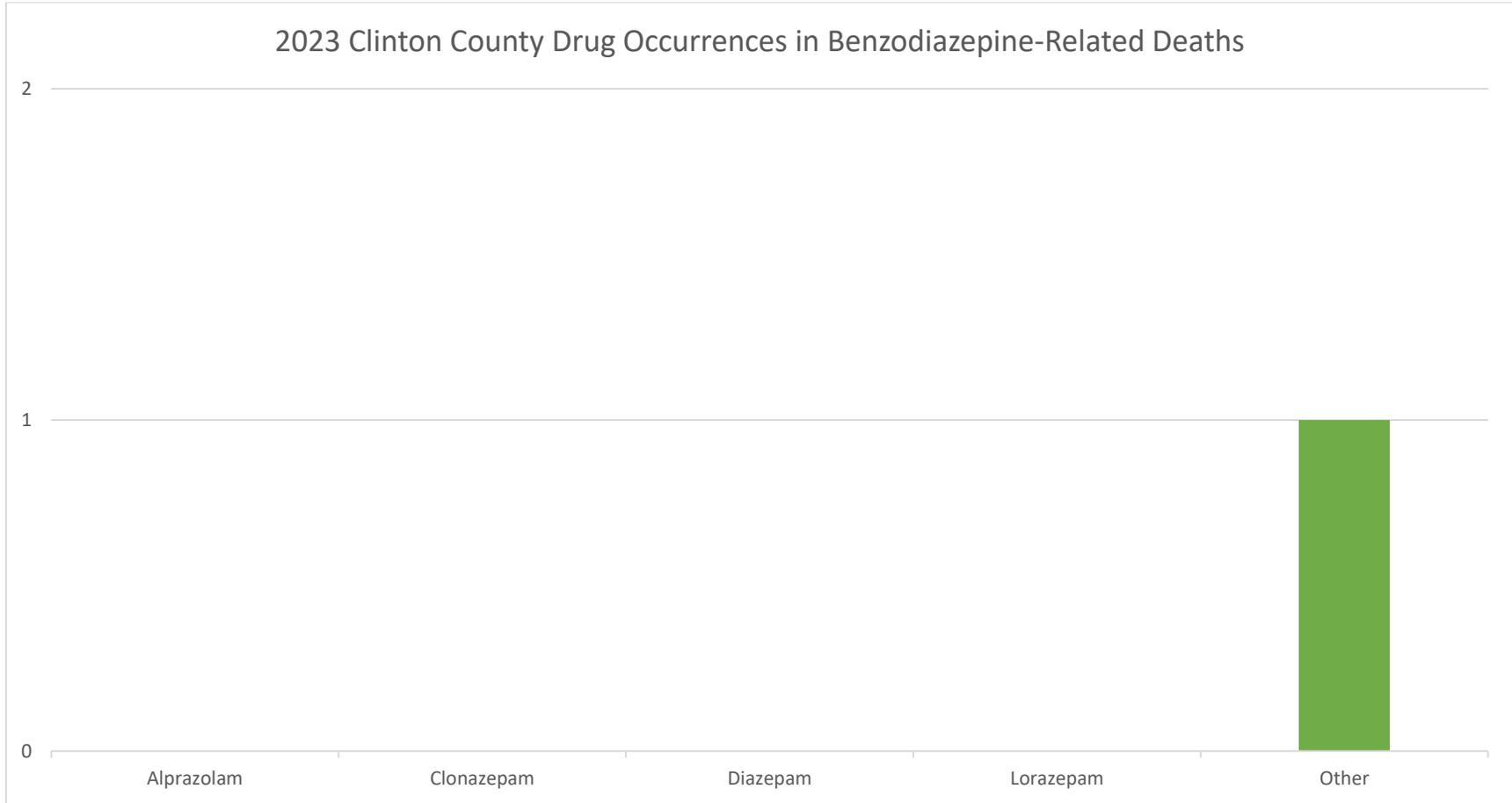
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine.

Clinton County

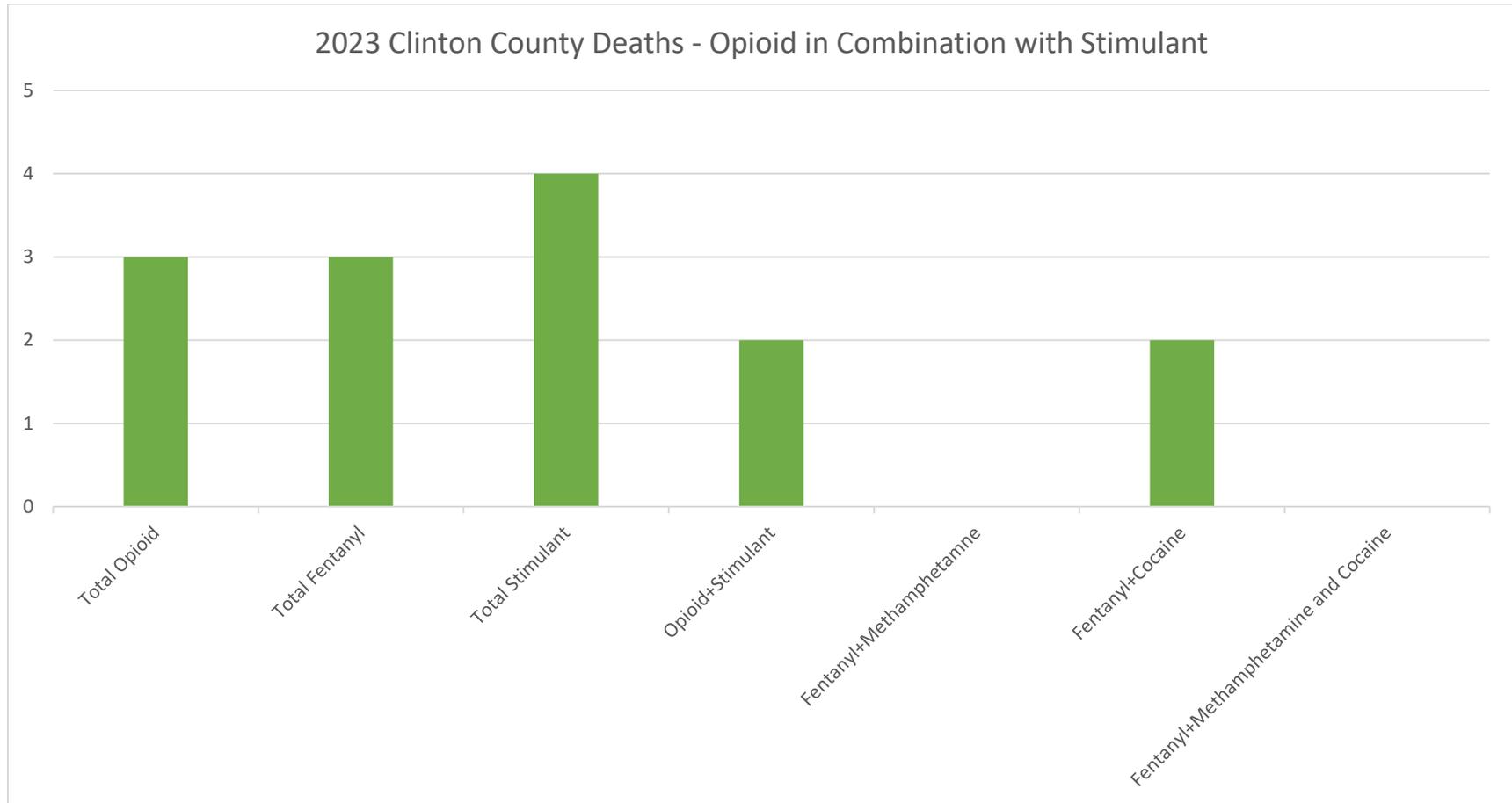
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

Clinton County

Drug-Related Deaths



This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Eaton County

Drug-Related Deaths

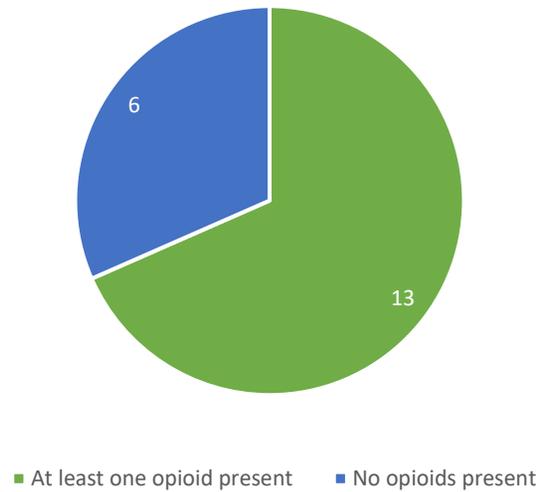
2023 Eaton County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Male	24	bupropion	Suicide
Male	33	cocaine, fentanyl	Accident
Male	35	duloxetine, ethanol, fentanyl, hydroxyzine, mirtazapine	Accident
Male	35	fentanyl	Accident
Male	36	cocaine, fentanyl	Accident
Female	37	cocaine, fentanyl, methamphetamine	Accident
Male	38	cocaine, fentanyl	Accident
Female	40	cyclobenzaprine, ethanol	Accident
Female	41	fentanyl, methamphetamine	Accident
Female	43	fentanyl	Accident
Female	47	amitriptyline, bupropion, ethanol, gabapentin, hydroxyzine	Suicide
Female	48	fentanyl	Accident
Male	54	cocaine, fentanyl	Accident
Male	58	cocaine, ethanol, hydrocodone	Accident
Female	58	bupropion, cocaine, ethanol, hydrocodone, sertraline	Accident
Male	62	fentanyl, methamphetamine	Accident
Male	64	venlafaxine	Suicide
Male	68	cocaine	Accident
Male	Unknown*	cocaine, ethanol	Accident

***Decedent is still pending positive identification**

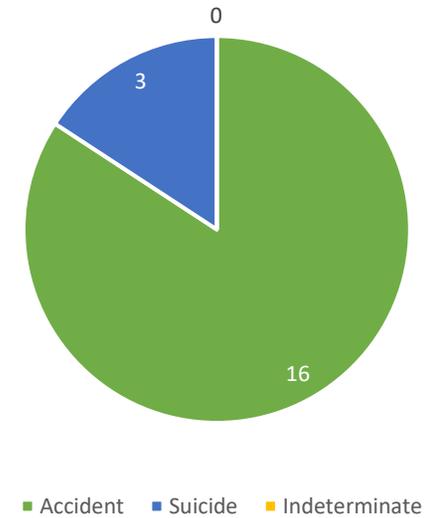
Eaton County

Drug-Related Deaths

2023 Eaton County Drug-Related Deaths
Opioid vs. Non-opioid

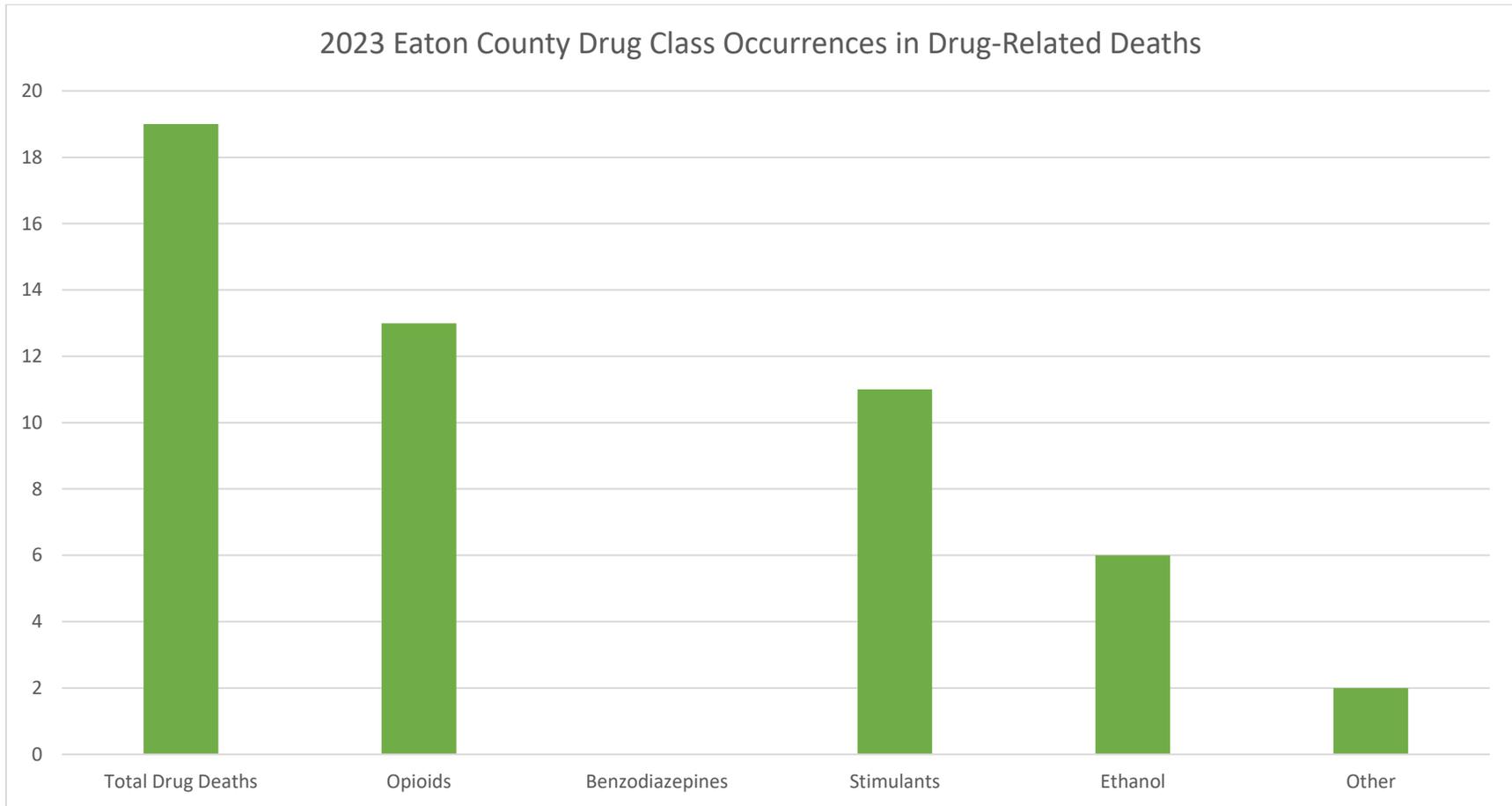


2023 Eaton County Drug-Related Deaths
Manner of Death



Eaton County

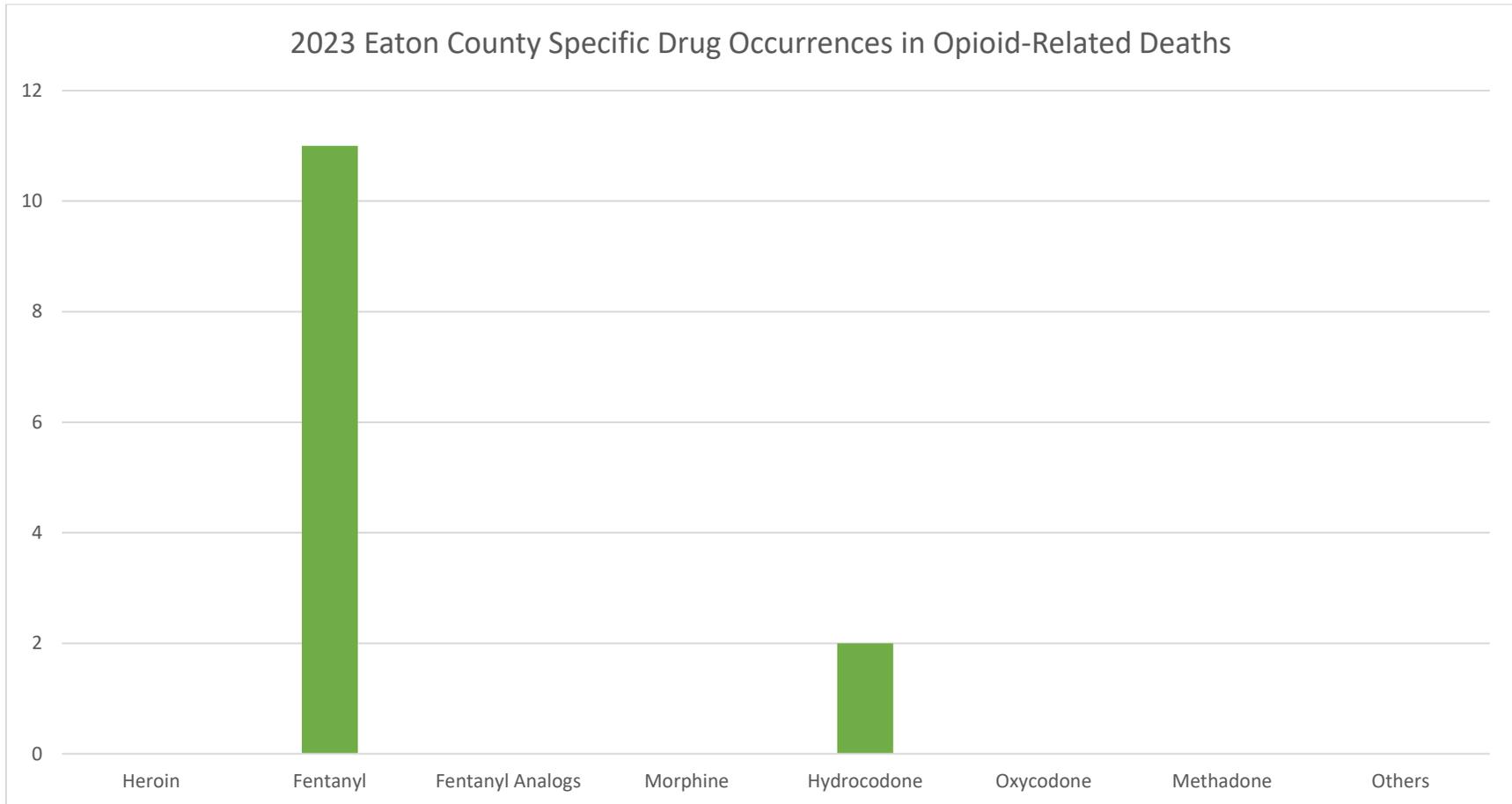
Drug-Related Deaths



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, cocaine, and alprazolam intoxication falls into the opioids, stimulants, and 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 fentanyl 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

