

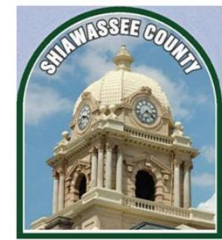


Department of Forensic Pathology
Office of the Medical Examiner

2020 Q3 (July 1 – September 30) Drug Report

Published December 30, 2020





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

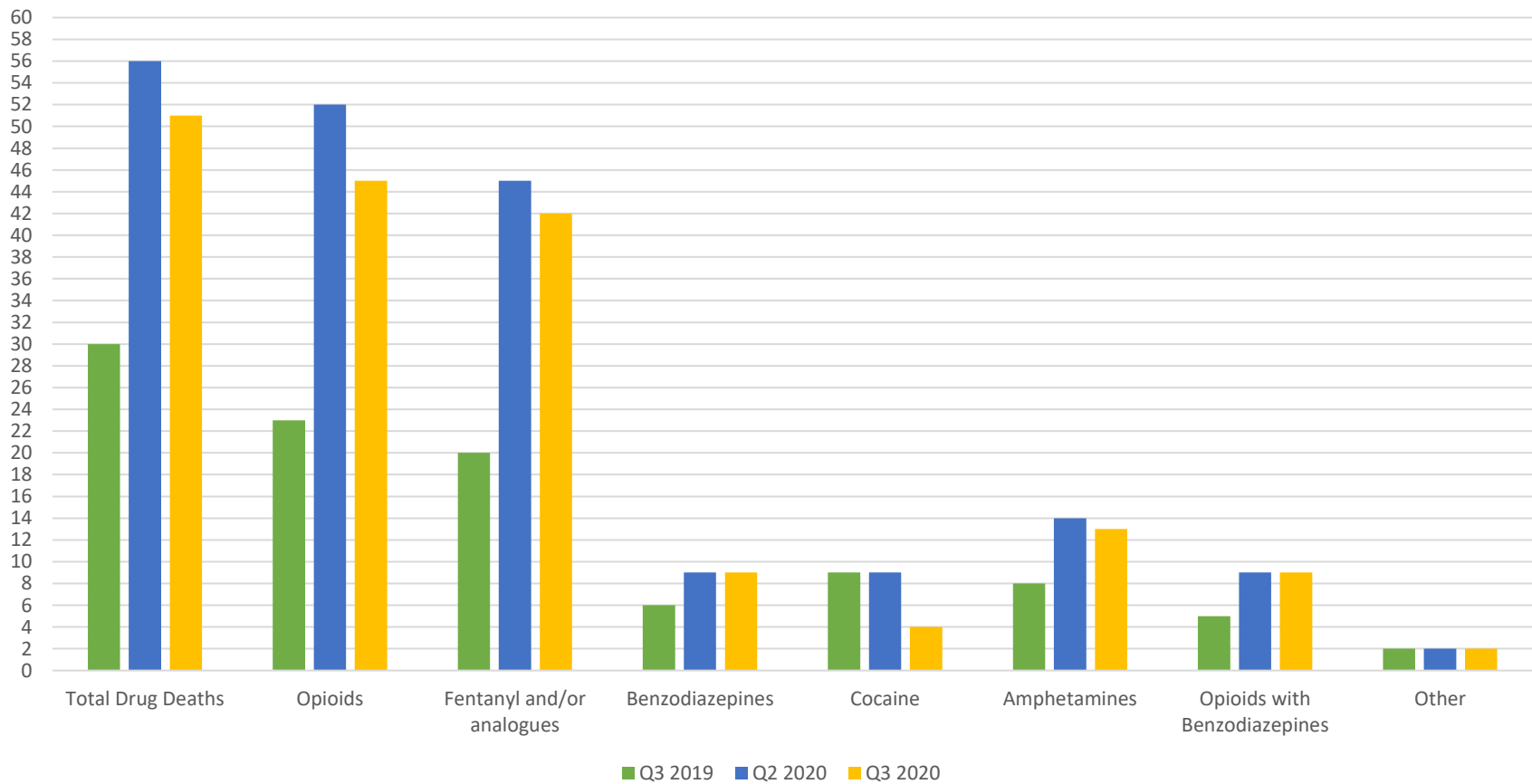
Highlights

All comparisons on the Highlights page are made to the data from Q3 (July 1 to September 30) of 2019². 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 70% (21 more)
- Opioid-related deaths **increased** by 95.6% (22 more)
- Fentanyl and/or fentanyl analogue-related deaths **increased** by 110% (22 more)
- Cocaine-related deaths **decreased** by 55% (5 fewer)
- Amphetamine/Methamphetamine-related deaths **increased** by 62.5% (5 more)
- Benzodiazepine-related deaths **increased** by 50% (3 more)
- **20%** of all opioid-related deaths in Q3 2020 also involved at least one benzodiazepine
- **76.5%** of all drug-related deaths in Q3 2020 were due to two or more substances
- **17.8%** of all opioid-related deaths in Q3 2020 also involved ethanol (alcohol)
- **17.6%** of all drug related deaths in Q3 2020 involved ethanol (alcohol)

² Report released December 18 2020 listed comparison to Q3 2020. All data comparisons on this page are made to Q3 2019.

All-County Drug Class Occurrences in Drug-Related Deaths Q3 2020 compared with Q2 2020 and Q3 2019



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.

