

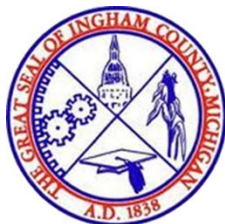


Department of Forensic Pathology
Office of the Medical Examiner

2022 Q1 (January 1 – March 31) Drug Report

Published June 17, 2022





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

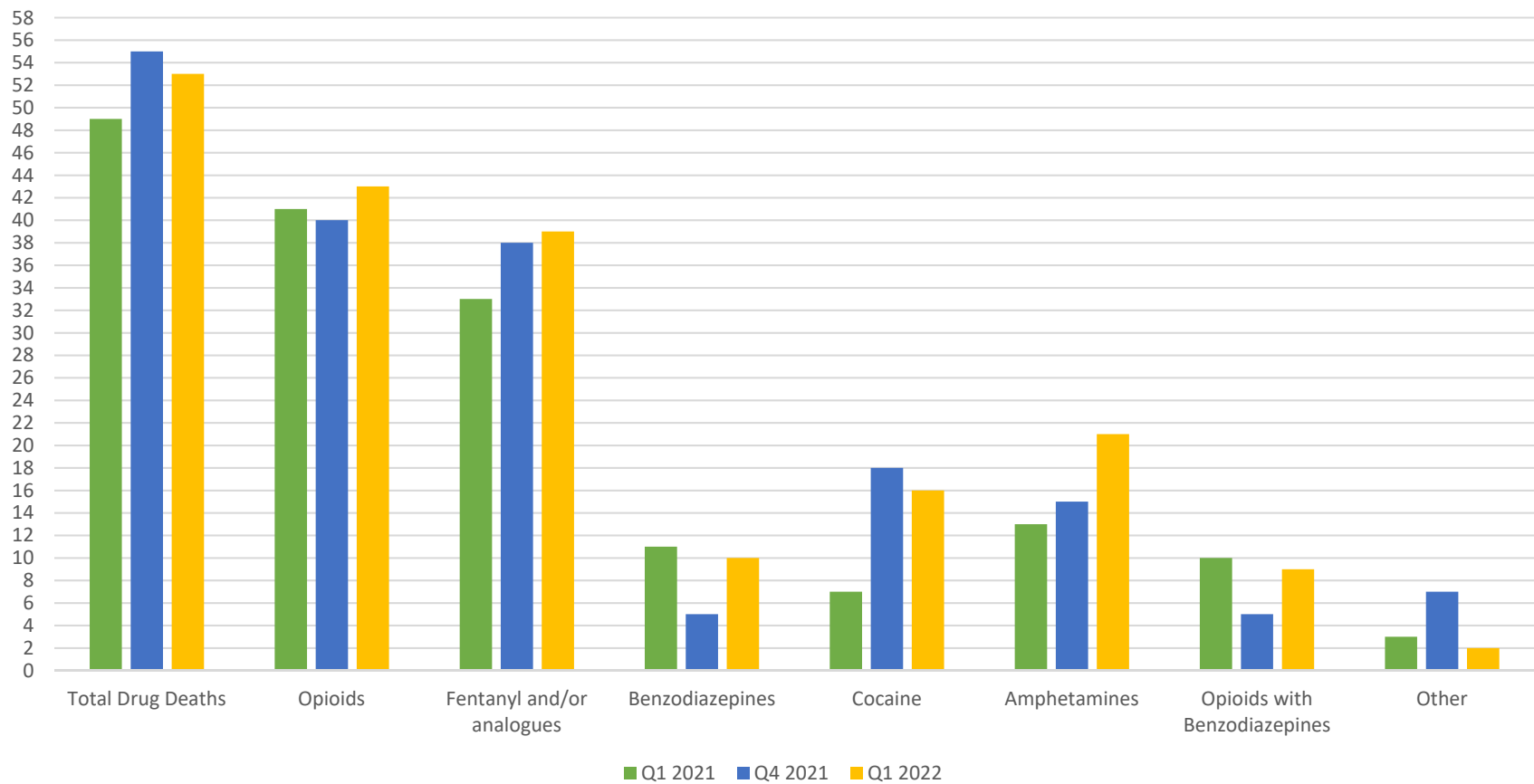
¹ If you have questions about what drugs we are currently capable of detecting, please visit www.axisfortox.com or email michelle.fox@sparrow.org

Highlights

All comparisons on the Highlights page are made to the data from Q1 (January 1 to March 31) of 2021. As stated above, most drug-related deaths are due to a combination of more than one substance. As such, numerous deaths fall into multiple of the below statistical categories (i.e. *all* heroin, fentanyl, methadone, and fentanyl analogue-related deaths are included in the opioid-related deaths category).