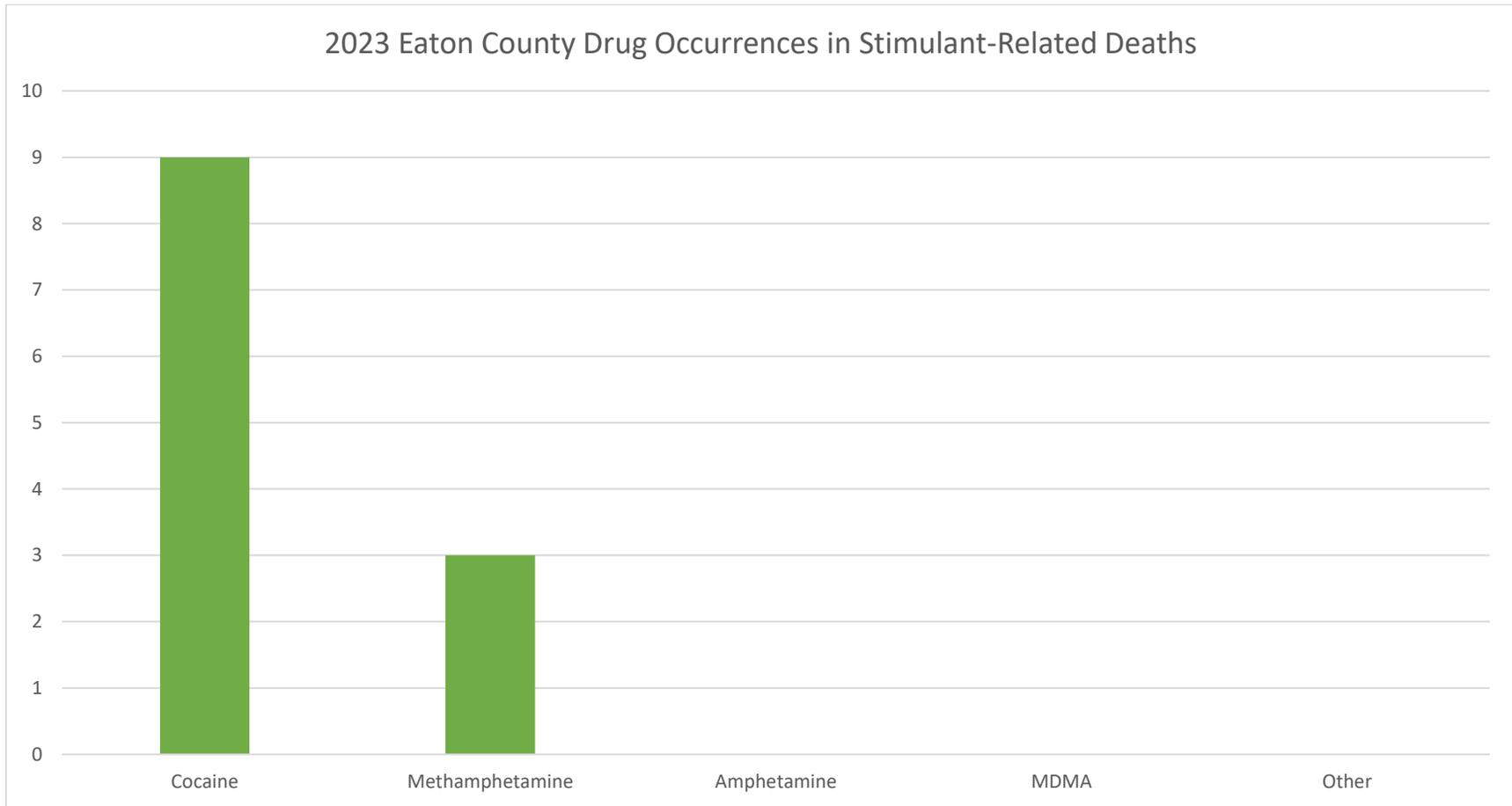
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, and the opioid-like substance metonitazene.

Eaton County

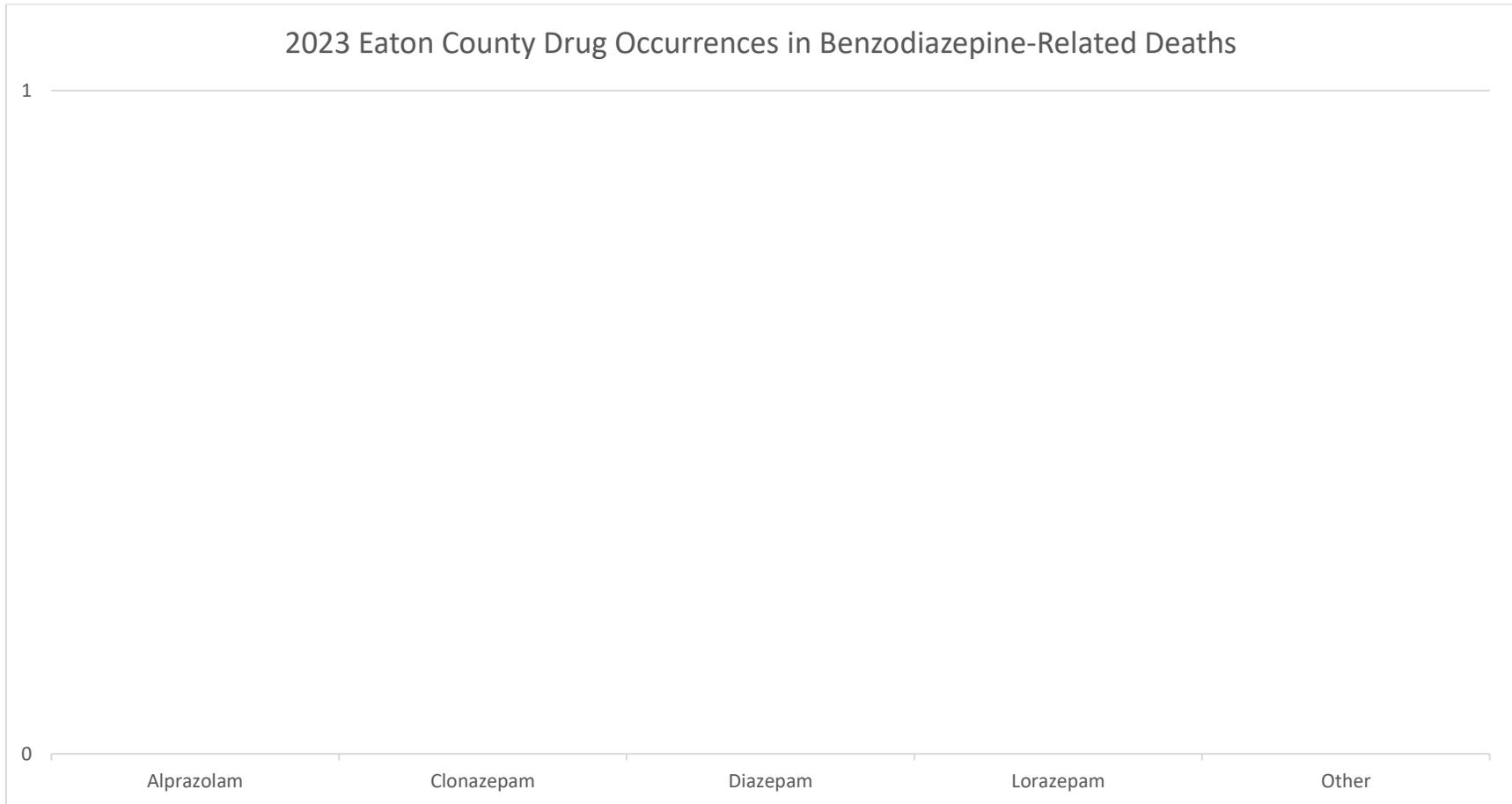
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine.

Eaton County

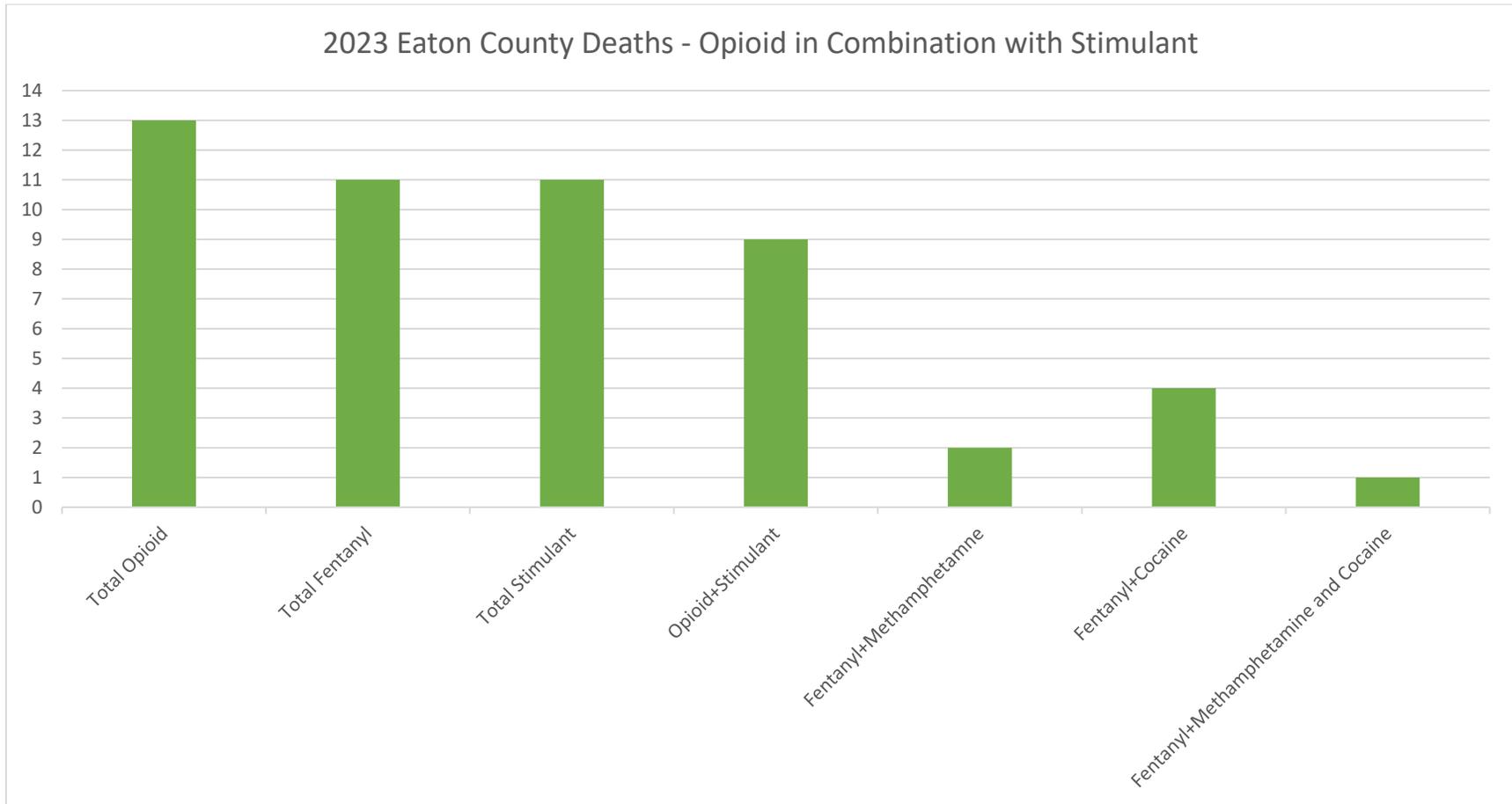
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

Eaton County

Drug-Related Deaths



This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Ingham County

Drug-Related Deaths

2023 Ingham County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Male	20	cocaine, fentanyl, methamphetamine	Accident
Female	21	methamphetamine	Accident
Male	22	ethanol, fentanyl	Accident
Female	23	fentanyl, methamphetamine	Accident
Male	23	codeine, fentanyl, morphine	Accident
Female	24	alprazolam, hydromorphone, oxycodone	Accident
Female	26	cocaine, eutylone, fentanyl, methamphetamine	Accident
Male	26	cocaine, fentanyl	Accident
Male	26	cocaine, fentanyl	Accident
Female	26	fentanyl, methamphetamine	Accident
Male	26	fentanyl, methamphetamine	Accident
Male	28	cocaine, opioid	Accident
Male	28	fentanyl	Accident
Female	28	cyclobenzaprine, fentanyl	Accident
Male	29	fentanyl, oxycodone, promethazine	Accident
Male	29	ethanol, fentanyl	Accident
Male	29	alprazolam, codeine, fentanyl	Accident
Female	30	ethanol, fentanyl	Accident
Male	30	fentanyl	Accident
Female	30	alprazolam, cocaine, fentanyl	Accident
Male	31	fentanyl, methamphetamine	Accident
Male	32	cocaine, fentanyl	Accident
Female	32	desalkylflurazepam, fentanyl, flubromazepam, fluorofentanyl, methamphetamine	Accident
Female	33	fentanyl	Accident
Male	33	fentanyl, mitragynine	Accident

Male	33	cyclobenzaprine, diphenhydramine, fentanyl, trazodone	Accident
Female	34	methamphetamine	Accident
Male	34	fentanyl	Accident
Male	35	cocaine, fentanyl	Accident
Male	35	fentanyl	Accident
Male	35	cocaine, ethanol, fentanyl	Accident
Female	36	ethanol, fentanyl, gabapentin	Accident
Female	36	fentanyl	Accident
Female	37	cocaine, fentanyl, fluorofentanyl, methamphetamine	Accident
Female	37	cocaine, haloperidol, fentanyl, methadone	Indeterminate
Male	37	cocaine, ethanol, fentanyl	Accident
Female	37	fluoxetine	Indeterminate
Male	37	fentanyl, methamphetamine	Accident
Female	37	fentanyl, methamphetamine	Accident
Male	38	ethanol, fentanyl	Accident
Female	38	diphenhydramine, methadone	Accident
Male	38	cocaine, fentanyl, mitragynine	Accident
Male	39	cocaine, fentanyl	Accident
Female	39	methamphetamine	Accident
Male	39	cocaine, fentanyl, methadone, methamphetamine	Accident
Female	40	cocaine, fentanyl	Accident
Male	40	cocaine, fentanyl	Accident
Male	40	cocaine	Accident
Female	40	fentanyl, methamphetamine	Accident
Female	40	amitriptyline, cyclobenzaprine, gabapentin, methamphetamine	Suicide
Male	41	cocaine, ethanol, fentanyl	Accident
Male	41	fentanyl, methamphetamine	Accident
Female	41	codeine, fentanyl, gabapentin	Accident
Male	41	ethanol, fentanyl	Accident
Female	42	cocaine, fentanyl, tramadol	Accident
Male	42	fentanyl, methamphetamine	Accident
Male	43	alprazolam, amphetamine, clonazepam, fentanyl, methamphetamine	Accident

Male	43	cocaine	Accident
Female	44	methadone	Accident
Female	44	cocaine, fentanyl, methamphetamine	Accident
Male	44	fentanyl	Accident
Female	45	cocaine, fentanyl	Accident
Female	45	cocaine, ethanol	Accident
Female	46	aripiprazole, atomoxetine, bupropion, duloxetine, fentanyl	Accident
Female	46	cyclobenzaprine, hydrocodone, oxycodone	Accident
Female	46	dextro/levo methorphan, diphenhydramine, doxylamine, fentanyl	Accident
Female	46	cocaine, methamphetamine	Indeterminate
Female	47	fentanyl, methamphetamine	Accident
Male	47	cocaine, fentanyl	Accident
Male	49	cocaine, fentanyl	Accident
Male	49	cyclobenzaprine, fentanyl	Accident
Male	49	cocaine, heroin, fentanyl	Accident
Female	49	cocaine, fentanyl, fluorofentanyl, methamphetamine	Accident
Female	49	cocaine, fentanyl	Accident
Male	50	cocaine, cyclobenzaprine, dextromethorphan, tramadol	Accident
Male	50	fentanyl, methamphetamine	Accident
Male	50	cocaine, fentanyl, methamphetamine	Accident
Male	51	cocaine, fentanyl	Accident
Female	51	cocaine, fentanyl	Accident
Female	51	methamphetamine	Accident
Female	52	fentanyl	Accident
Male	53	fentanyl, gabapentin	Accident
Female	53	amphetamine, fentanyl, oxycodone, xylazine	Accident
Female	53	cocaine, fentanyl, hydroxyzine, sertraline	Accident
Male	54	cyclobenzaprine, fentanyl, gabapentin, hydroxyzine	Accident
Male	54	cocaine, fentanyl, fluorofentanyl, methamphetamine	Accident
Male	55	cocaine, fentanyl	Accident
Male	55	acetylfentanyl, cocaine, ethanol, fentanyl	Accident
Male	55	fentanyl	Accident

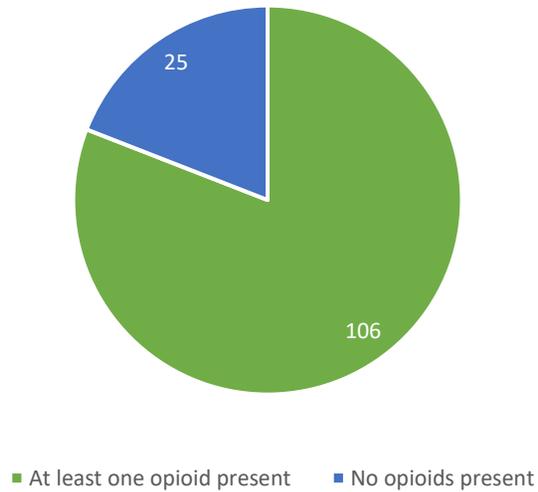
Female	55	cocaine, fentanyl	Accident
Male	56	metoprolol, naproxen, quetiapine	Suicide
Female	56	cocaine, cyclobenzaprine, ethanol	Accident
Male	56	cocaine, ethanol, fentanyl	Accident
Male	56	methamphetamine	Indeterminate
Male	57	amlodipine	Indeterminate
Male	57	cocaine, fentanyl	Accident
Male	58	cocaine	Accident
Male	58	cocaine	Accident
Male	58	cocaine, ethanol, fentanyl	Accident
Female	59	morphine, pregabalin	Accident
Male	59	cocaine, fentanyl	Accident
Male	59	cocaine, ethanol	Accident
Male	59	cocaine, ethanol, fentanyl, methamphetamine	Accident
Male	59	cocaine	Accident
Male	60	cocaine, fentanyl, methamphetamine	Accident
Male	60	cocaine, fentanyl	Accident
Male	61	cocaine, fentanyl, methamphetamine	Accident
Male	61	ethanol, fentanyl	Accident
Female	61	cocaine, fentanyl	Accident
Male	61	ethanol, fentanyl, mitragynine	Accident
Male	61	cocaine, ethanol, fentanyl, fluorofentanyl	Accident
Male	61	alprazolam, methadone	Accident
Female	62	cocaine, ethanol, fentanyl, hydrocodone	Accident
Male	62	cocaine, methamphetamine	Indeterminate
Male	63	ethanol	Accident
Female	63	cocaine, fentanyl	Accident
Male	64	ethanol	Accident
Male	64	fentanyl, hydrocodone	Accident
Male	64	cocaine	Accident
Male	65	methamphetamine	Accident
Male	65	cocaine, cyclobenzaprine, diazepam, fentanyl	Accident

Male	66	cocaine	Accident
Male	67	cocaine, fentanyl	Accident
Male	68	fentanyl	Accident
Female	69	bromazolam, cocaine, fentanyl, fluorofentanyl, heroin	Accident
Male	69	cocaine	Accident
Male	70	oxycodone, temazepam	Suicide
Male	70	cocaine, fentanyl, methadone	Accident
Male	71	fluoxetine, gabapentin, hydrocodone, oxycodone	Accident
Male	75	gabapentin, fentanyl, methadone, xylazine	Accident
Female	78	fentanyl	Accident