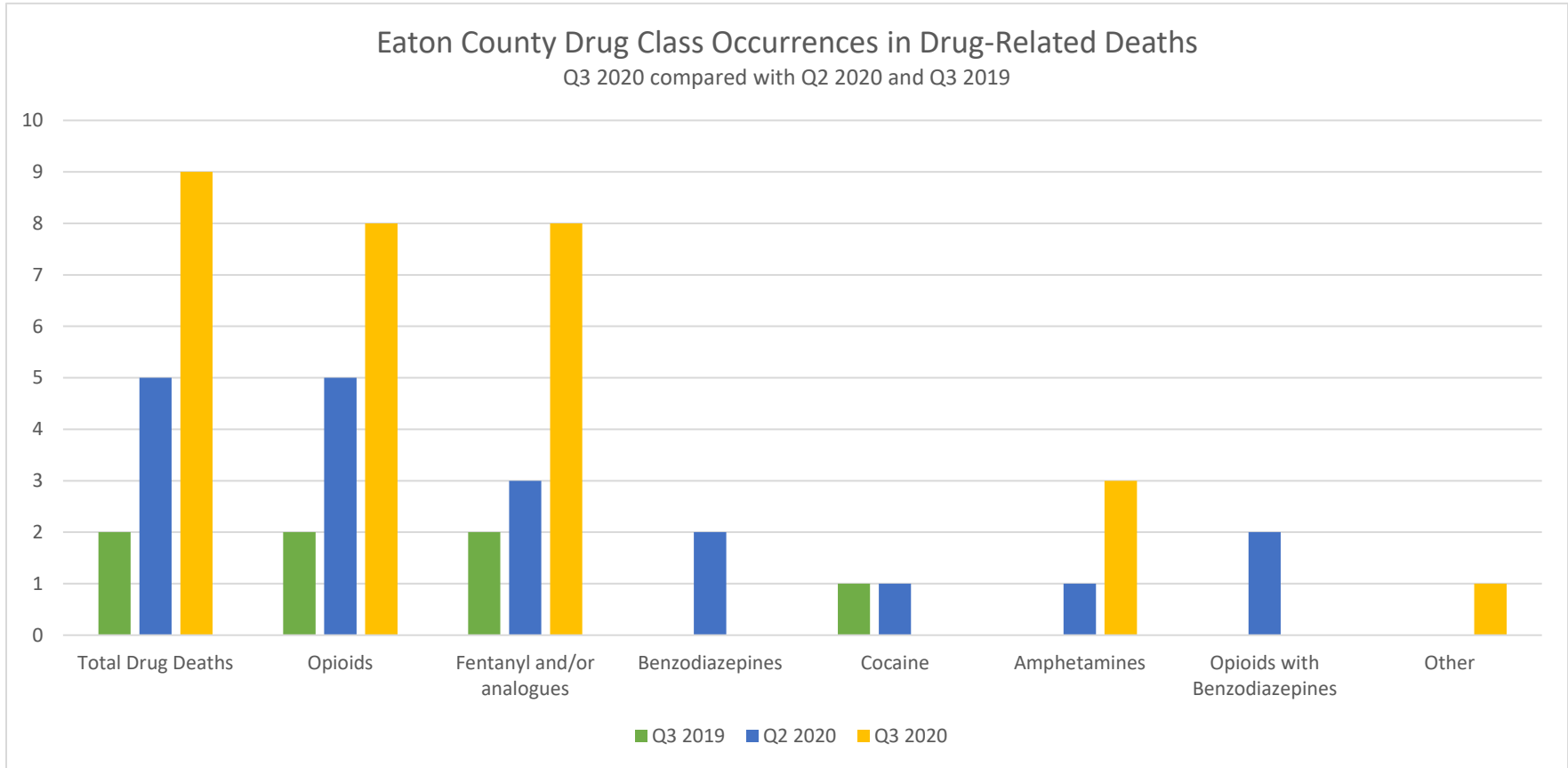
Eaton County

Drug-Related Deaths

2020 Q3 Eaton County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	21	fentanyl, methamphetamine	Accident
Female	23	fentanyl, hydrocodone	Accident
Female	24	fentanyl, methamphetamine	Accident
Male	35	bupropion, venlafaxine, clonidine	Suicide
Male	42	fentanyl	Accident
Female	47	fentanyl, methamphetamine	Accident
Male	58	fentanyl, xylazine	Accident
Male	62	fentanyl, mitragynine	Accident
Male	67	fentanyl	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