- Total drug-related deaths **increased** by 8.2% (4 more)
- Opioid-related deaths **increased** by 4.9% (2 more)
- Fentanyl and/or fentanyl analogue-related deaths **increased** by 18.2% (6 more)
- Cocaine-related deaths **increased** by 128.6% (9 more)
- Amphetamine/Methamphetamine-related deaths **increased** by 61.5% (8 more)
- Benzodiazepine-related deaths **decreased** by 9.1% (1 fewer)
- 20.9% of all opioid-related deaths in Q1 2022 also involved at least one benzodiazepine
- 73.6% of all drug-related deaths in Q1 2022 were due to two or more substances
- 14.0% of all opioid-related deaths in Q1 2022 also involved ethanol (Only one ethanol death did not involve an opioid)
- 13.2% of all drug related deaths in Q1 2022 involved ethanol (only seen in Ingham County)

All-County Drug Class Occurrences in Drug-Related Deaths Q1 2022 compared with Q4 2021 and Q1 2021



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

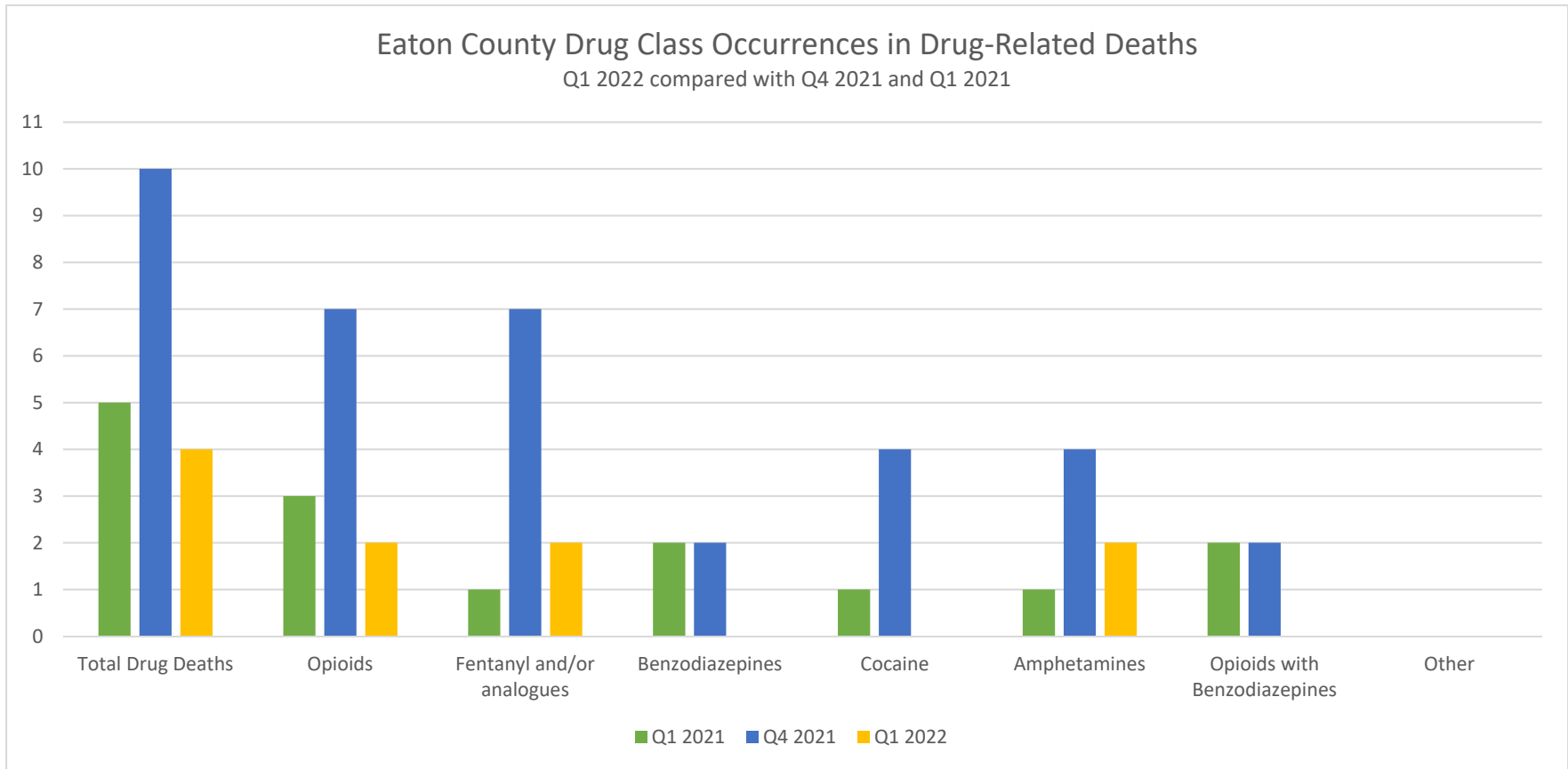
Drug-Related Deaths

2022 Q1 Eaton County Drug-Related Deaths

Sex	Age	Substance(s) Causing Death	Manner of Death
Male	24	fentanyl	Accident
Male	32	fentanyl	Accident
Male	53	methamphetamine	Accident
Male	62	methamphetamine	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

