Department of Forensic Pathology

Office of the Medical Examiner

2020 Q2 (April 1 – June 30) Drug Report

Published September 8, 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.

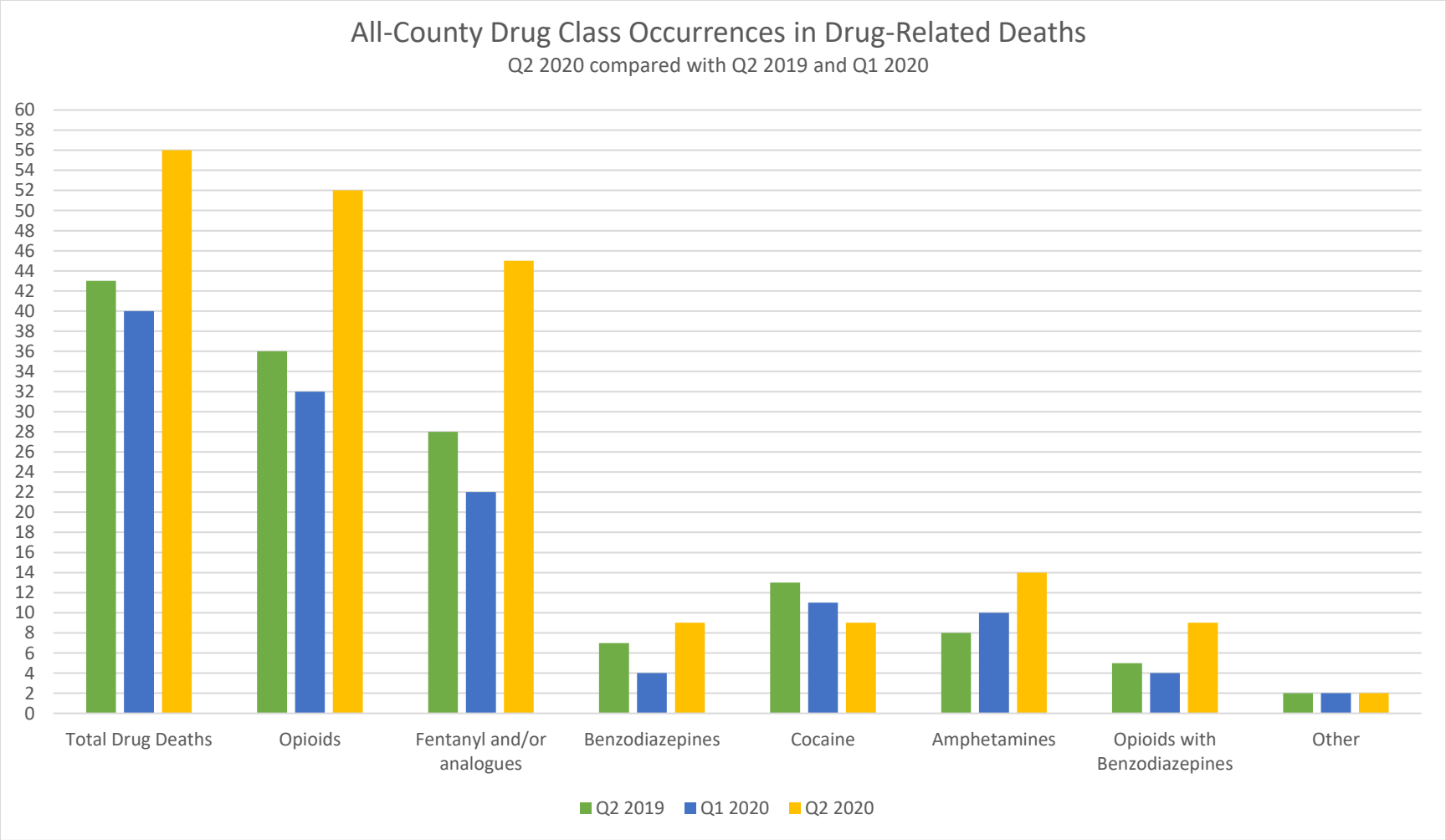
The extent of toxicology testing is determined by the medical examiner assigned to the case, based upon the circumstances of death. During the period reported, our office used Axis Forensic Toxicology for toxicology testing.[1]

[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 Q2 (April 1 – June 30) of 2019. 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, and deaths involving both heroin and fentanyl are included in both specific categories).