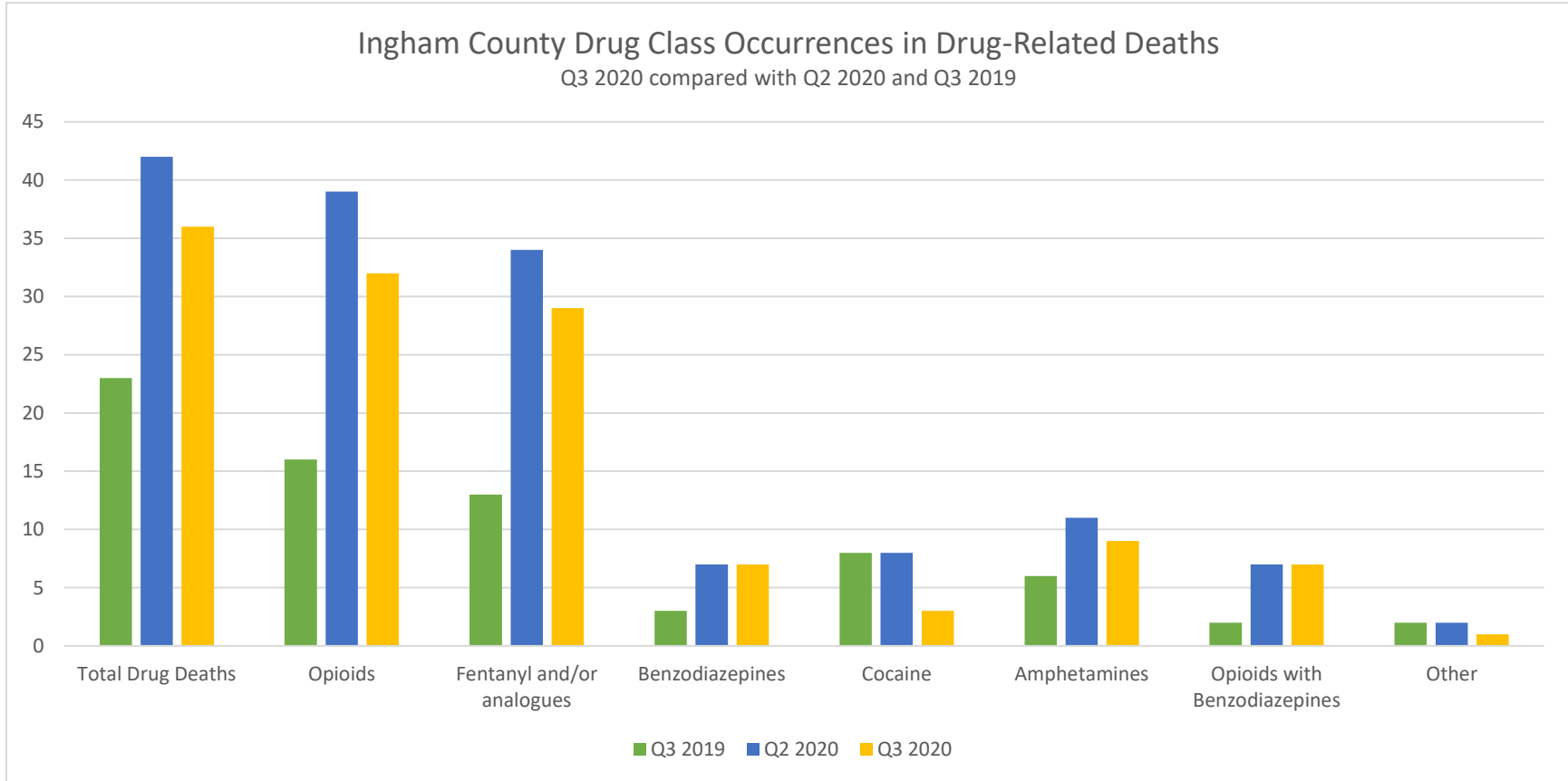
Drug-Related Deaths

2020 Q3 Ingham County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	20	fentanyl, alprazolam	Accident
Male	23	methamphetamine	Accident
Female	24	fentanyl	Accident
Male	26	fentanyl, ethanol	Accident
Male	26	methamphetamine, fentanyl	Accident
Male	28	fentanyl, methamphetamine	Accident
Male	29	alprazolam, diphenhydramine, fentanyl, tramadol	Indeterminate
Male	29	fentanyl, methamphetamine	Accident
Male	31	fentanyl, heroin	Accident
Female	33	fentanyl, methamphetamine, ethanol	Accident
Male	33	fentanyl, methamphetamine	Accident
Male	34	clonazepam, fentanyl	Accident
Female	34	fentanyl	Accident
Male	35	fentanyl	Accident
Female	35	fentanyl, diazepam, heroin	Accident
Male	36	fentanyl, alprazolam, hydrocodone, gabapentin, ethanol	Accident
Male	36	methamphetamine, fentanyl	Accident
Male	40	fentanyl, cocaine, xylazine	Accident
Male	40	mitragynine	Accident
Male	42	fentanyl, methamphetamine	Accident
Male	42	fentanyl	Accident
Female	43	fentanyl, hydrocodone, gabapentin, citalopram	Accident
Male	43	fentanyl	Accident

Male	44	fentanyl, cocaine, ethanol	Accident
Female	47	cocaine	Accident
Female	50	fentanyl, methadone	Accident
Male	52	fentanyl, Morphine, Ethanol	Accident
Female	52	fentanyl, hydrocodone, alprazolam	Accident
Female	55	cyclobenzaprine, hydrocodone	Suicide
Female	56	fentanyl, ethanol	Accident
Male	57	fentanyl, cyclobenzaprine, ethanol	Accident
Female	57	fentanyl, Gabapentin	Accident
Male	58	hydrocodone, cyclobenzaprine, meprobamate	Accident
Female	63	methadone, Bupropion	Accident
Female	64	amphetamine, zolpidem, amitriptyline, diphenhydramine, duloxetine, lamotrigine, ethanol	Accident
Male	66	alprazolam, 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