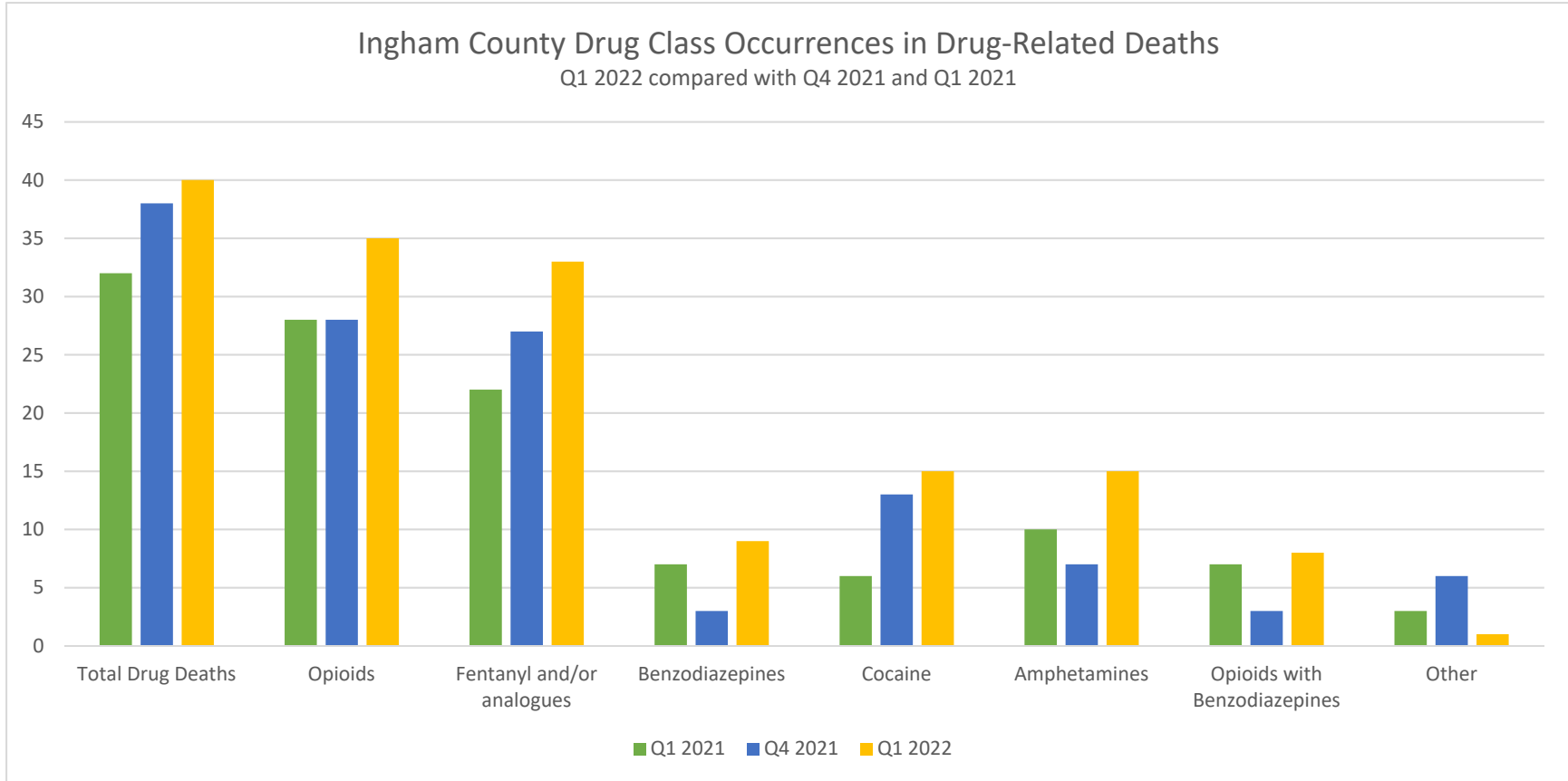
Drug-Related Deaths

2022 Q1 Ingham County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Female	19	cocaine, ethanol, fentanyl, fluorofentanyl	Accident
Female	24	alprazolam, cocaine, diazepam, fentanyl, methamphetamine	Accident
Male	27	fentanyl, methamphetamine	Accident
Male	28	cocaine, ethanol, fentanyl	Accident
Male	30	alprazolam, fentanyl, methamphetamine	Accident
Male	30	alprazolam, fentanyl, xylazine	Accident
Male	31	fentanyl, methamphetamine	Accident
Male	32	fentanyl, fluorofentanyl, methamphetamine	Accident
Male	32	ethanol , fentanyl, hydrocodone	Accident
Female	33	cocaine, fentanyl	Accident
Female	34	alprazolam, diphenhydramine, fentanyl, hydrocodone, methylenedioxymethamphetamine, tramadol	Accident
Female	34	cocaine, diphenhydramine, fentanyl, fluorofentanyl, morphine	Accident
Female	35	amphetamine, ethanol	Accident
Male	37	fentanyl, methamphetamine	Accident
Female	38	alprazolam, hydrocodone, promethazine, quetiapine	Accident
Male	38	hydroxyzine, methadone	Indeterminate
Male	40	cocaine, ethanol, fentanyl	Accident
Male	41	fentanyl, fluorofentanyl, methamphetamine, mitragynine, morphine	Accident