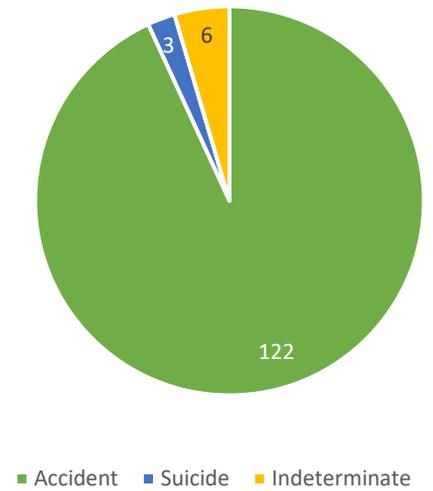
Ingham County

Drug-Related Deaths

2023 Ingham County Drug-Related Deaths
Opioid vs. Non-opioid

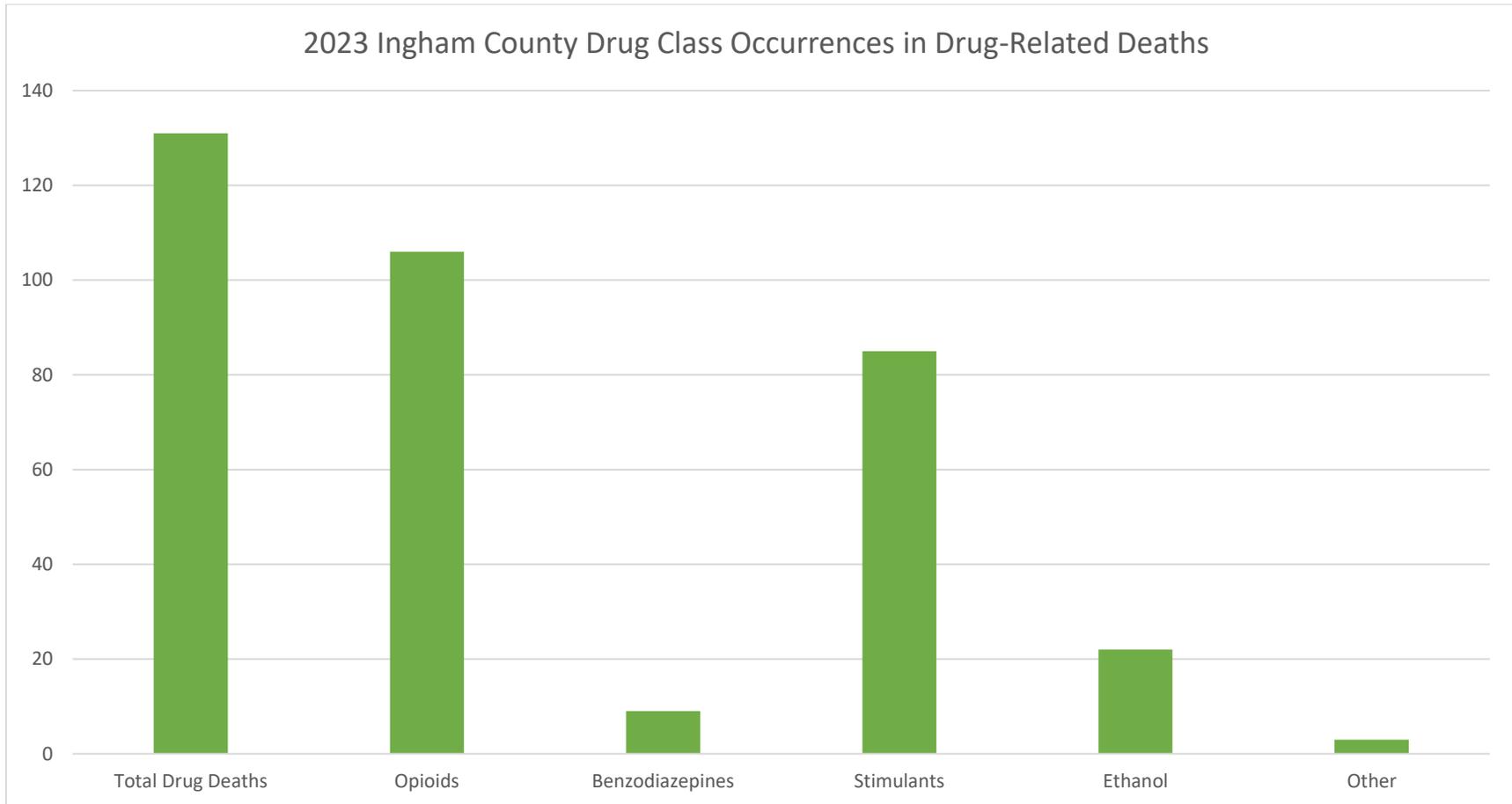


2023 Ingham County Drug-Related Deaths
Manner of Death



Ingham County

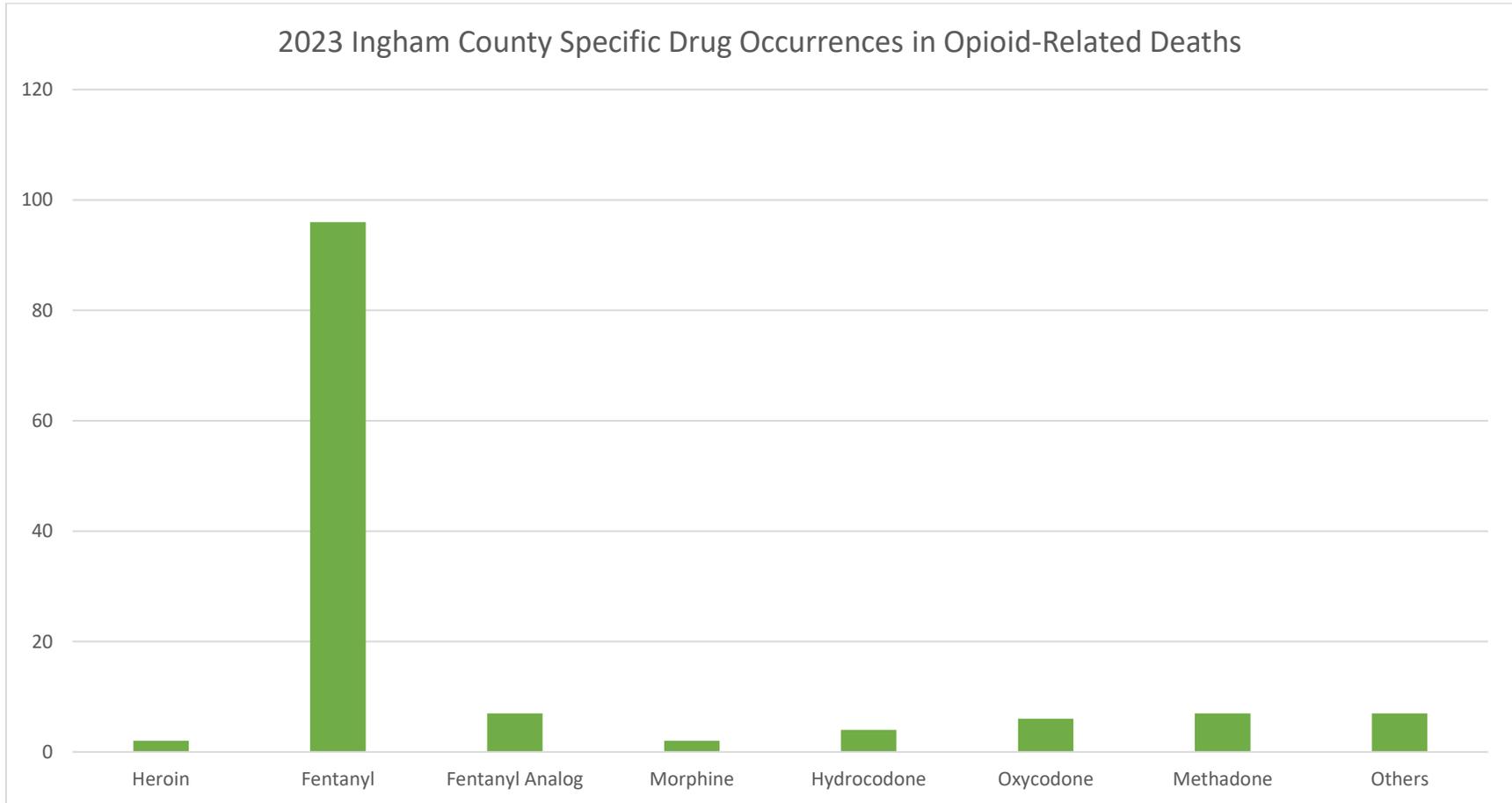
Drug-Related Deaths



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Ingham County

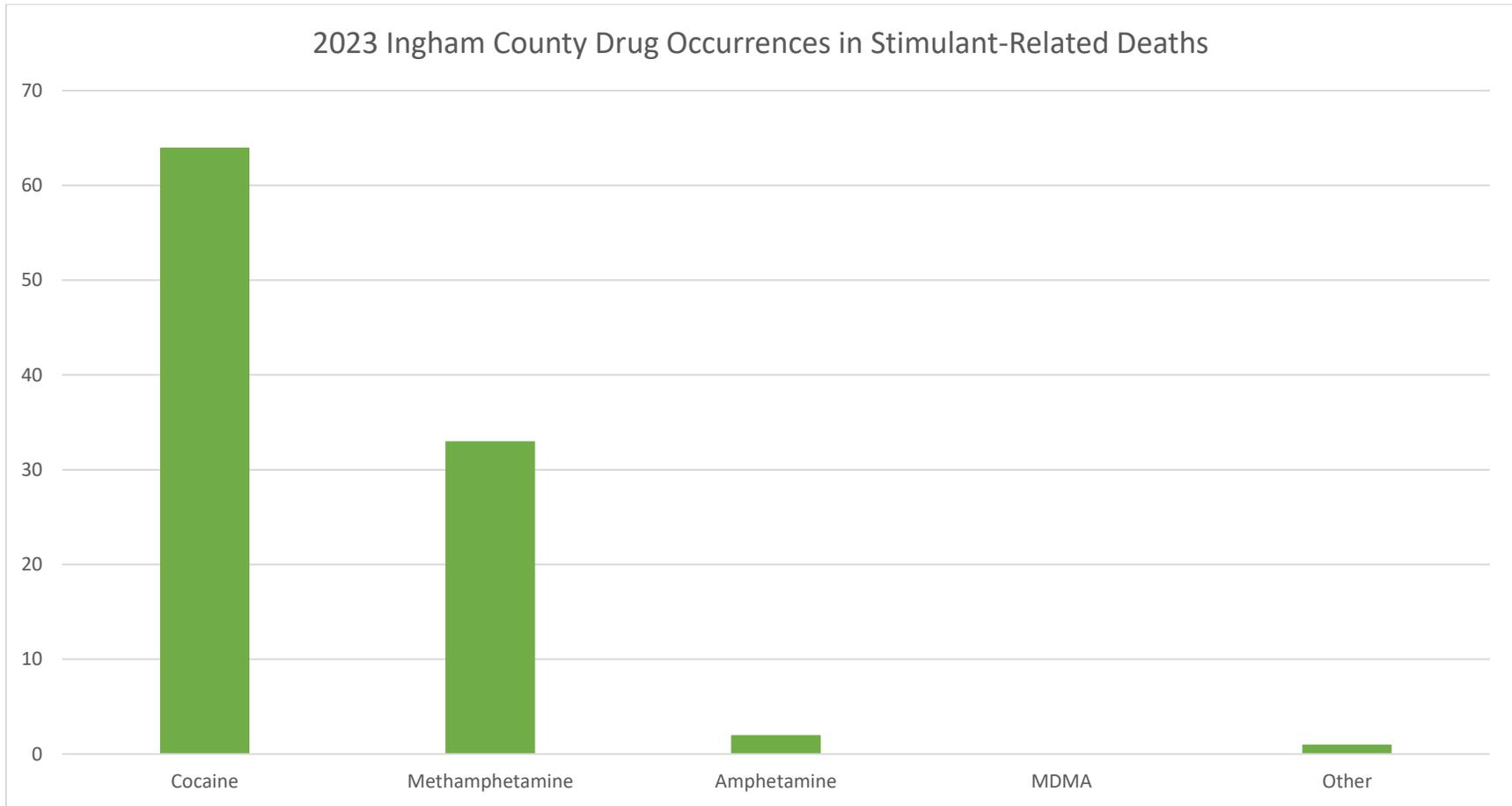
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, and the opioid-like substance metonitazene.

Ingham County

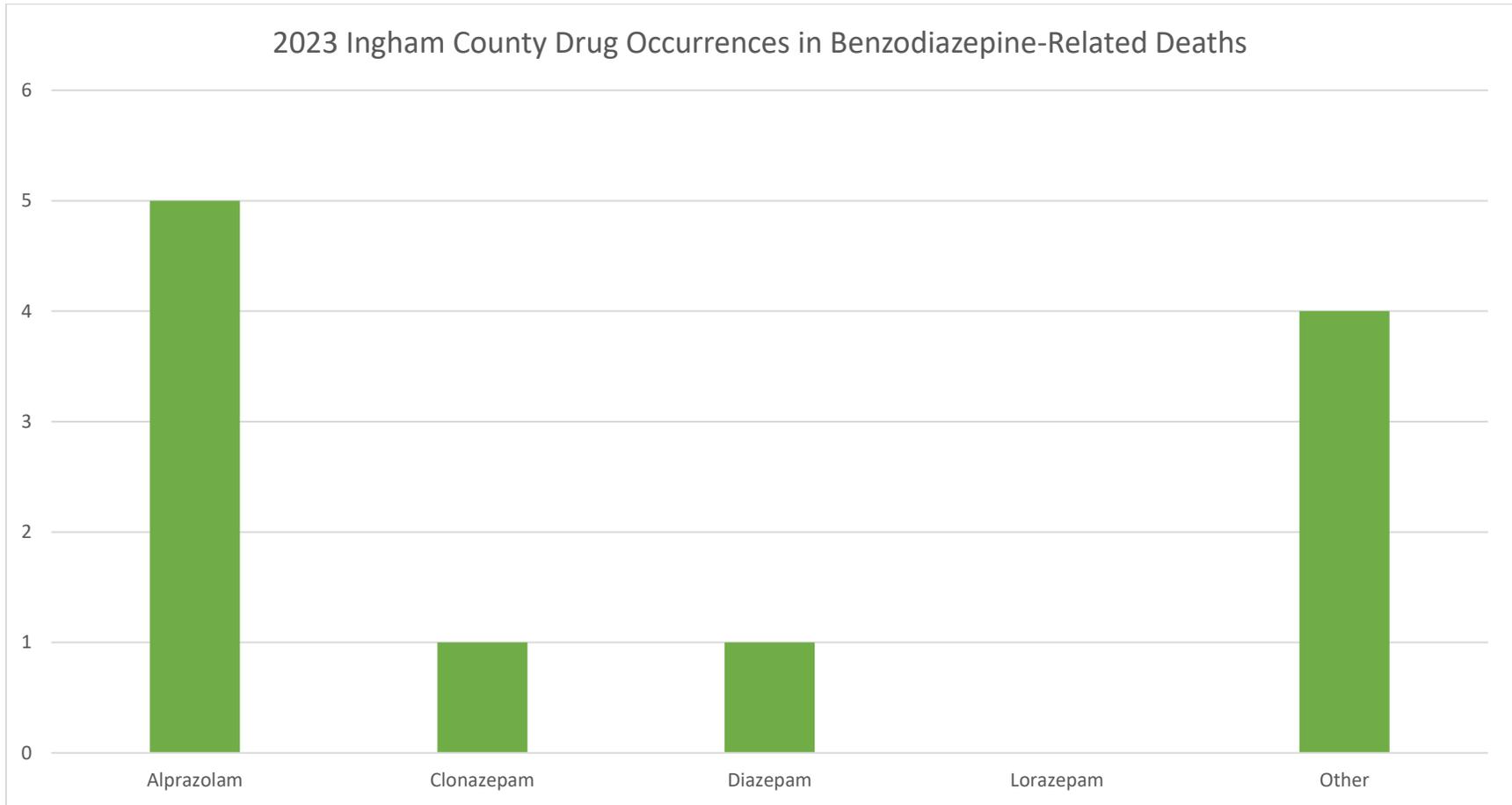
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine and eutylone (bath salt).

Ingham County

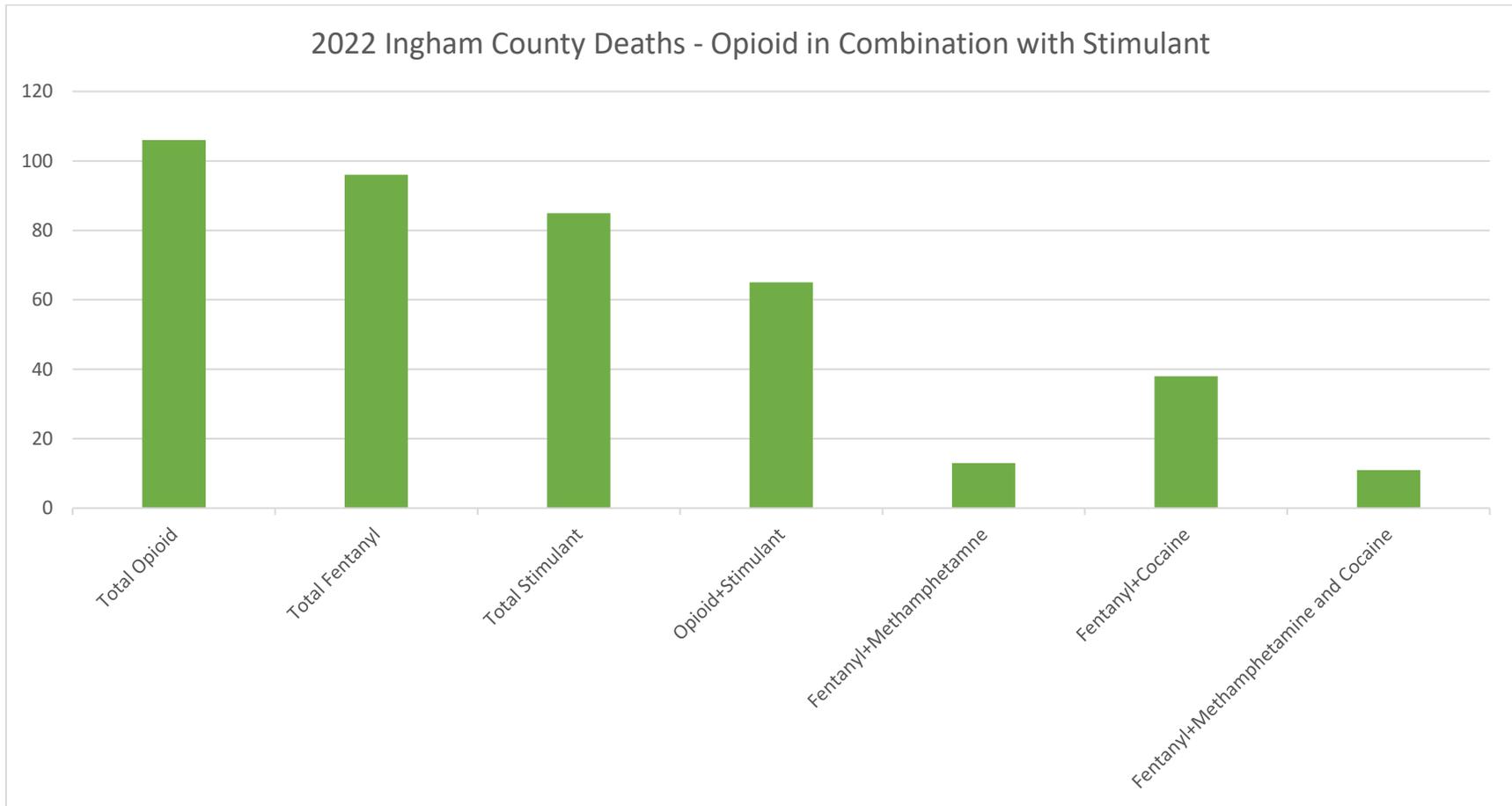
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