- Total drug-related deaths **increased** by 30.2% (13 more)
- Opioid-related deaths **increased** by 44.4% (16 more)
- Fentanyl-related deaths **increased** by 60.7% (17 more)
- Cocaine-related deaths **decreased** by 30.8% (4 less)
- Amphetamine/Methamphetamine-related deaths **increased** by 75% (6 more)
- Benzodiazepine-related deaths **increased** by 28.6% (2 more)
- **0** Fentanyl analogues were identified as having caused or contributed to death in Q2 2020.
- **85.7%** of all drug-related deaths in Q2 2020 were due to two or more substances
- **17.3%** of all opioid-related deaths in Q2 2020 also involved at least one benzodiazepine
- 25% of all opioid-related deaths in Q2 2020 also involved ethanol (alcohol)
- **25%** of all drug related deaths in Q2 2020 involved ethanol (alcohol)



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.

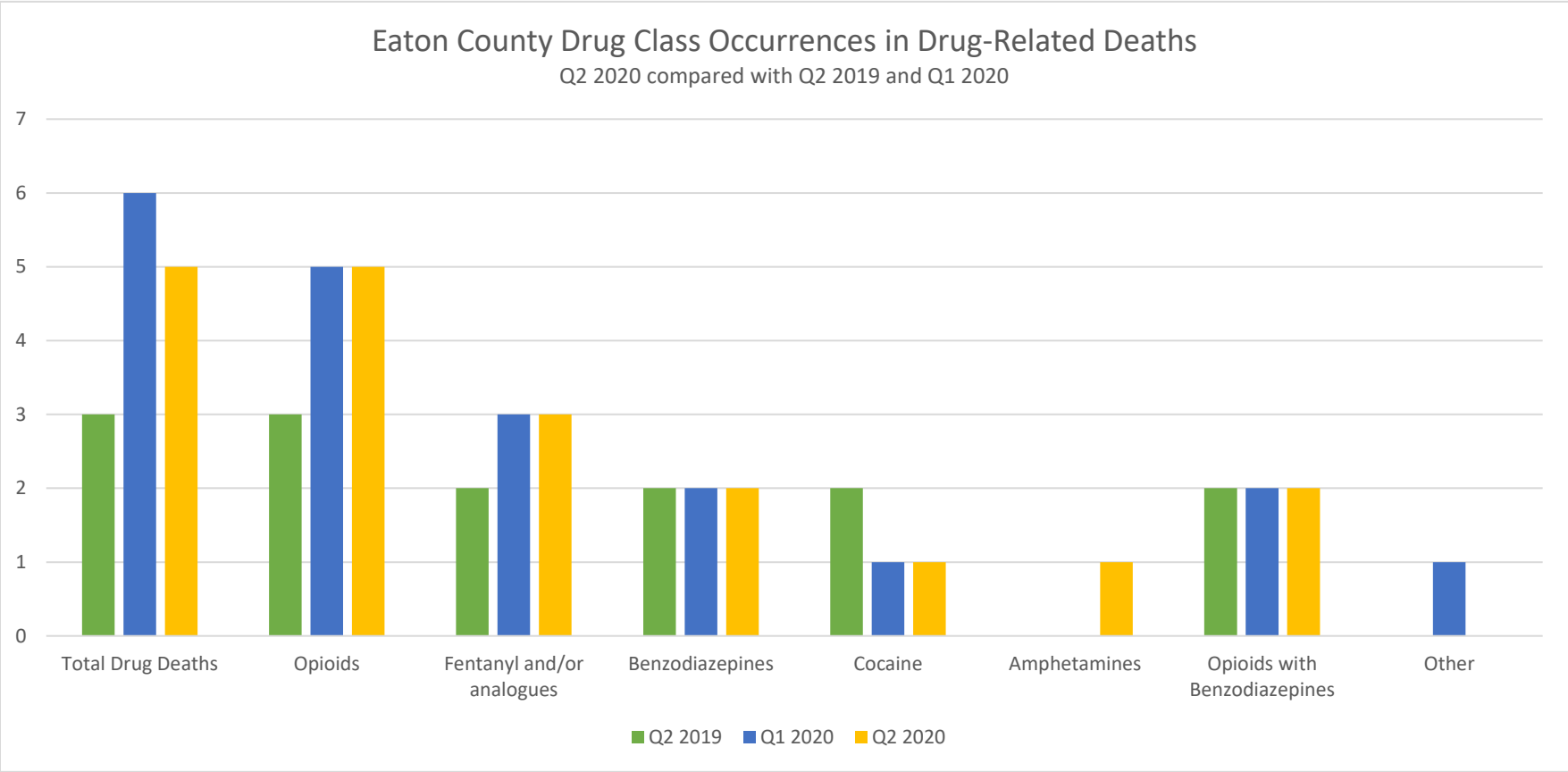
Eaton County

Drug-Related Deaths

2020 Q2 Eaton County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	21	fentanyl	Accident
Male	24	fentanyl, gabapentin, lorazepam	Accident
Male	28	cocaine, heroin, bupropion, gabapentin	Accident
Female	31	methamphetamine, aplrazolam, hydrocodone, tramadol	Accident
Male	46	cyclobenzaprine, ethanol, fentanyl, hydroxyzine	Accident