Female	42	cocaine	Accident
Female	42	insulin	Suicide

Male	42	fentanyl, fluorofentanyl	Accident
Male	43	fentanyl	Accident
Female	43	cocaine, fentanyl	Accident
Female	43	fentanyl, methamphetamine	Accident
Female	45	amitriptyline, cocaine, cyclobenzaprine, fentanyl, hydroxyzine, mirtazapine, olanzapine	Accident
Male	47	cocaine, fentanyl	Accident
Male	51	cocaine, fentanyl, methamphetamine, quetiapine	Accident
Male	51	cocaine, fentanyl, methamphetamine	Accident
Female	52	acetylfentanyl, diazepam, fentanyl	Accident
Male	54	amphetamine, clonazepam, fentanyl, methamphetamine	Accident
Male	54	alprazolam, carisoprodol, diphenhydramine, doxylamine, methamphetamine, zolpidem	Accident
Male	55	cocaine	Accident
Female	55	cocaine, ethanol, fentanyl	Accident
Male	55	ethanol, fentanyl	Accident
Male	55	fentanyl	Accident
Male	56	cocaine, fentanyl	Accident
Female	57	fentanyl, fluorofentanyl	Accident
Male	57	cyclobenzaprine, fentanyl, methamphetamine, morphine	Accident
Male	69	fentanyl	Accident
Male	73	clonazepam, fentanyl, hydrocodone	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.