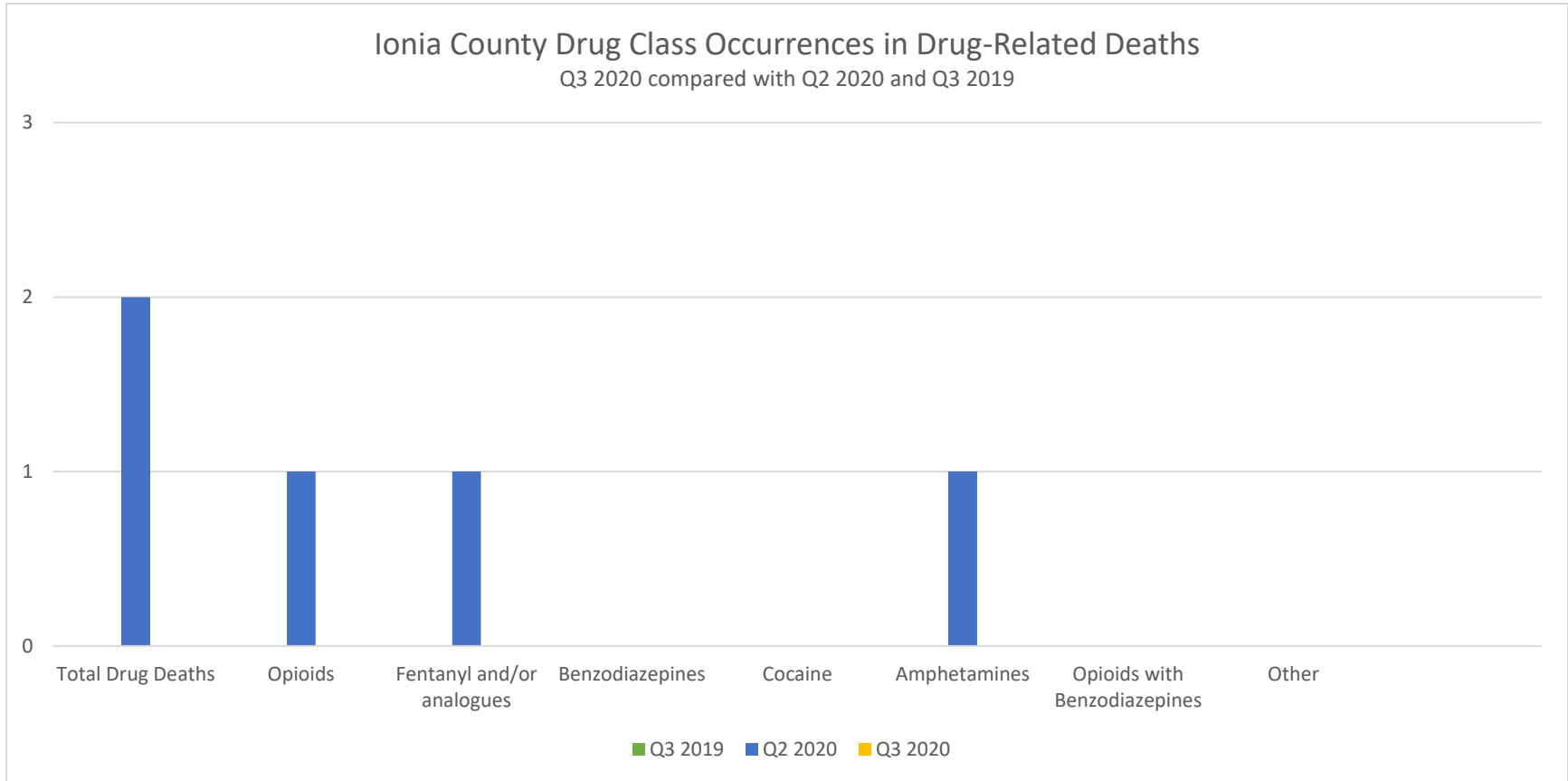
2020 Q3 Ionia County Drug-Related Deaths

Sex	Age	Substance(s) Causing Death	Manner of death
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No drug-related deaths in Q3 2020

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.