Ingham County

Drug-Related Deaths



This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Ionia County

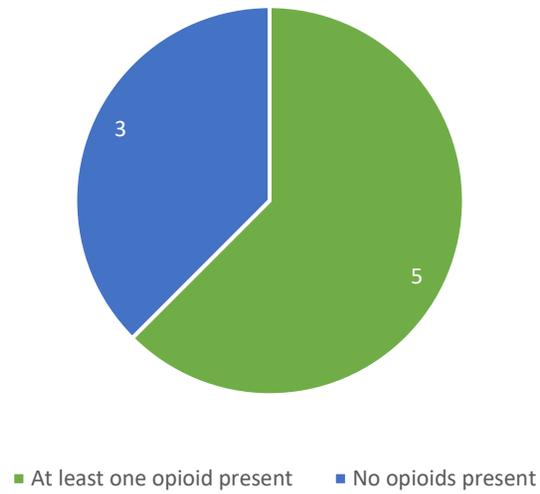
Drug-Related Deaths

2023 Ionia County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Female	21	diphenhydramine	Suicide
Female	30	1,1-Difluoroethane	Accident
Male	33	fentanyl	Accident
Male	33	clozapine, citalopram, ethanol	Accident
Male	40	fentanyl	Accident
Male	45	fentanyl, methamphetamine	Accident
Female	45	fentanyl, methamphetamine	Accident
Male	50	fentanyl, heroin, tramadol	Accident

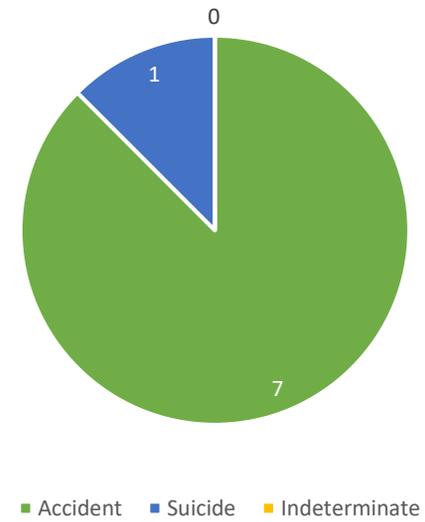
Ionia County

Drug-Related Deaths

2023 Ionia County Drug-Related Deaths
Opioid vs. Non-opioid

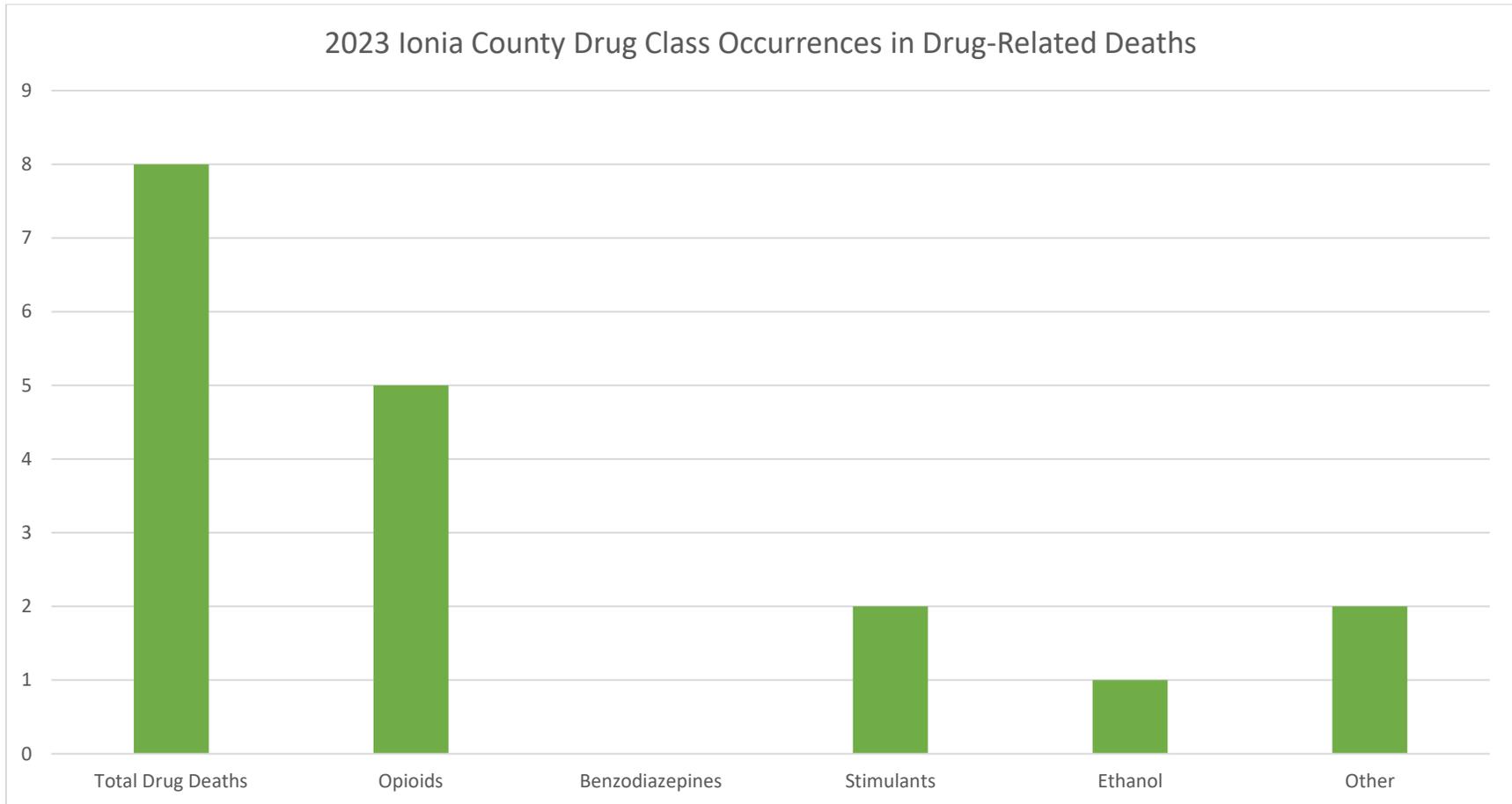


2023 Ionia County Drug-Related Deaths
Manner of Death



Ionia County

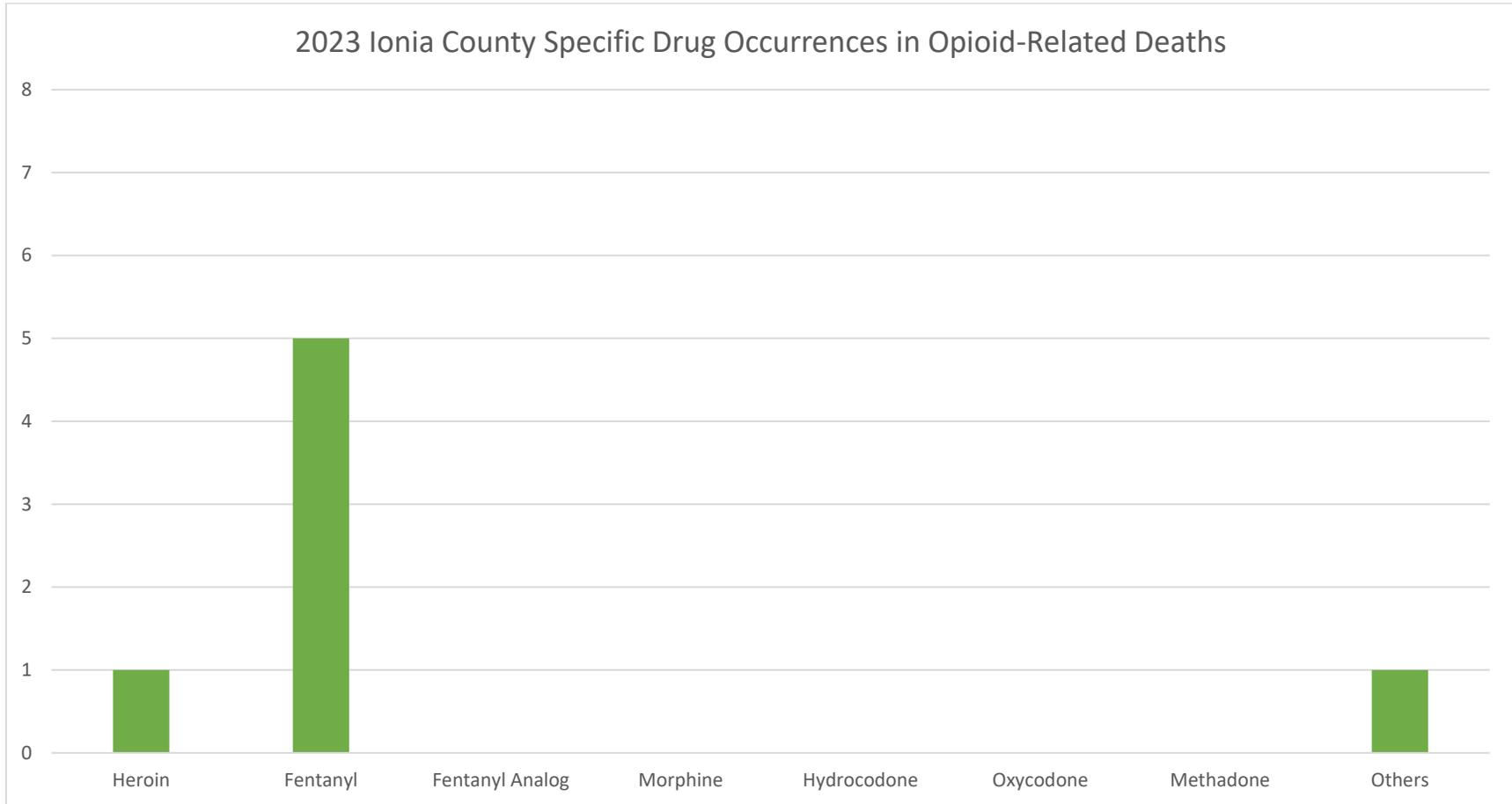
Drug-Related Deaths



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Ionia County

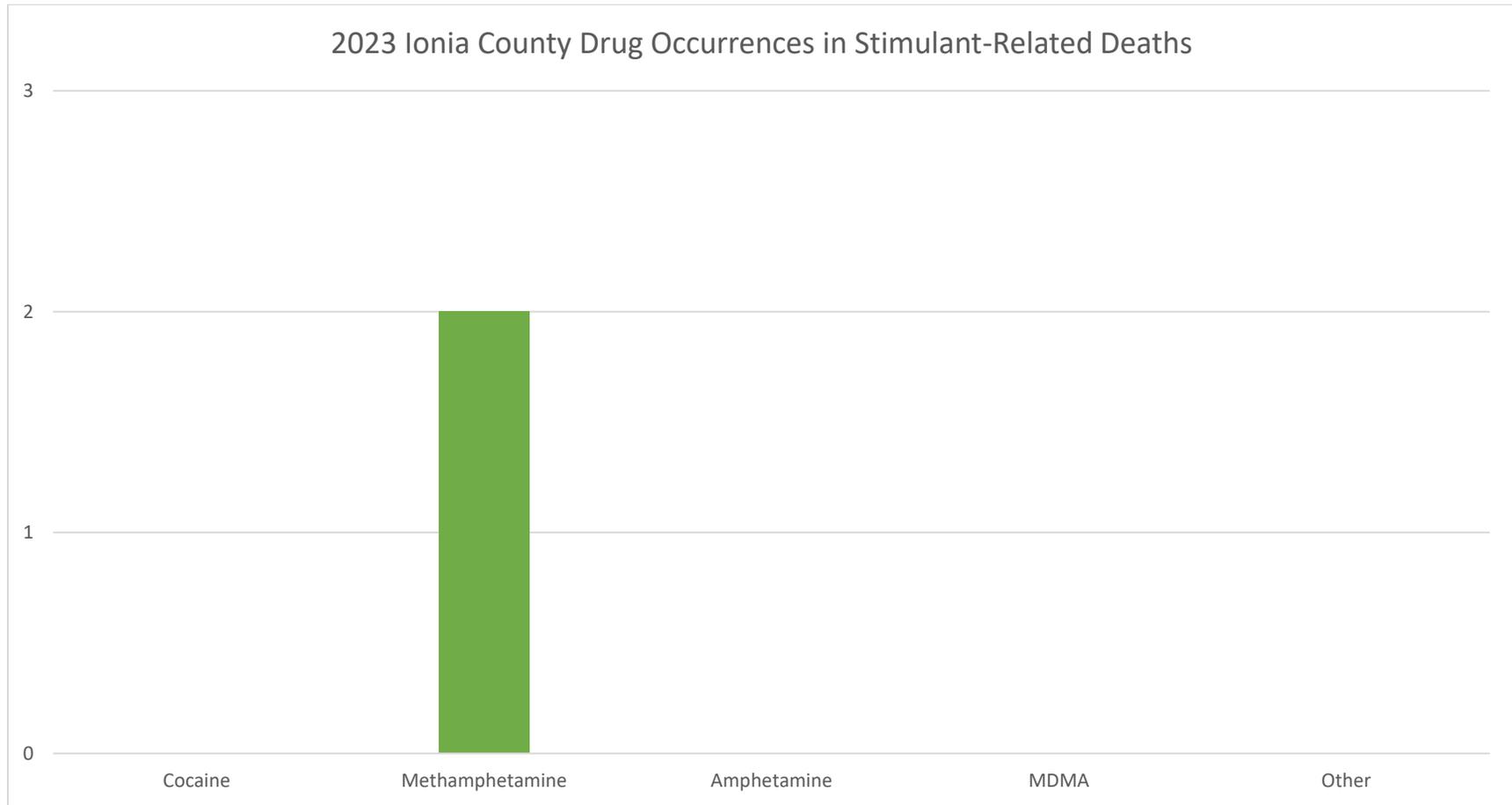
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, and the opioid-like substance metonitazene.

Ionia County

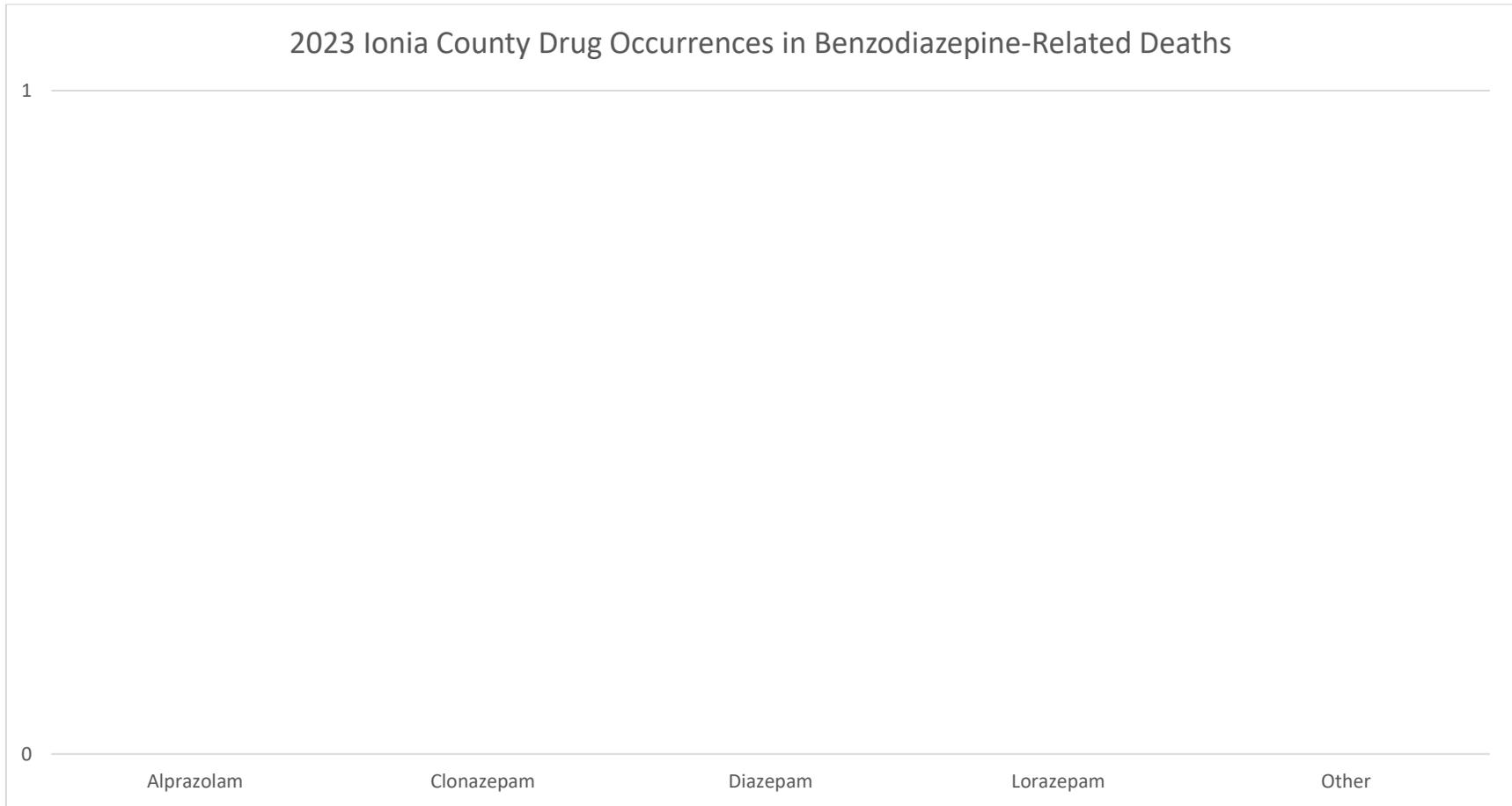
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine.