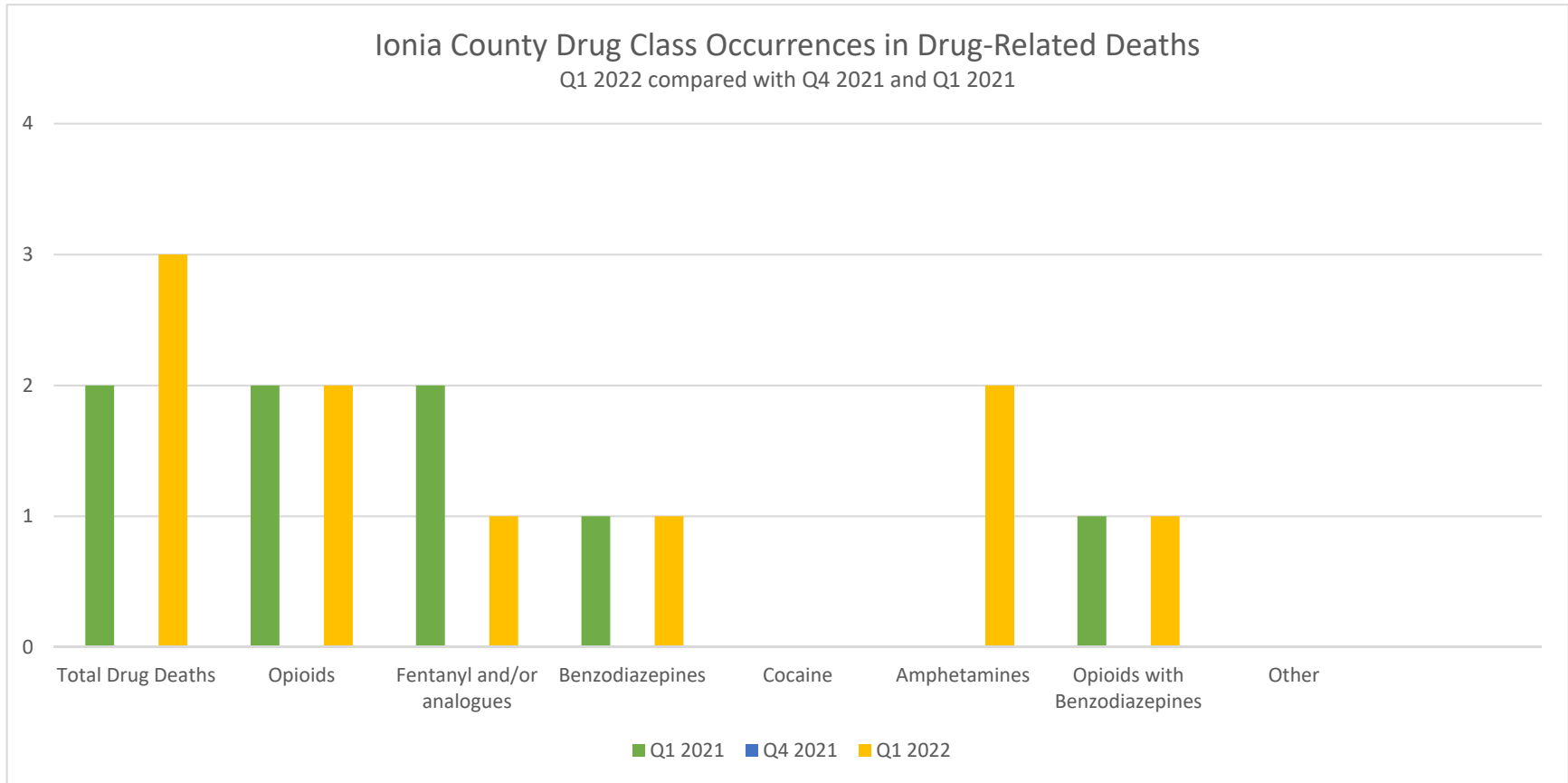
Ionia County

Drug-Related Deaths

2022 Q1 Ionia County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Female	34	methamphetamine	Accident
Female	34	alprazolam, cyclobenzaprine, dextromethorphan, hydroxyzine, promethazine, tramadol	Accident
Male	38	fentanyl, methamphetamine, orphenadrine	Accident