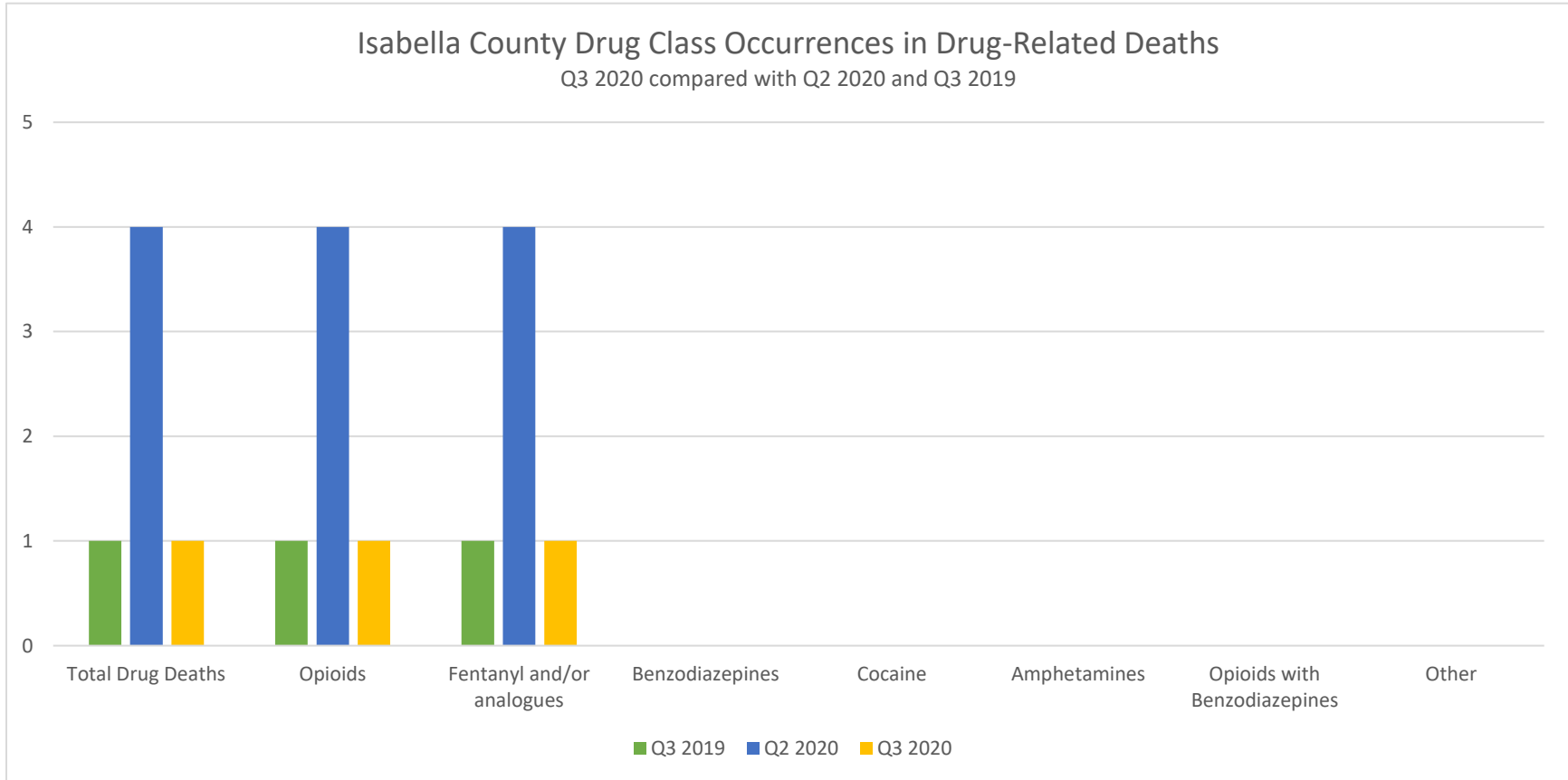
Isabella County

Drug-Related Deaths

2020 Q3 Isabella County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	45	fentanyl	Accident

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.