Ionia County

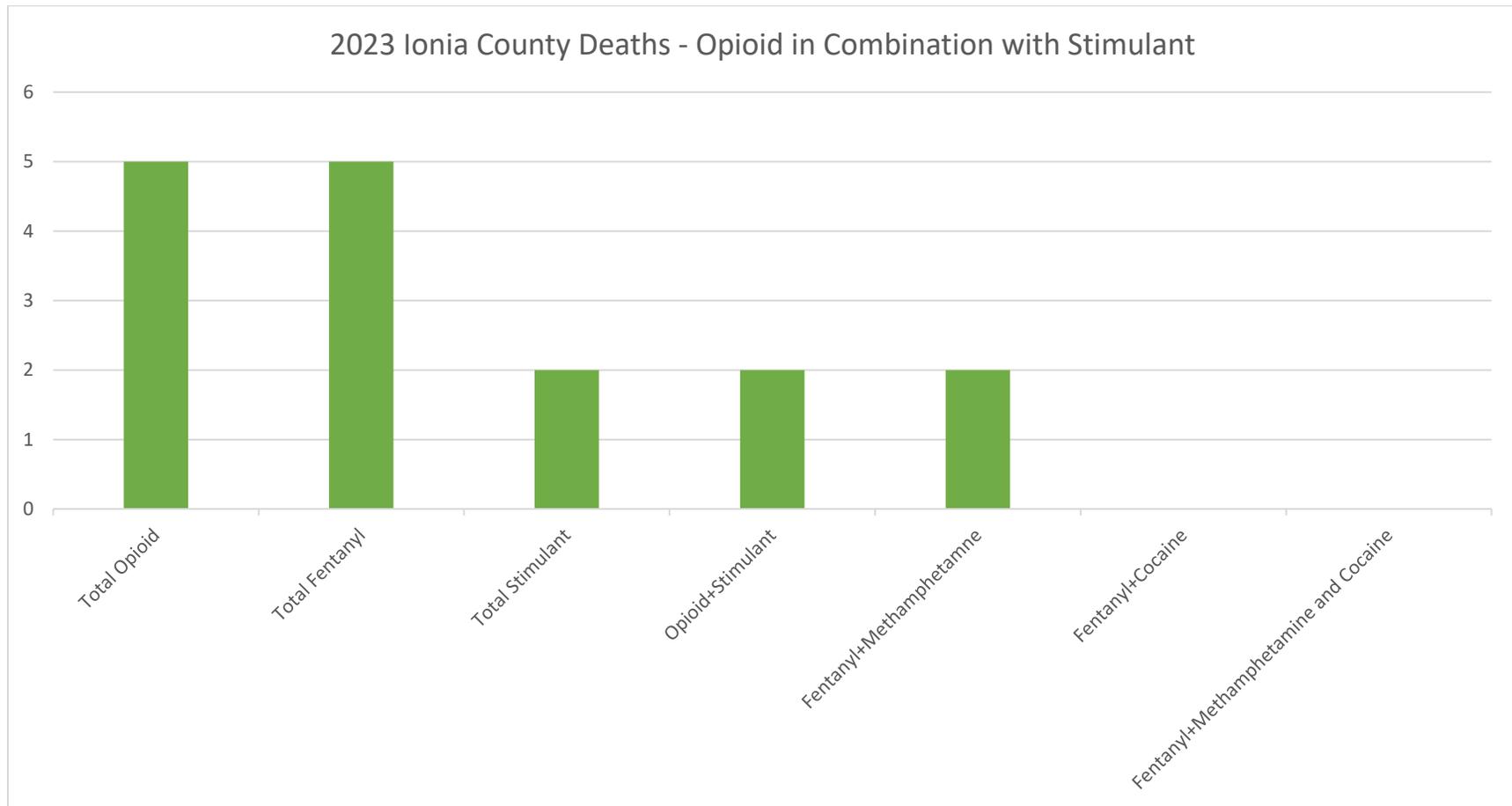
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

Ionia County

Drug-Related Deaths



This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Isabella County

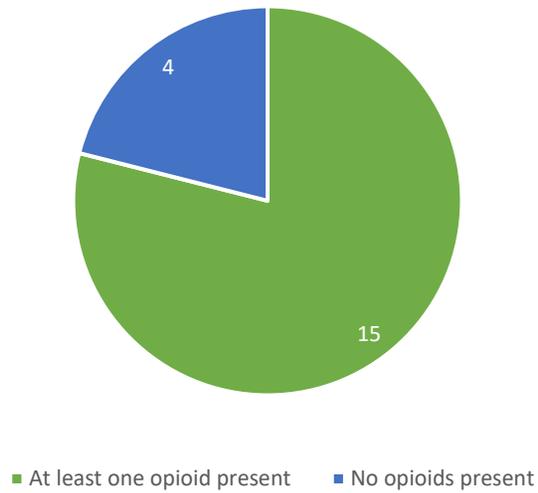
Drug-Related Deaths

2023 Isabella County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Male	18	fentanyl	Accident
Female	20	bromazolam, cocaine, fentanyl	Accident
Female	22	cocaine, fentanyl, methamphetamine	Accident
Female	22	cocaine, fentanyl	Accident
Male	24	mitragynine	Accident
Female	25	fentanyl, methamphetamine	Accident
Male	27	fentanyl	Accident
Male	30	cocaine, fentanyl, methamphetamine	Accident
Female	32	fentanyl, methamphetamine	Accident
Male	33	ethanol, fentanyl	Accident
Male	33	methamphetamine/amphetamine	Accident
Female	43	fentanyl	Accident
Male	47	cocaine, ethanol, fentanyl, fluorofentanyl	Accident
Male	47	fentanyl	Accident
Female	49	gabapentin	Accident
Female	52	fentanyl, gabapentin	Accident
Male	64	cocaine, fentanyl	Accident
Male	68	methamphetamine	Accident
Male	68	fentanyl, methamphetamine	Accident

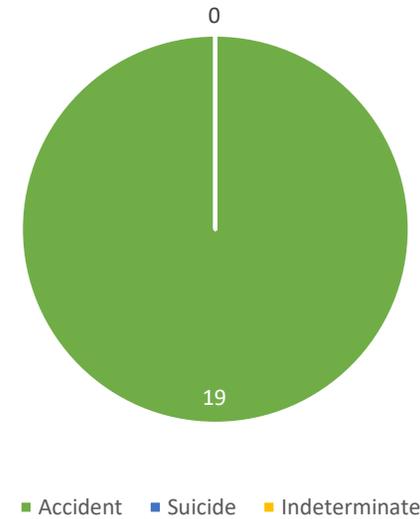
Isabella County

Drug-Related Deaths

2023 Isabella County Drug-Related Deaths
Opioid vs. Non-opioid

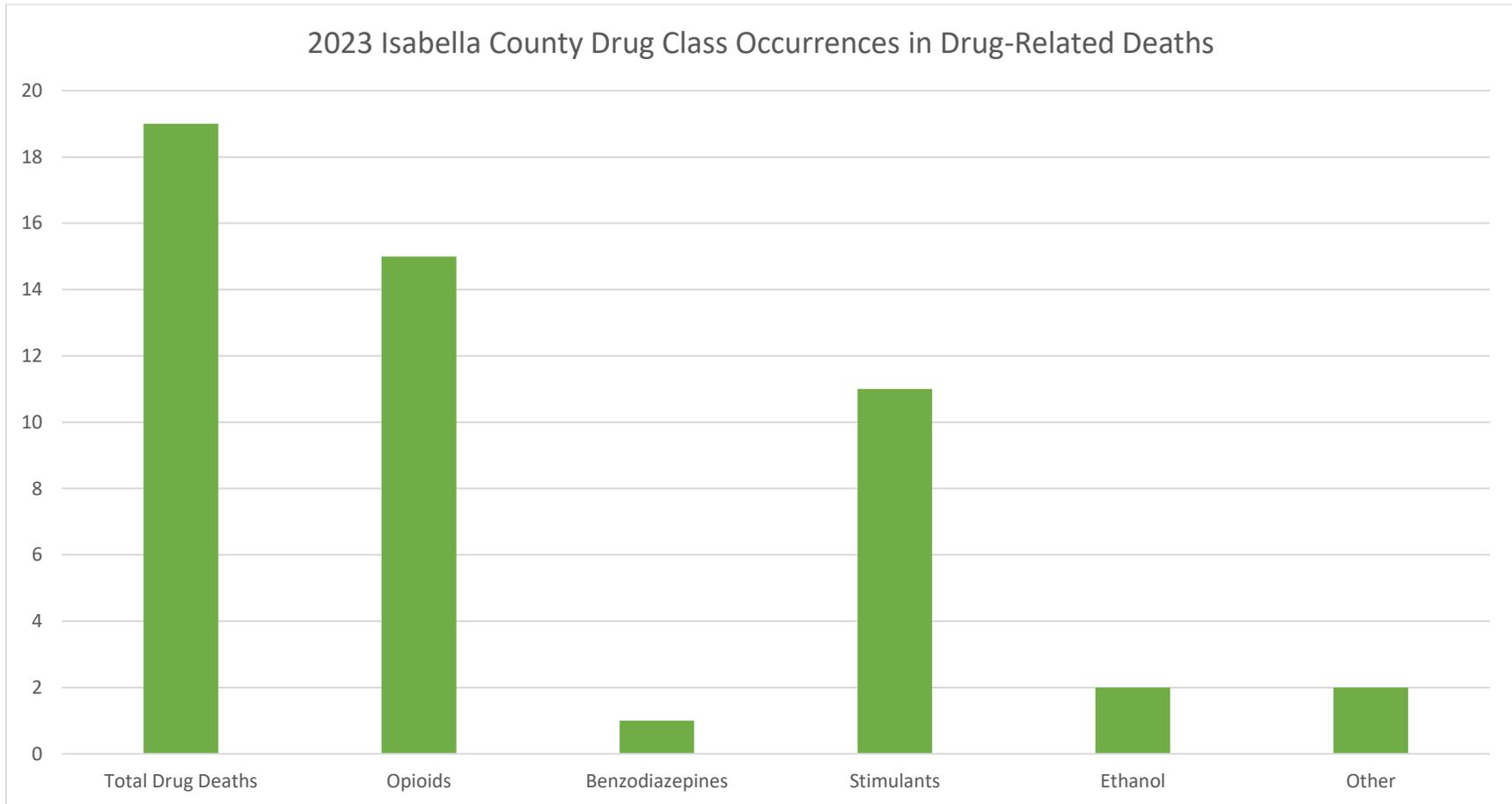


2023 Isabella County Drug-Related Deaths
Manner of Death



Isabella County

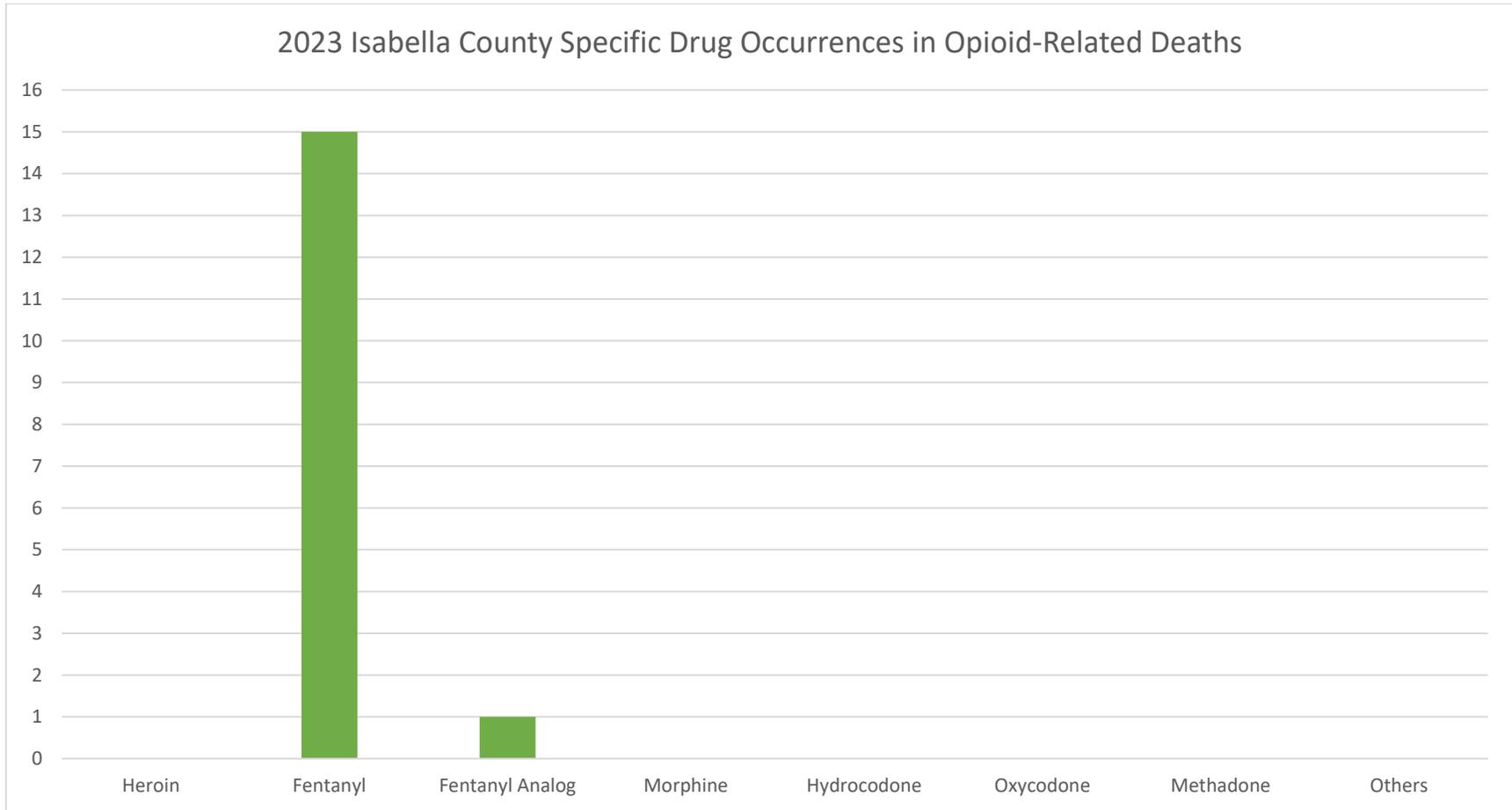
Drug-Related Deaths



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, cocaine, and alprazolam intoxication falls into the opioids, stimulants, and 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 fentanyl 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

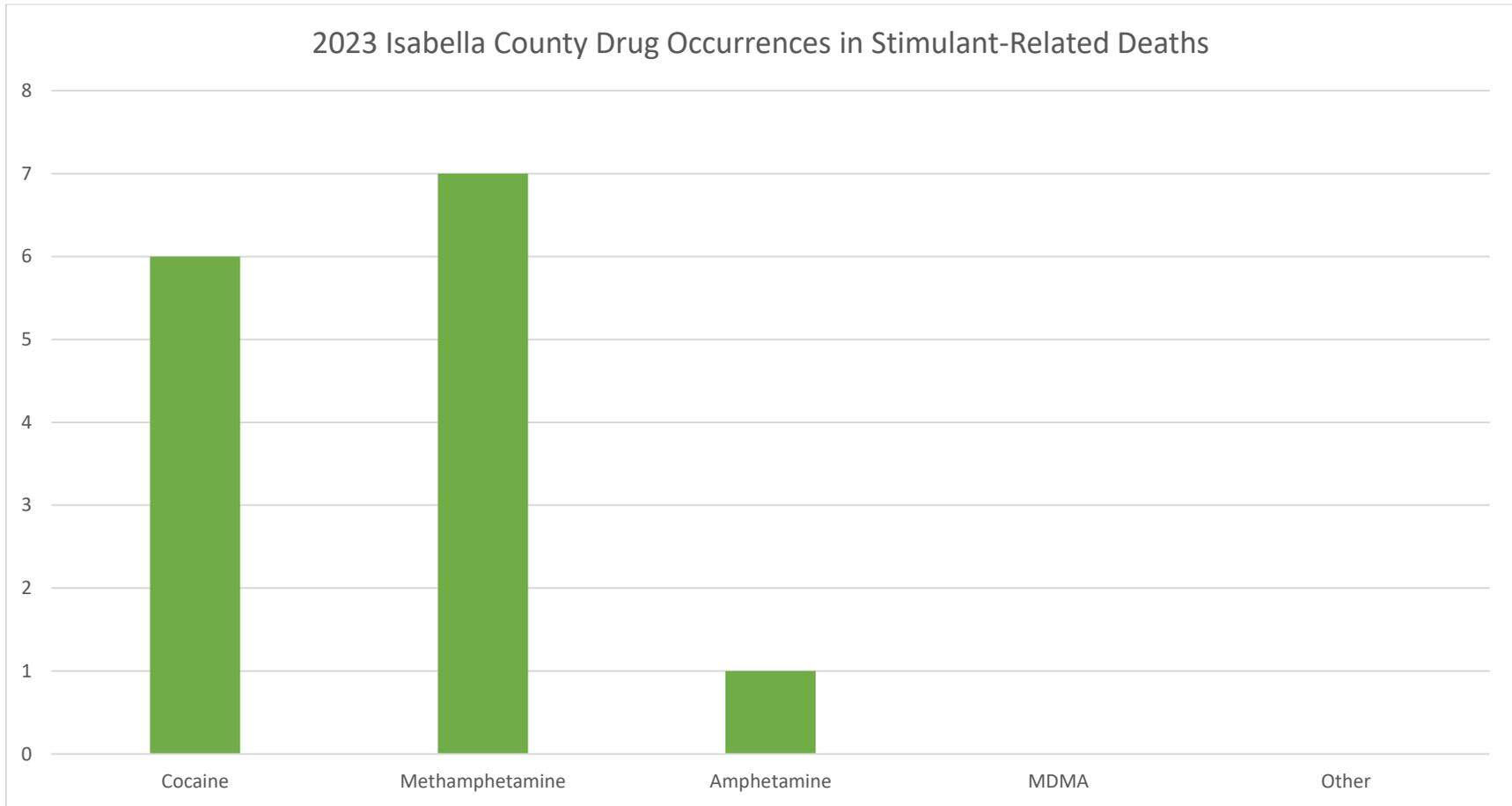
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, and the opioid-like substance metonitazene.

Isabella County

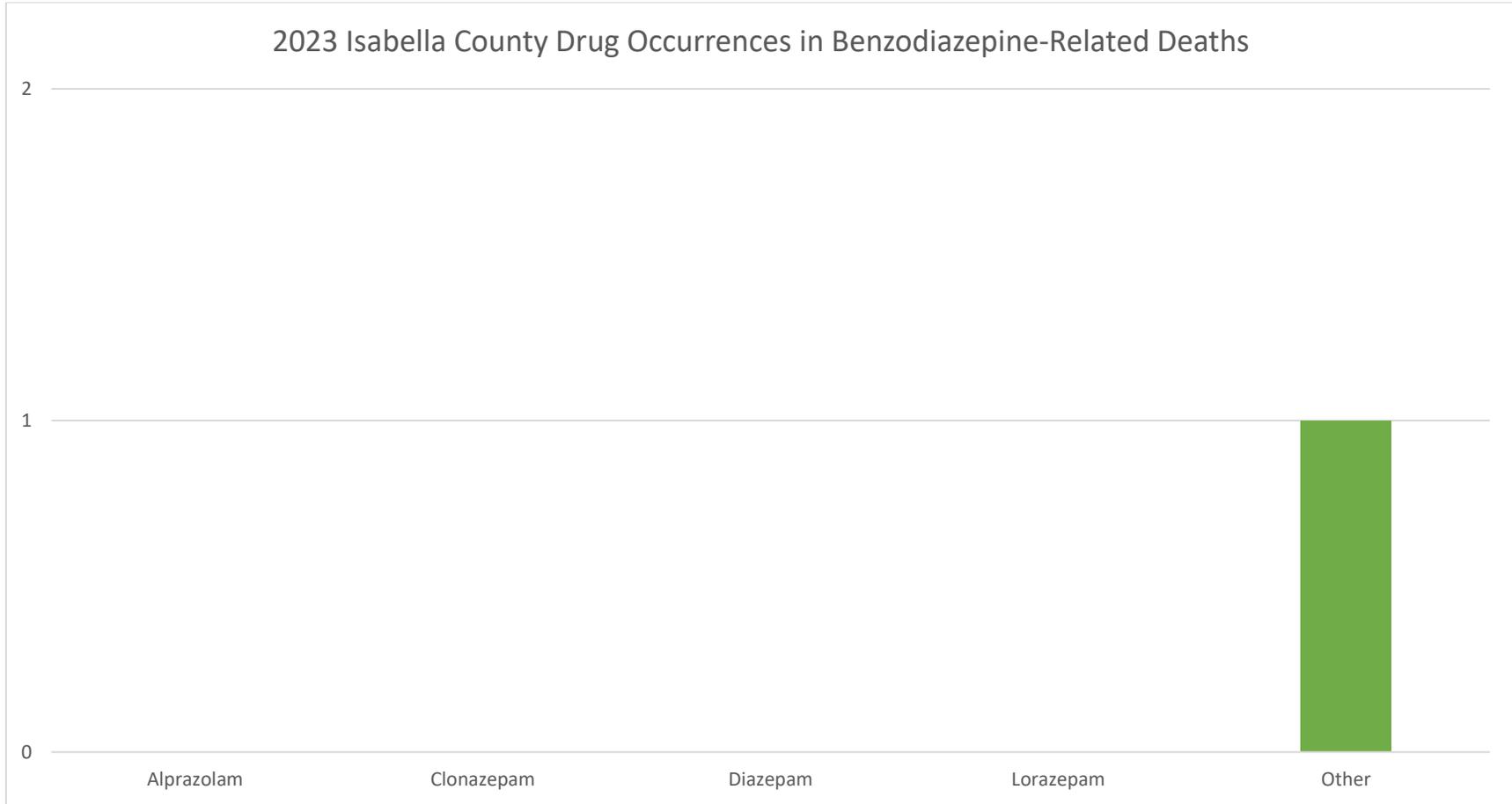
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine.