Ionia County

Drug-Related Deaths



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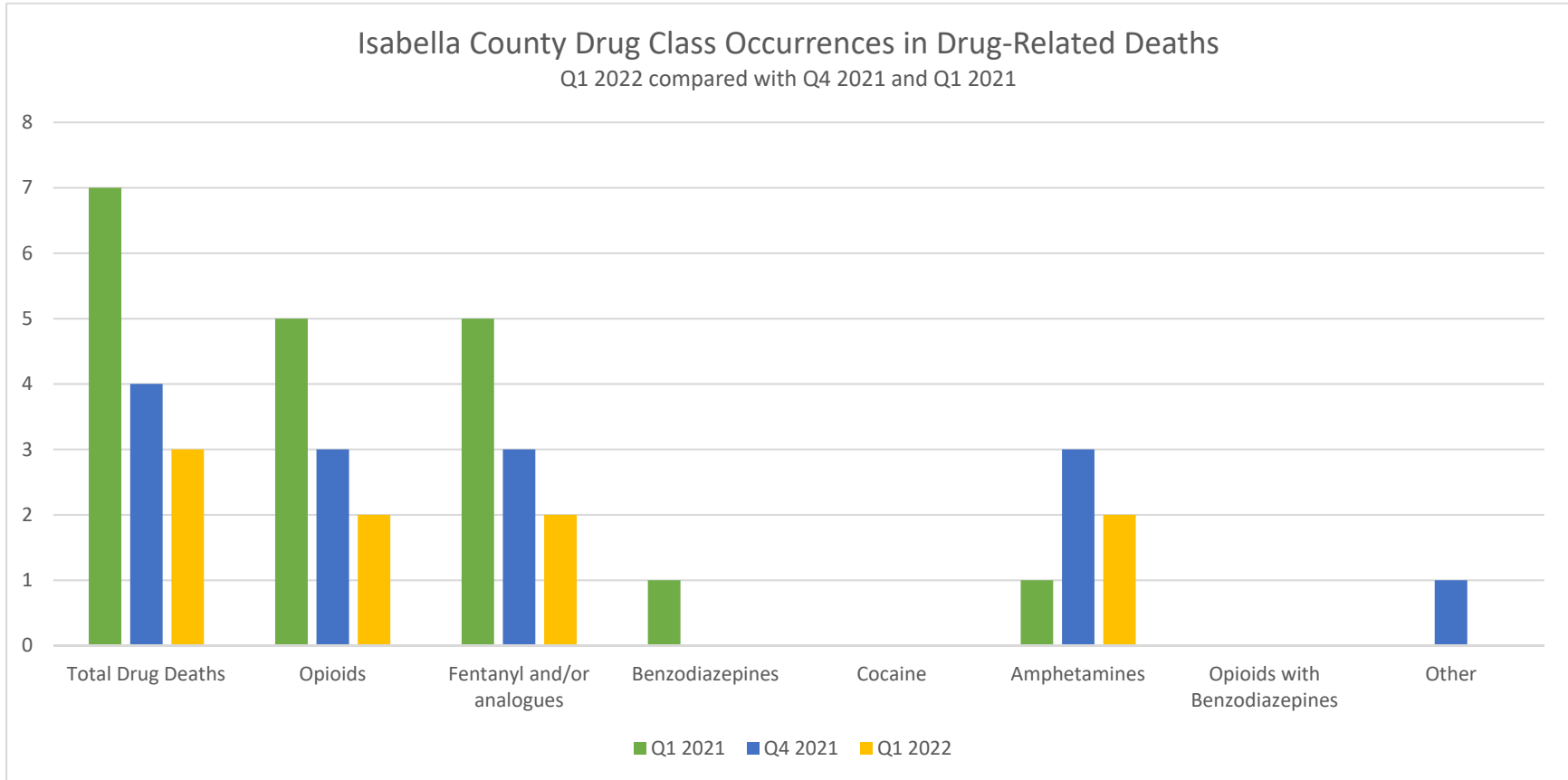
Isabella County

Drug-Related Deaths

2022 Q1 Isabella County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of Death
Female	28	fentanyl	Accident
Male	31	fentanyl, fluorofentanyl, methamphetamine	Accident
Female	33	methamphetamine	Accident