Eaton County

Drug-Related Deaths



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Ingham County

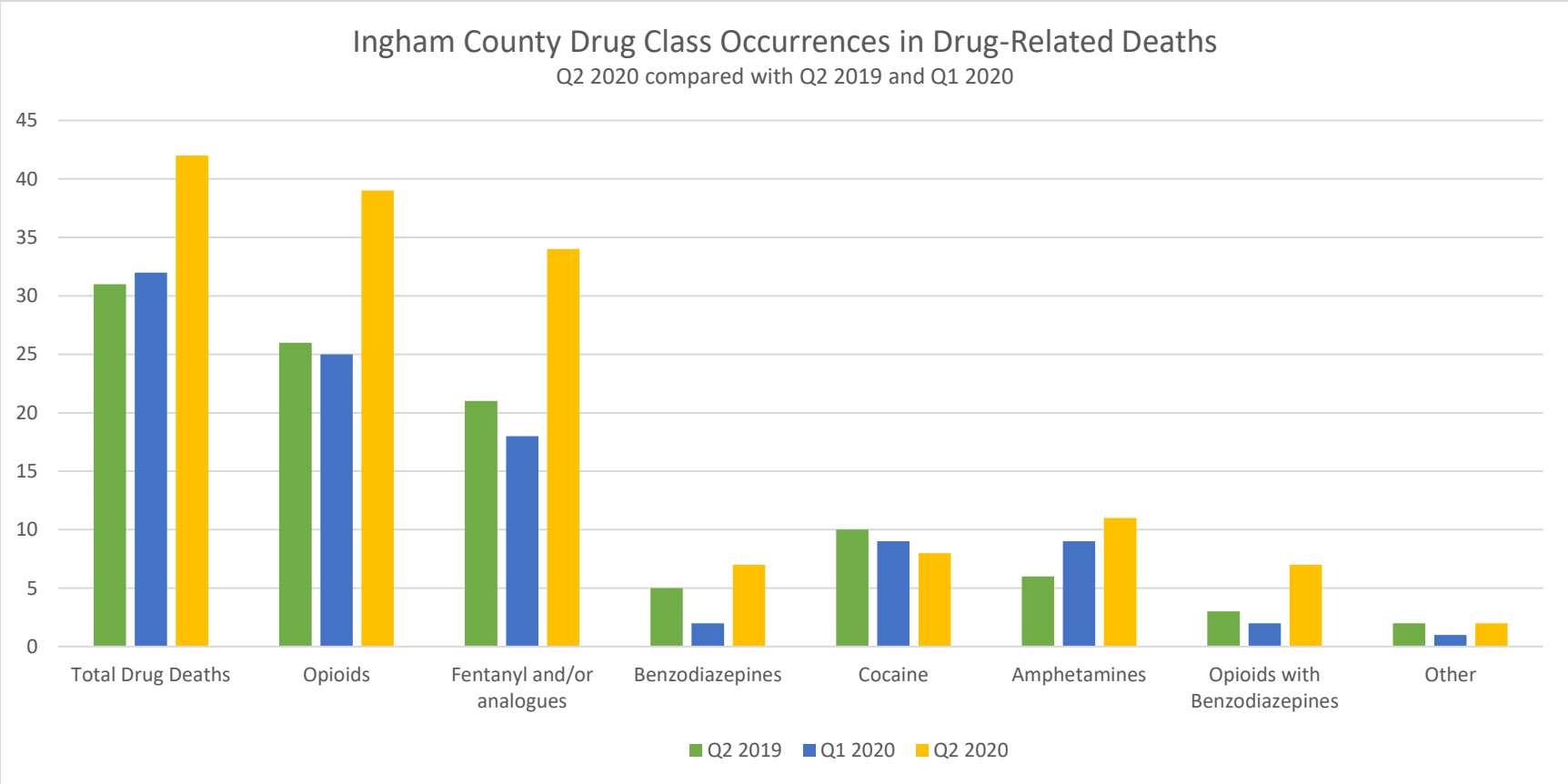
Drug-Related Deaths

2020 Q2 Ingham County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	18	fentanyl	Accident
Male	19	fentanyl, methamphetamine	Accident
Male	21	fentanyl, cocaine	Accident
Female	22	fentanyl, heroin, aplrazolam	Accident
Male	24	cocaine, ethanol, oxycodone	Accident
Male	26	fentanyl, heroin, methamphetamine	Accident
Female	27	ethanol, oxycodone, tramadol	Accident
Male	27	methadone, alprazolam, clonazepam, promethazine	Accident
Male	31	fentanyl, mitragynine, cyclobenzaprine, gabapentin	Accident
Male	31	methamphetamine, fentanyl, dextromethorphan	Accident
Male	33	fentanyl, heroin	Accident
Male	33	fentanyl, methamphetamine, cocaine	Accident
Male	34	fentanyl	Accident
Male	35	fentanyl, sertraline	Accident
Female	35	fentanyl, methamphetamine	Accident
Female	36	fentanyl	Accident
Female	36	fentanyl, aprazolam, cocaine, methylphenidate	Accident
Male	37	fentanyl	Accident
Female	37	cocaine, fentanyl, heroin, ethanol	Accident