Isabella County

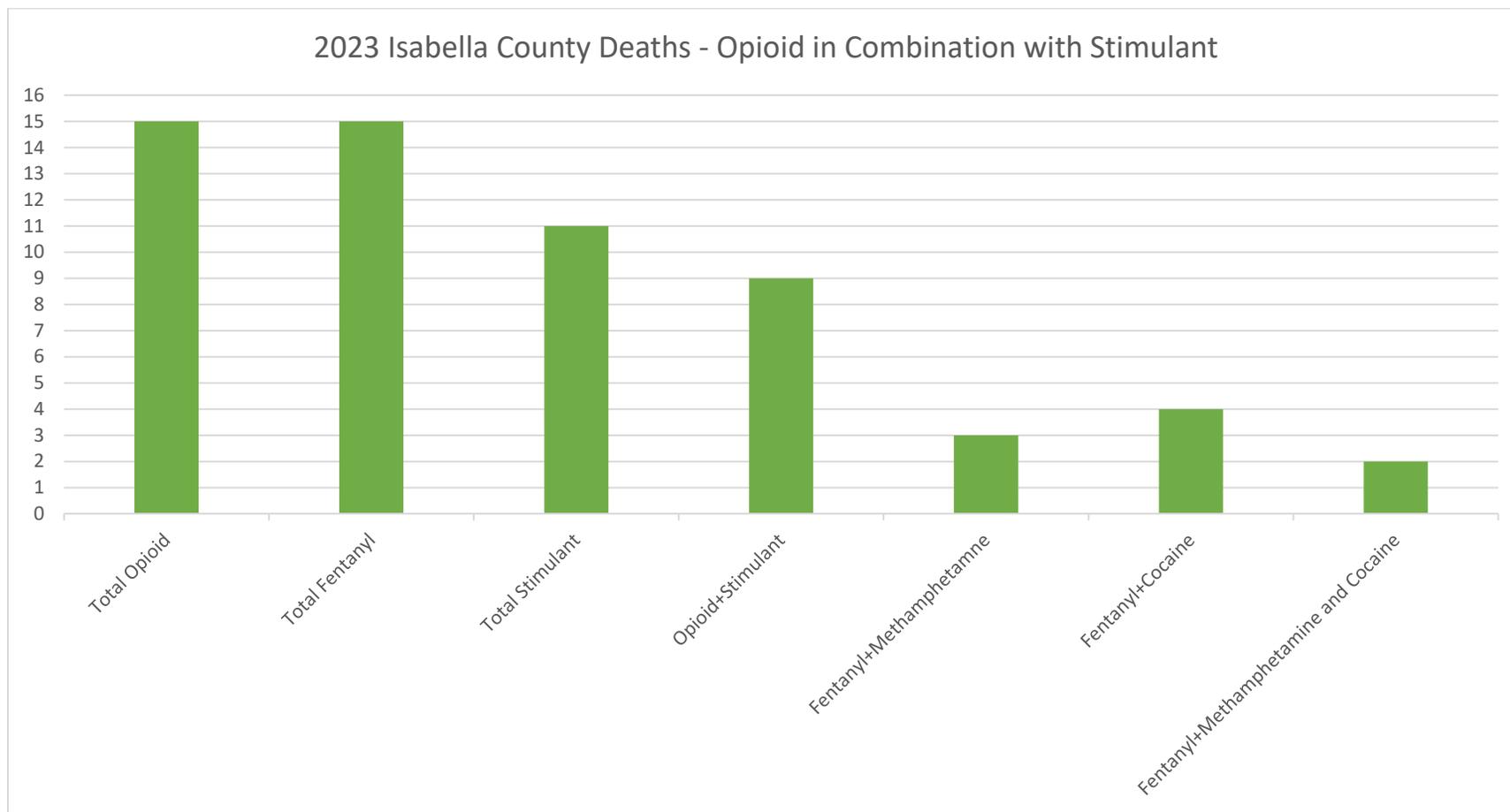
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

Isabella County

Drug-Related Deaths



This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Livingston County

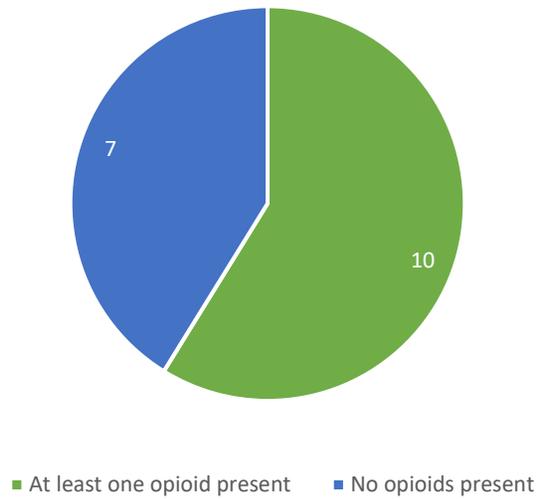
Drug-Related Deaths

2023 Livingston County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Female	33	fentanyl	Accident
Male	33	ethanol, fentanyl	Accident
Female	35	hydromorphone, nordiazepam, quetiapine	Suicide
Male	35	amphetamine, cocaine, clonazepam, diazepam, fentanyl	Accident
Male	35	alprazolam, fentanyl, heroin, tramadol	Accident
Female	35	alprazolam, loperamide	Accident
Male	37	ethanol, fentanyl, hydrocodone	Accident
Male	39	methamphetamine	Indeterminate
Female	47	cocaine	Accident
Male	49	bromazolam, cyclobenzaprine, ethanol, fentanyl, fluorofentanyl, methamphetamine, mitragynine, morphine	Accident
Male	49	acetylfentanyl, cyclobenzaprine, fentanyl, fluorofentanyl	Accident
Female	54	methamphetamine	Accident
Male	54	cocaine, ethanol, yohimbine	Accident
Male	60	amlodipine, ethanol, etodolac	Suicide
Male	61	amitriptyline, ethanol	Suicide
Male	64	cocaine, fentanyl	Accident
Female	75	clonazepam, cyclobenzaprine	Suicide

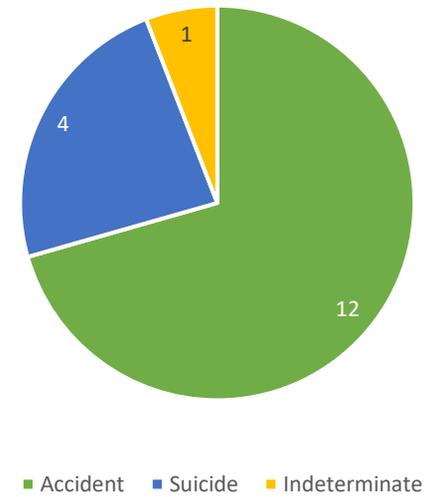
Livingston County

Drug-Related Deaths

2023 Livingston County Drug-Related Deaths
Opioid vs. Non-opioid

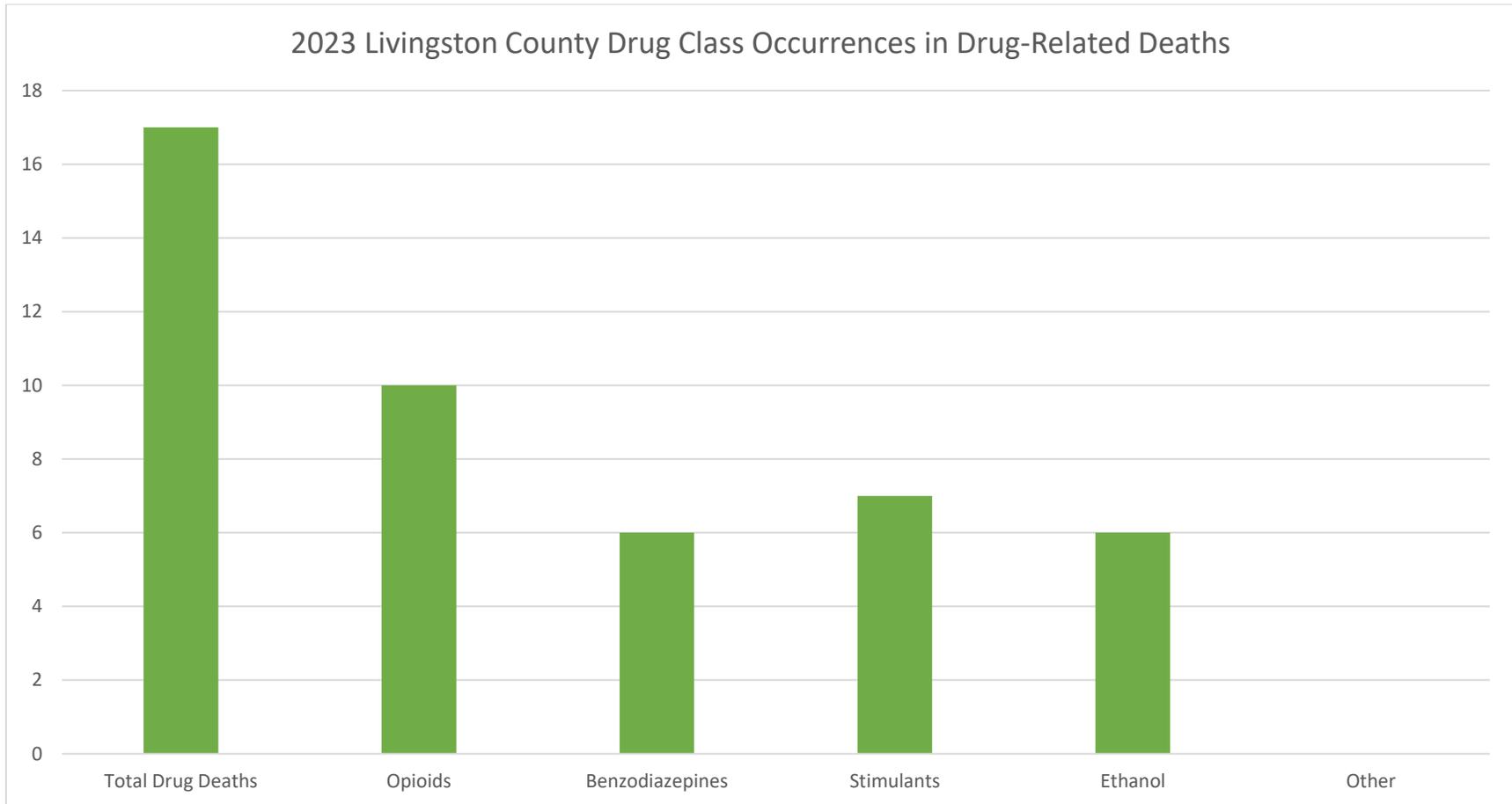


2023 Livingston County Drug-Related Deaths
Manner of Death



Livingston County

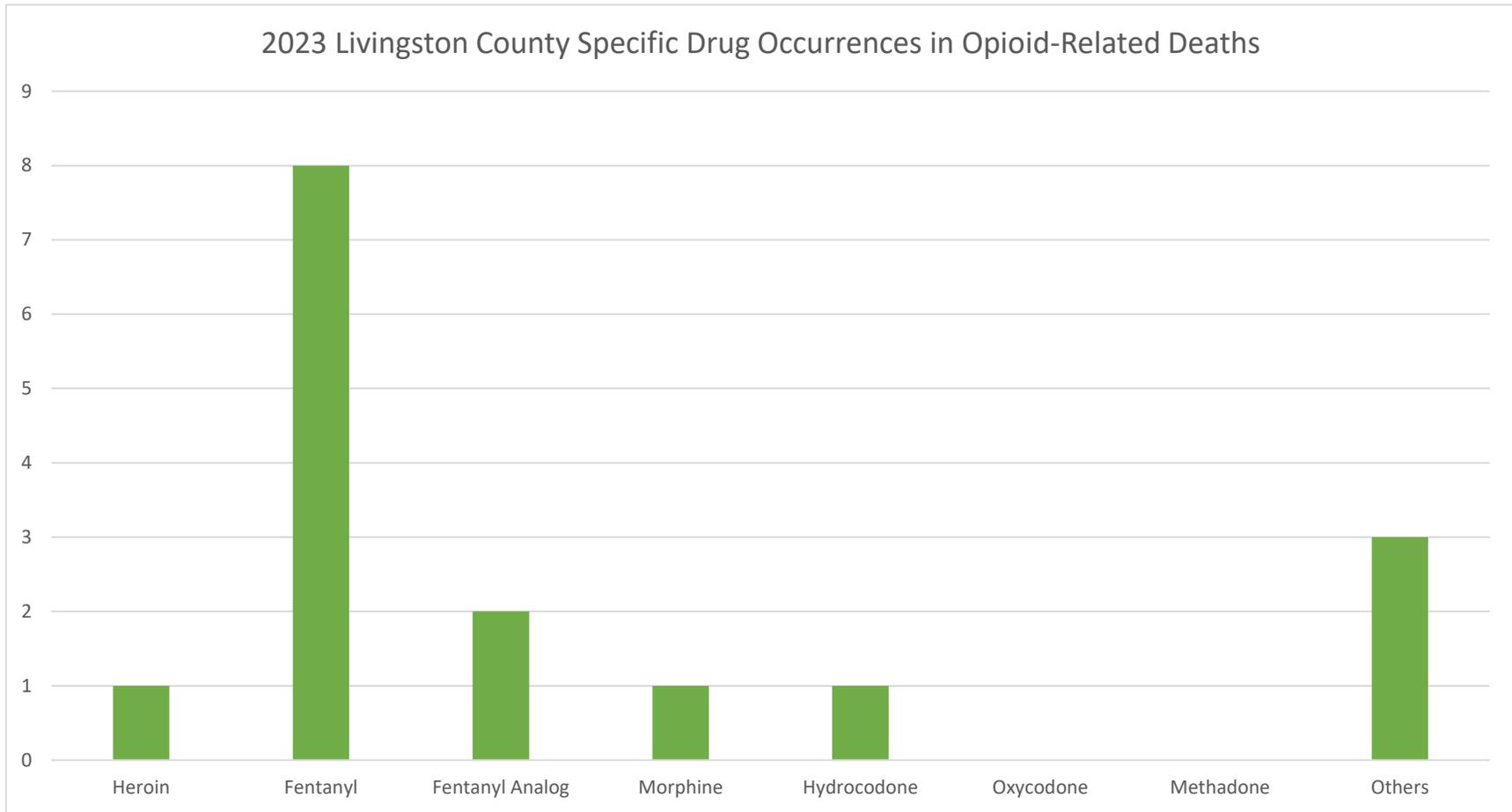
Drug-Related Deaths



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, cocaine, and alprazolam intoxication falls into the opioids, stimulants, and 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 fentanyl 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

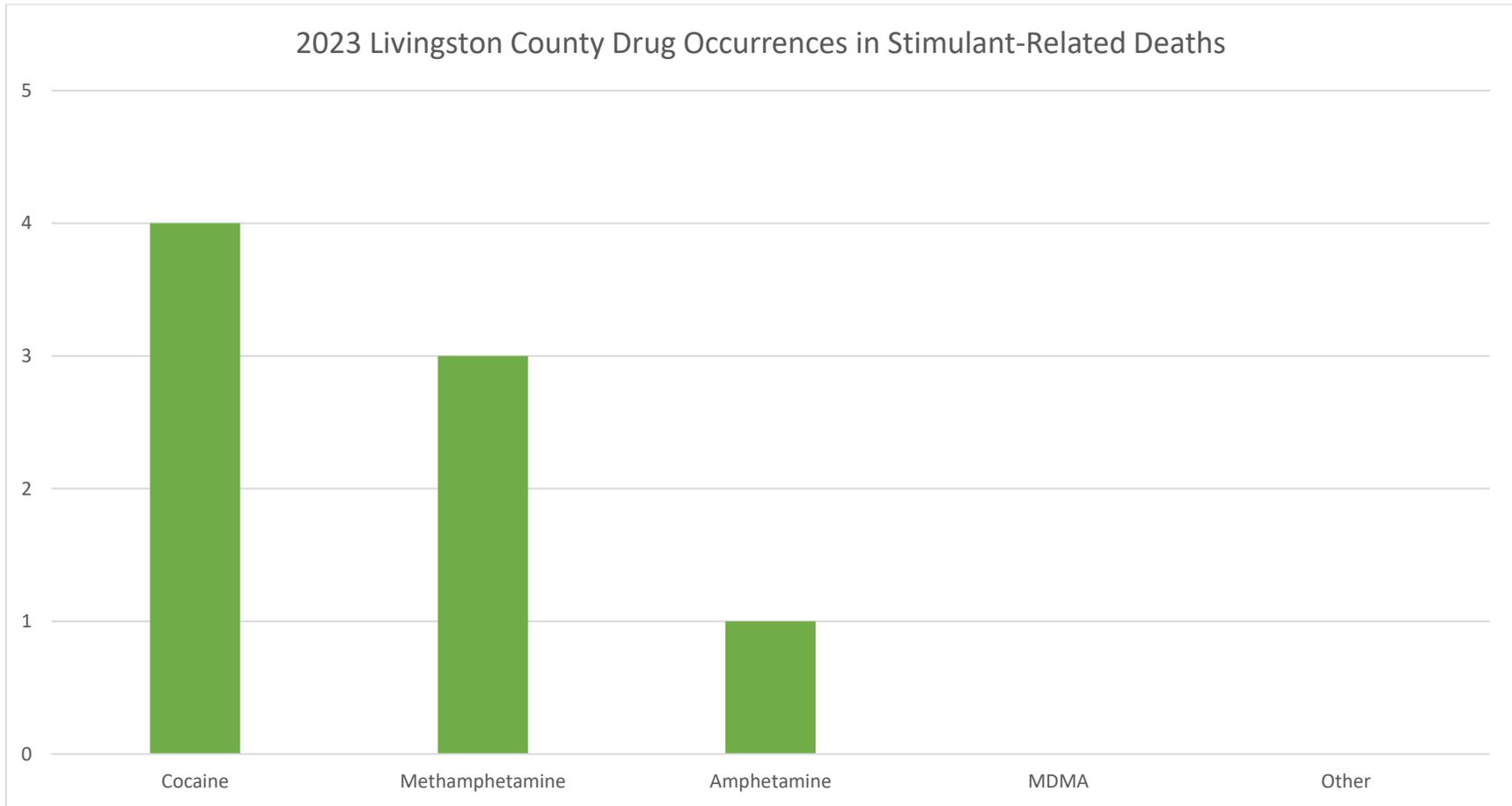
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, loperamide and the opioid-like substance metonitazene.