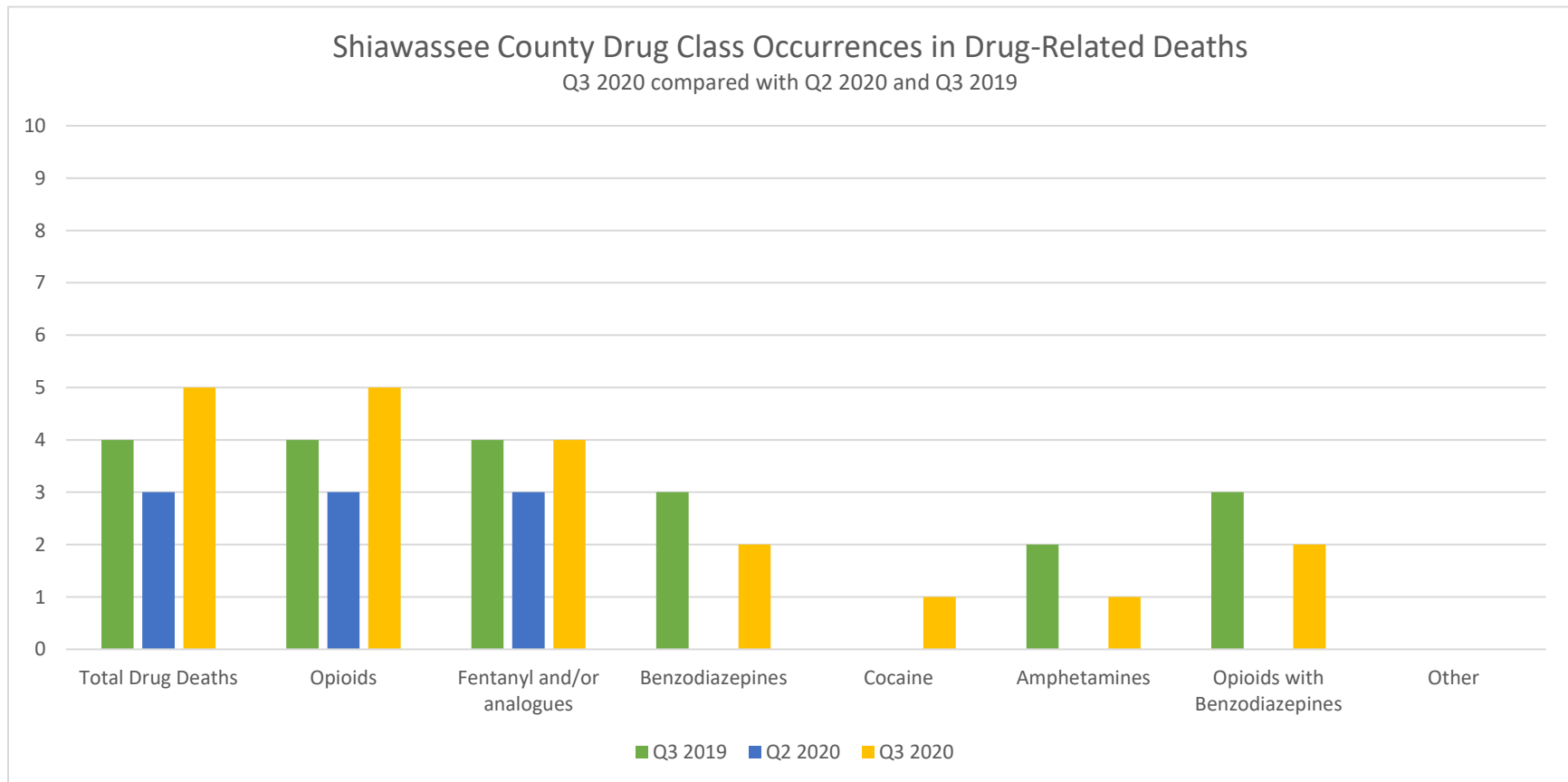
Shiawassee County

Drug-Related Deaths

2020 Q3 Shiawassee County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	24	fentanyl	Accident
Male	29	fentanyl, heroin, diazepam	Accident
Female	35	methadone, ethanol	Accident
Male	36	fentanyl, cyclobenzaprine, amitriptyline	Accident
Male	46	fentanyl, methamphetamine, cocaine, clonazepam, diazepam, sertraline	Accident

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.