Isabella County

Drug-Related Deaths



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Shiawassee County

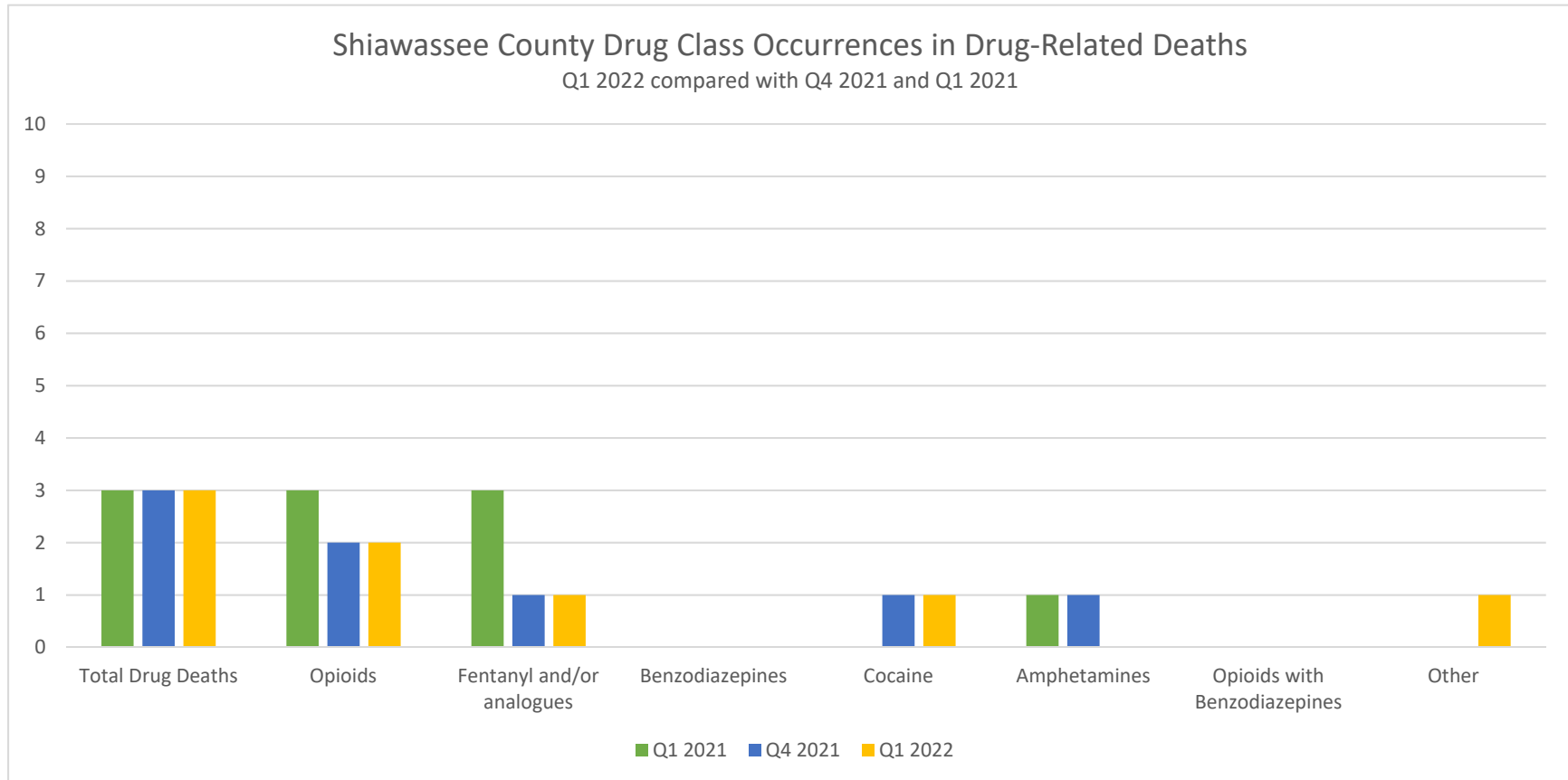
Drug-Related Deaths

2022 Q1 Shiawassee County Drug-Related Deaths

Sex	Age	Substance(s) Causing Death	Manner of Death
Male	1	fentanyl	Indeterminate
Male	43	cocaine, dextromethorphan, diphenhydramine, doxylamine, methadone	Accident
Male	51	mitragynine	Accident

Shiawassee County

Drug-Related Deaths



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Historical Data