Livingston County

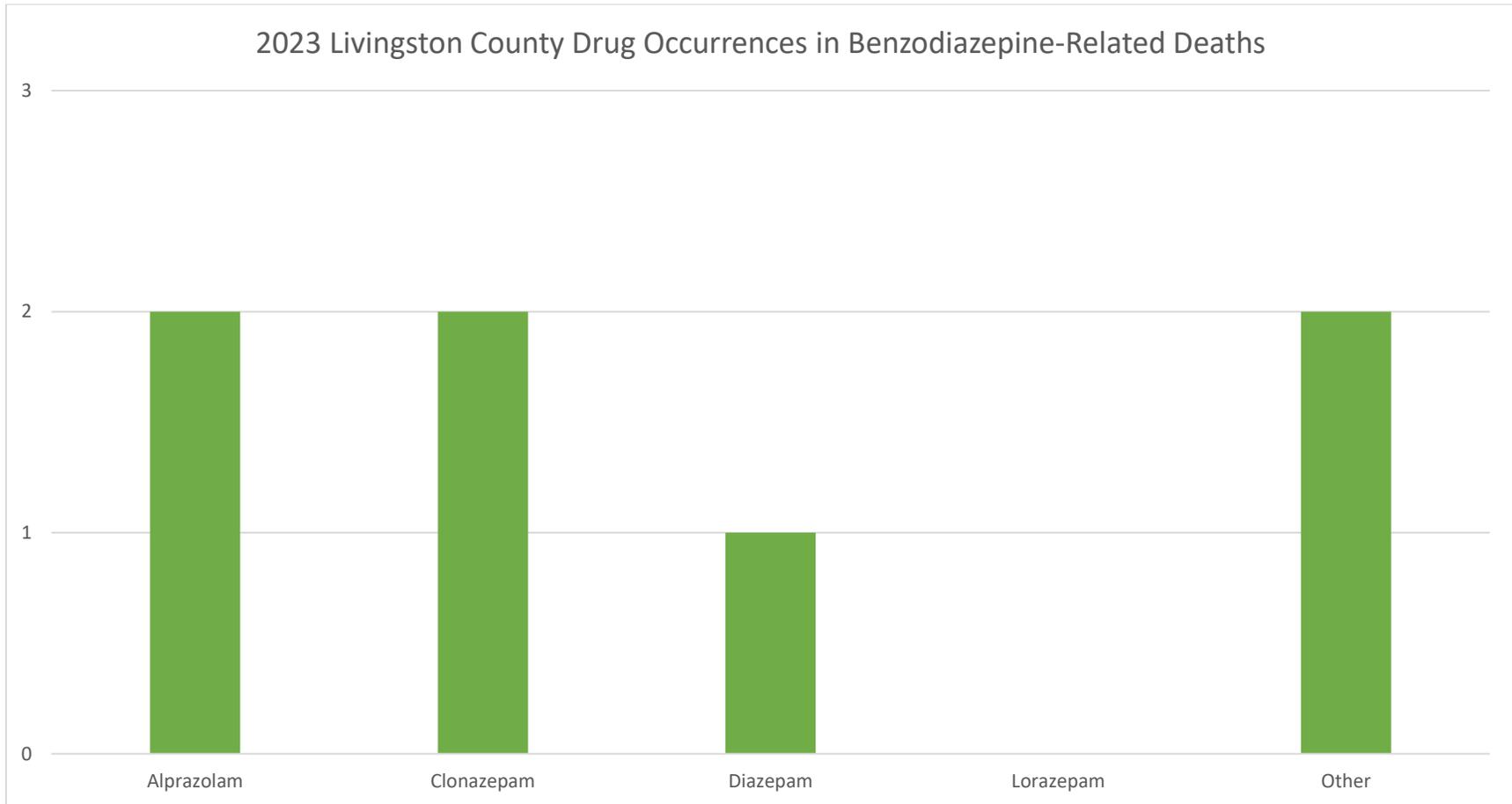
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine.

Livingston County

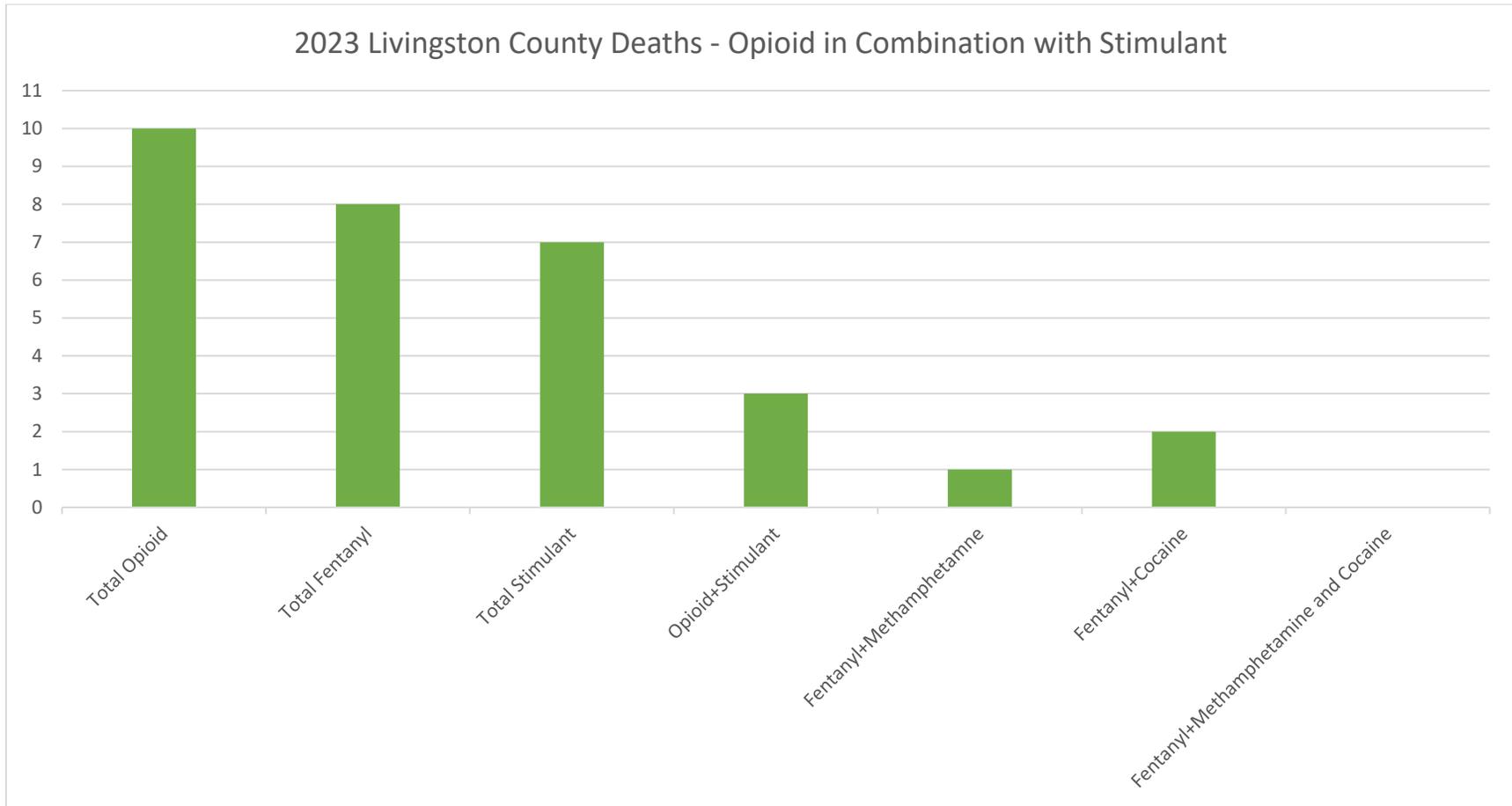
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

Livingston County

Drug-Related Deaths



This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Shiawassee County

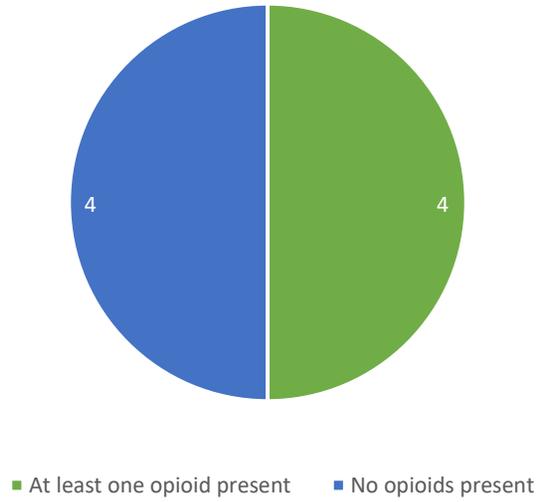
Drug-Related Deaths

2023 Shiawassee County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Male	37	fentanyl, methamphetamine	Accident
Male	40	methamphetamine	Accident
Male	47	cocaine	Accident
Female	49	cocaine, fentanyl	Accident
Male	50	cocaine	Accident
Female	51	diphenhydramine	Indeterminate
Male	54	fentanyl	Accident
Female	75	hydrocodone	Accident

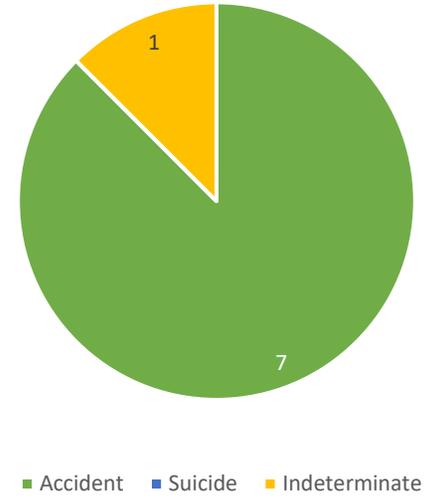
Shiawassee County

Drug-Related Deaths

2023 Shiawassee County Drug-Related Deaths
Opioid vs. Non-opioid

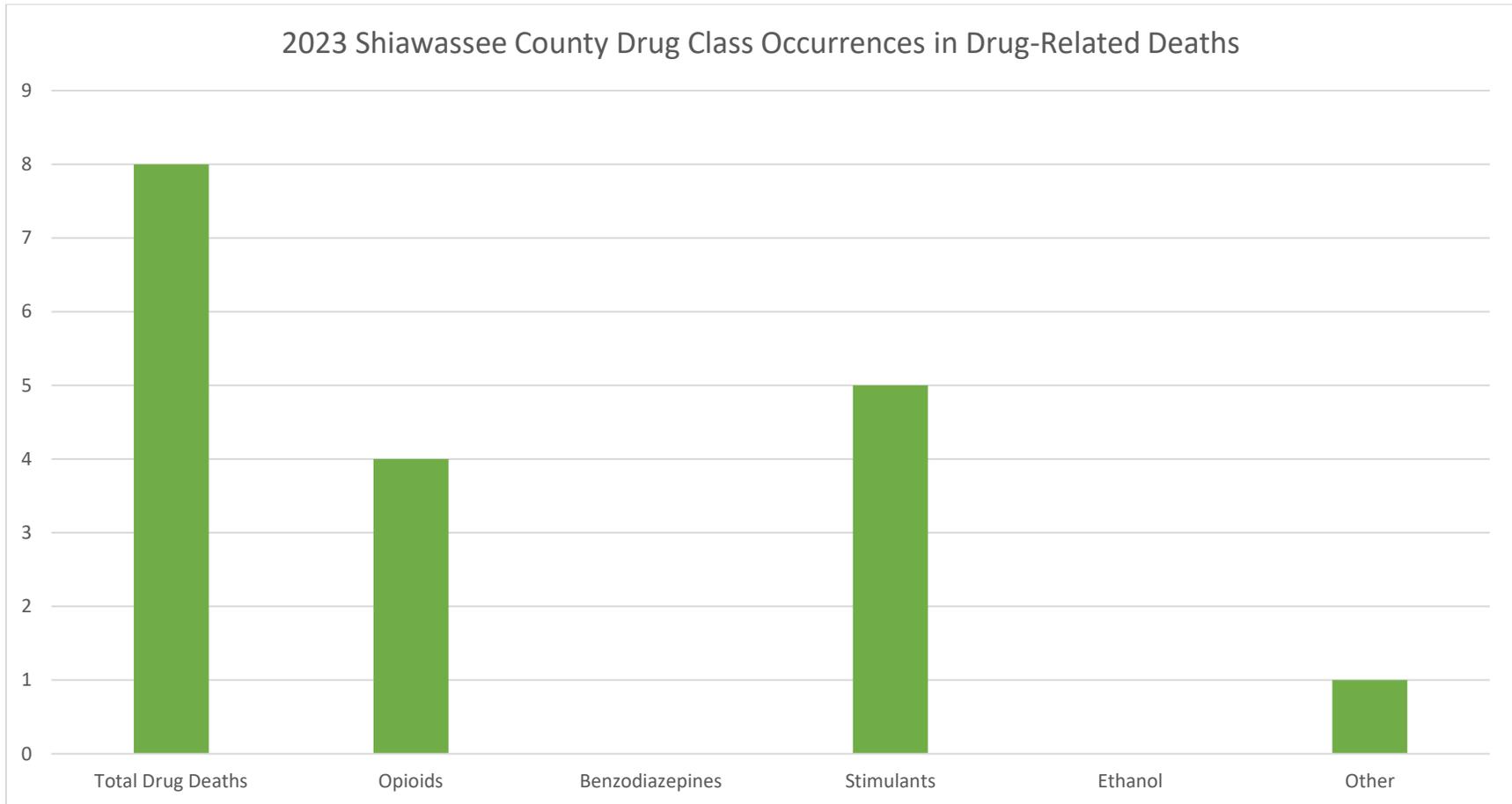


2023 Shiawassee County Drug-Related Deaths
Manner of Death



Shiawassee County

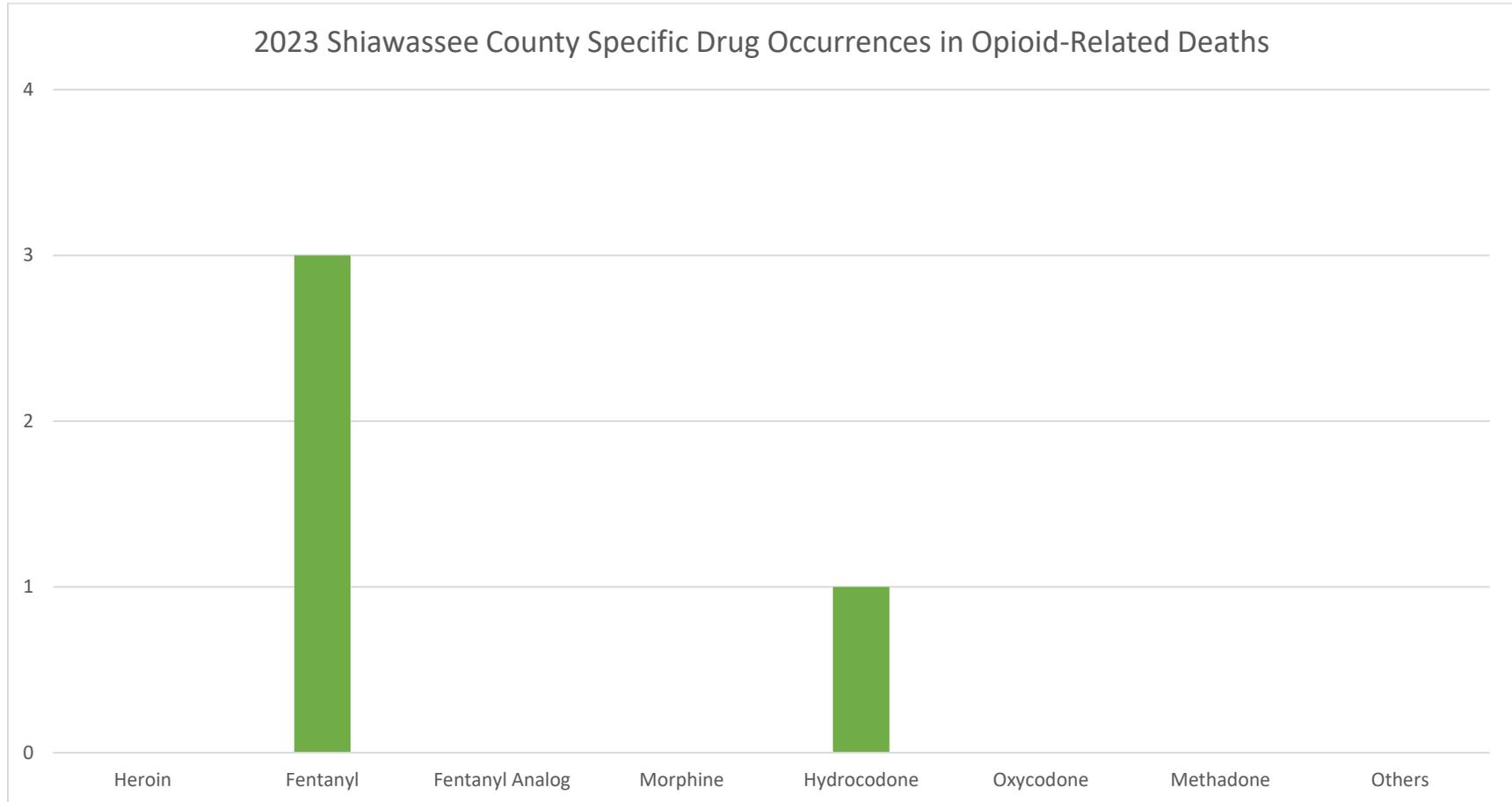
Drug-Related Deaths



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, cocaine, and alprazolam intoxication falls into the opioids, stimulants, and 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 fentanyl 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

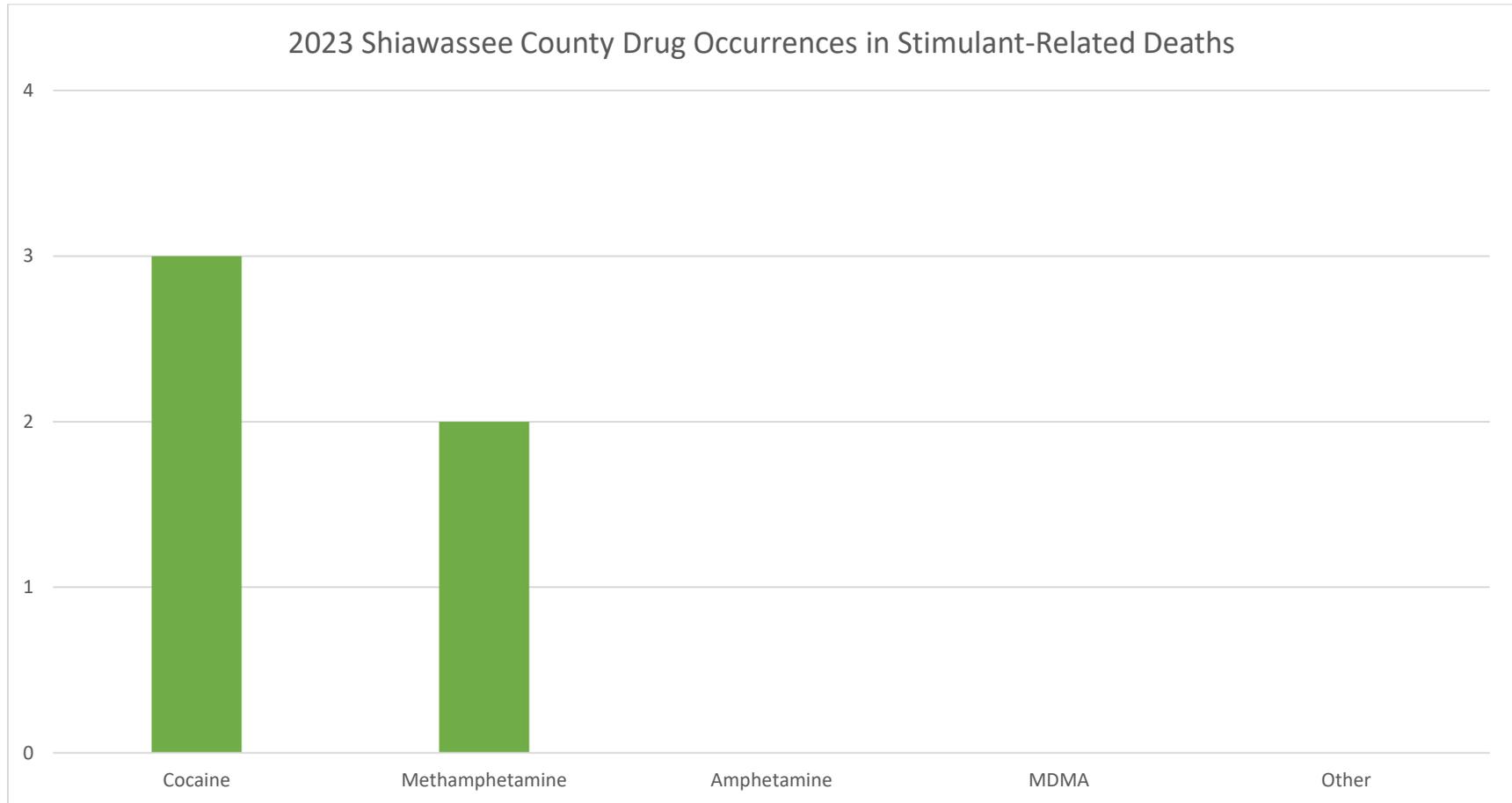
Drug-Related Deaths



This chart describes occurrences in one death of a specific opioid drug. As some opioid-related deaths are due to two or more opioids, the same death may fall into multiple categories (e.g. death due to fentanyl and heroin intoxication falls into both the fentanyl and heroin categories). The “other” category is for occurrences of other less-frequently observed opioids, including (but not limited to) tramadol, hydromorphone, codeine, buprenorphine, and the opioid-like substance metonitazene.

Shiawassee County

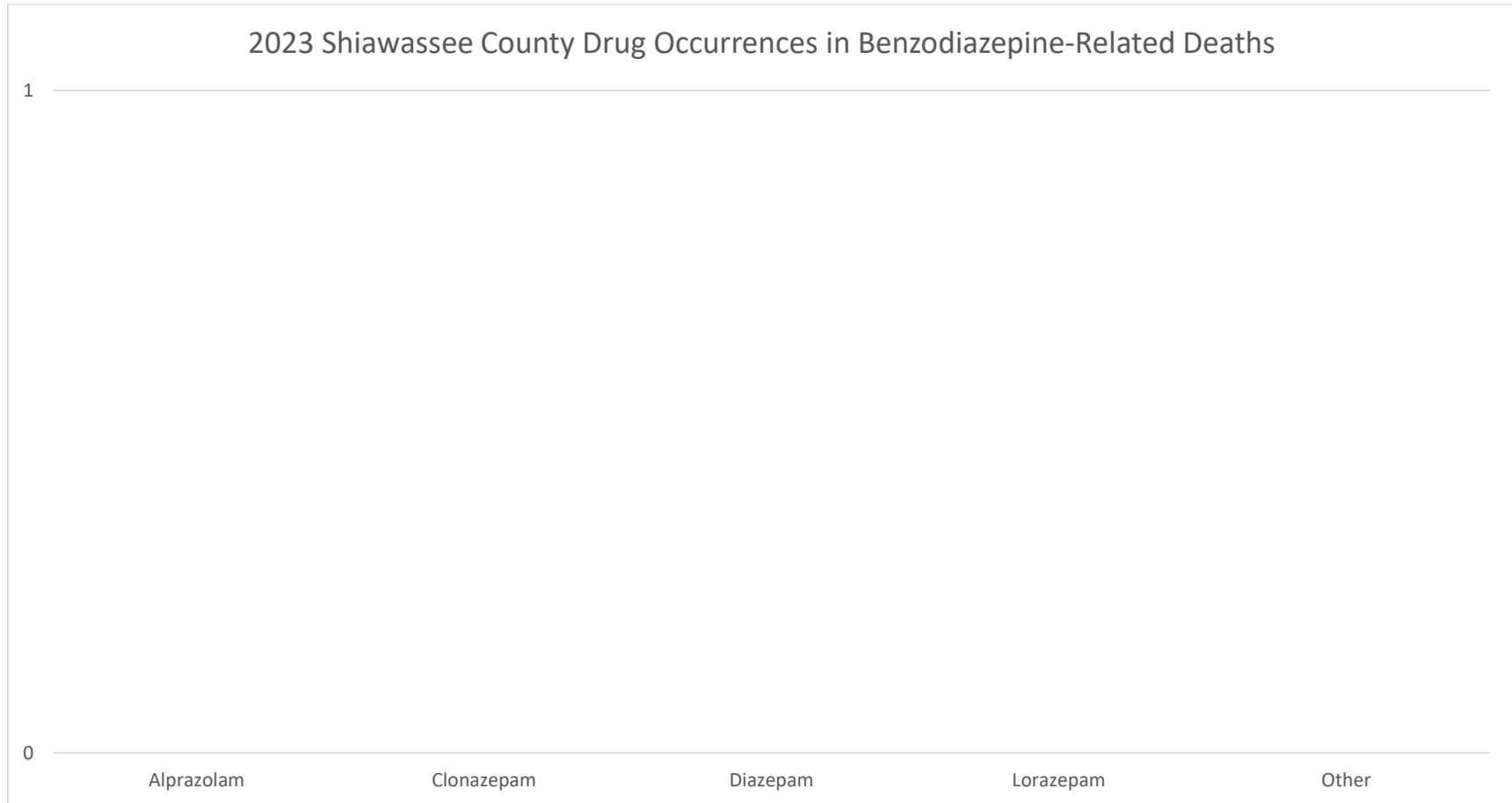
Drug-Related Deaths



This chart describes occurrences in one death of a specific stimulant drug. As some stimulant drug-related deaths are due to more than one stimulant, the same death may fall into multiple categories (e.g. death due to cocaine and methamphetamine intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed stimulants, including (but not limited to) pseudoephedrine.

Shiawassee County

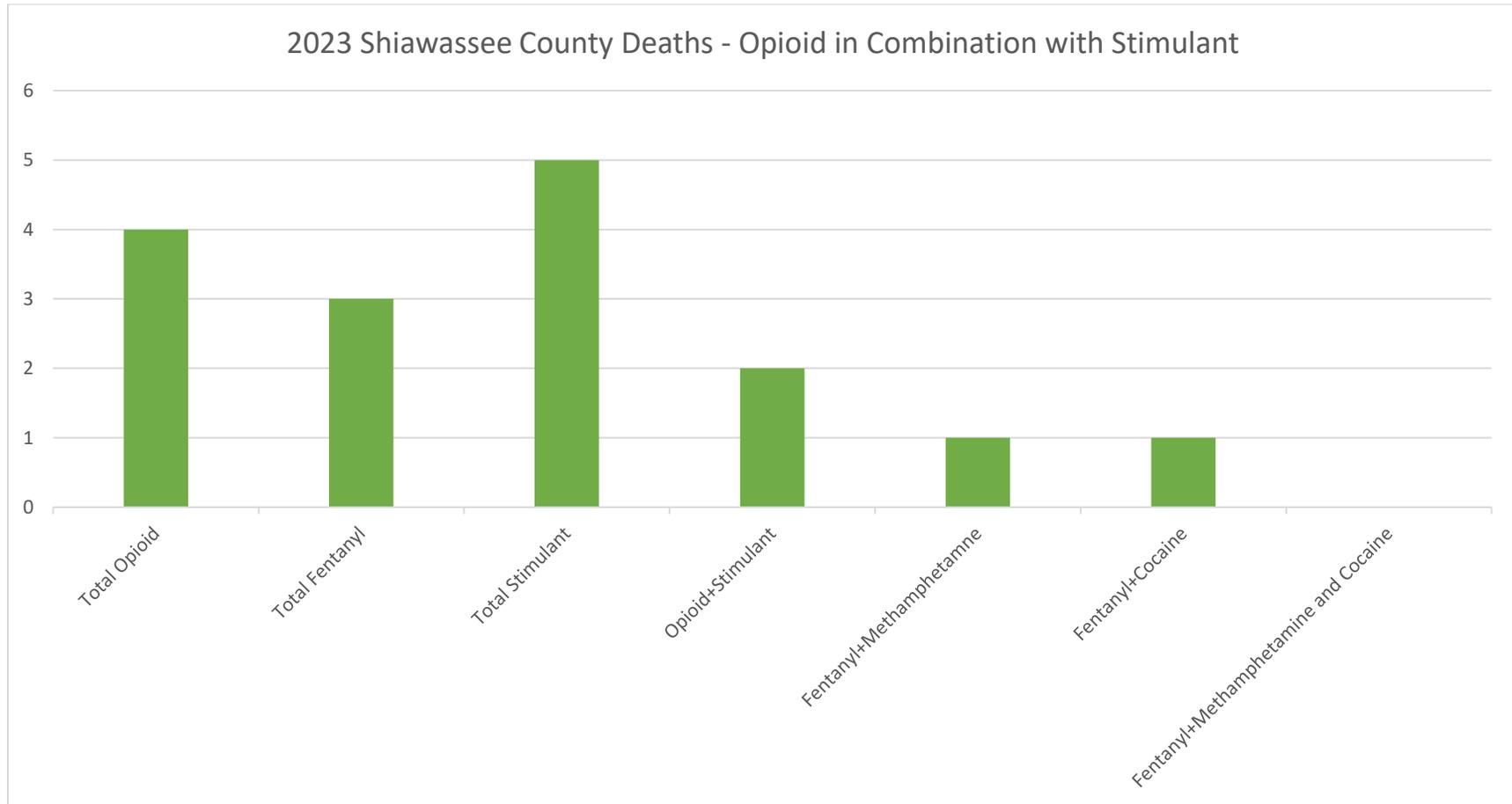
Drug-Related Deaths



This chart describes occurrences in one death of a specific benzodiazepine drug. As some benzodiazepine drug-related deaths are due to more than one benzodiazepine, the same death may fall into multiple categories (e.g. death due to alprazolam and diazepam intoxication falls into both categories). The “other” category is for occurrences of other less-frequently observed benzodiazepine, including (but not limited to) bromazolam, desalkylflurazepam, flubromazepam, temazepam, etizolam, chlordiazepoxide, and flualprazolam).

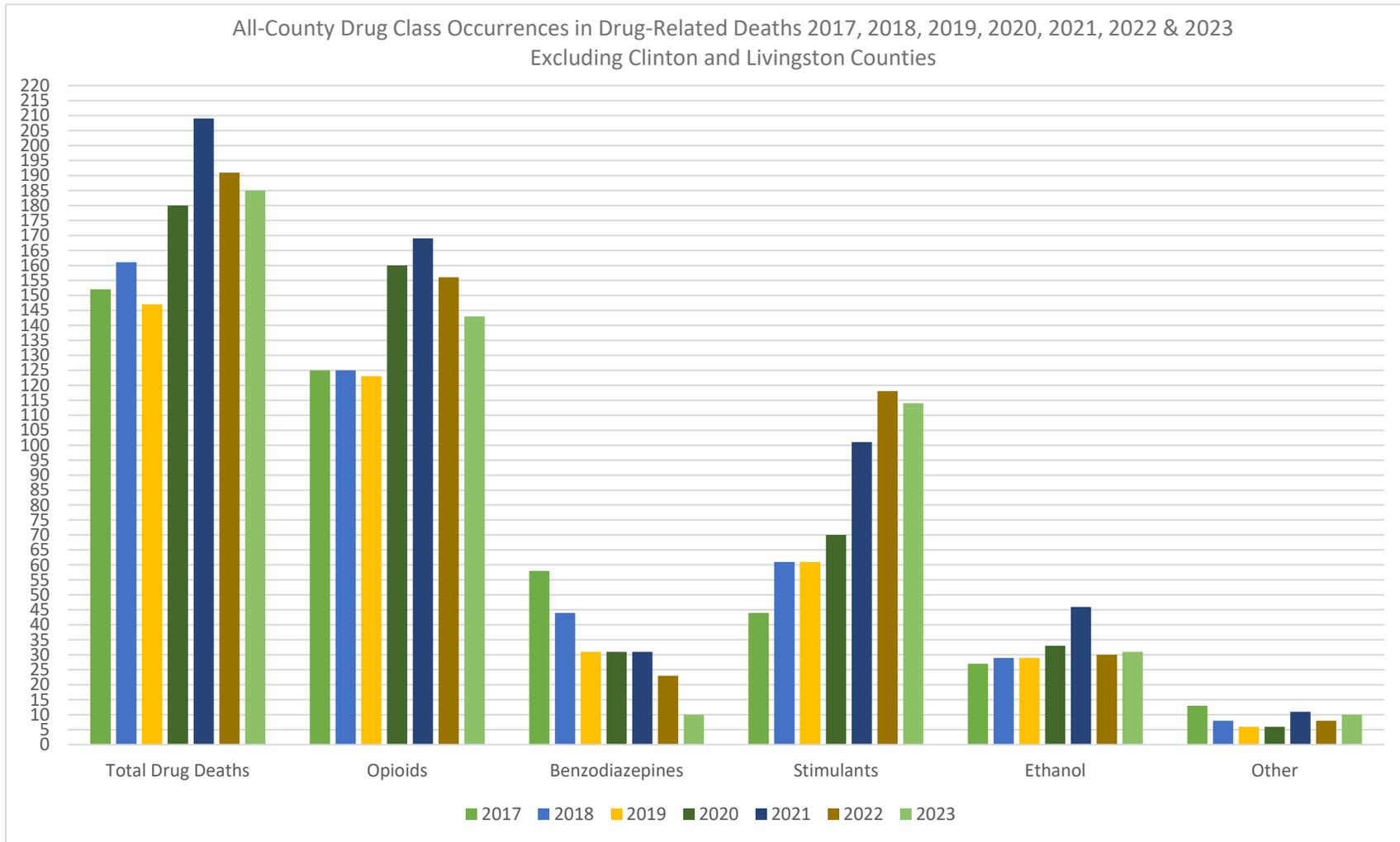
Shiawassee County

Drug-Related Deaths



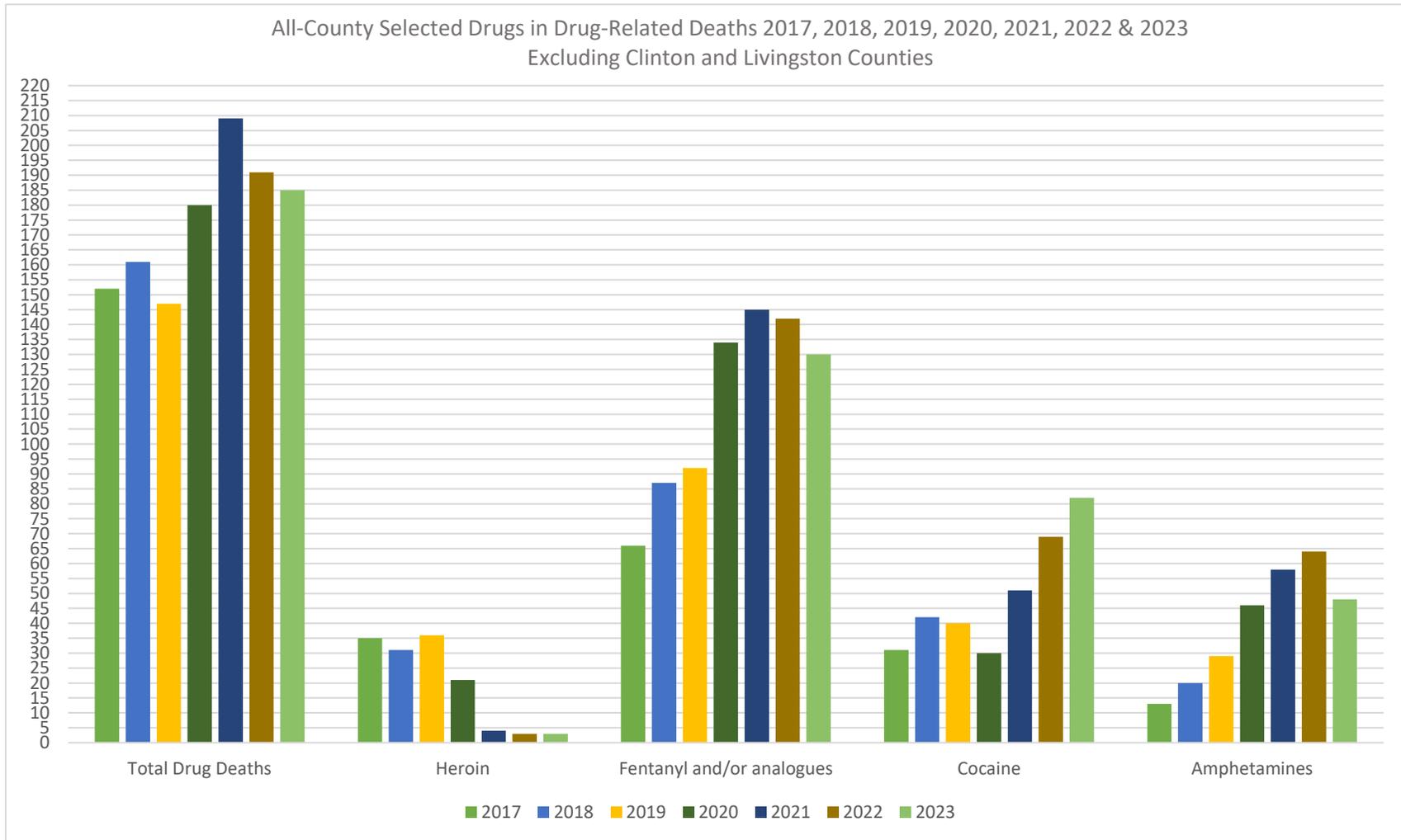
This chart describes occurrences in one death of both an opioid and a stimulant drug. In most of the cases fentanyl is the (or at least one of) opioid present. In most of the cases the stimulant is either methamphetamine or cocaine.

Historical Data



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, cocaine, and alprazolam intoxication falls into the opioids, stimulants, and 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 fentanyl 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



This chart describes occurrences in one death of a given 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 cocaine intoxication falls into both categories above).