Female	39	methamphetamine, fentanyl	Accident
Male	41	fentanyl, methamphetamine, cocaine	Accident
Male	43	ethanol, fentanyl, mitragynine, cyclobenzaprine	Accident
Male	44	methadone, fentanyl, alprazolam, clonazepam	Accident

Female	44	fentanyl	Accident
Male	46	ethanol, fentanyl, heroin, methadone	Accident
Male	46	ethanol, fentanyl	Accident
Male	49	ethanol, fentanyl	Accident
Female	50	fentanyl, heroin, methamphetamine, cocaine, clonazepam	Accident
Female	51	insulin	Suicide
Male	52	fentanyl, heroin, xylazine, alprazolam	Accident
Male	52	ethanol, fentanyl	Accident
Male	57	ethanol	Accident
Male	60	Methadone	Accident
Male	60	fentanyl, clonazepam, ethanol	Accident
Female	61	fentanyl, methamphetamine	Accident
Male	62	diphenhydramine, fentanyl, heroin, methadone, xylazine	Accident
Female	62	fentanyl, methamphetamine	Accident
Male	63	methamphetamine, fentanyl, morphine	Accident
Male	63	ethanol, fentanyl, morphine, oxycodone	Accident
Female	65	cocaine	Accident
Male	70	fentanyl, morphine, ethanol	Accident
Male	74	diazepam, methadone	Accident

Ingham County

Drug-Related Deaths



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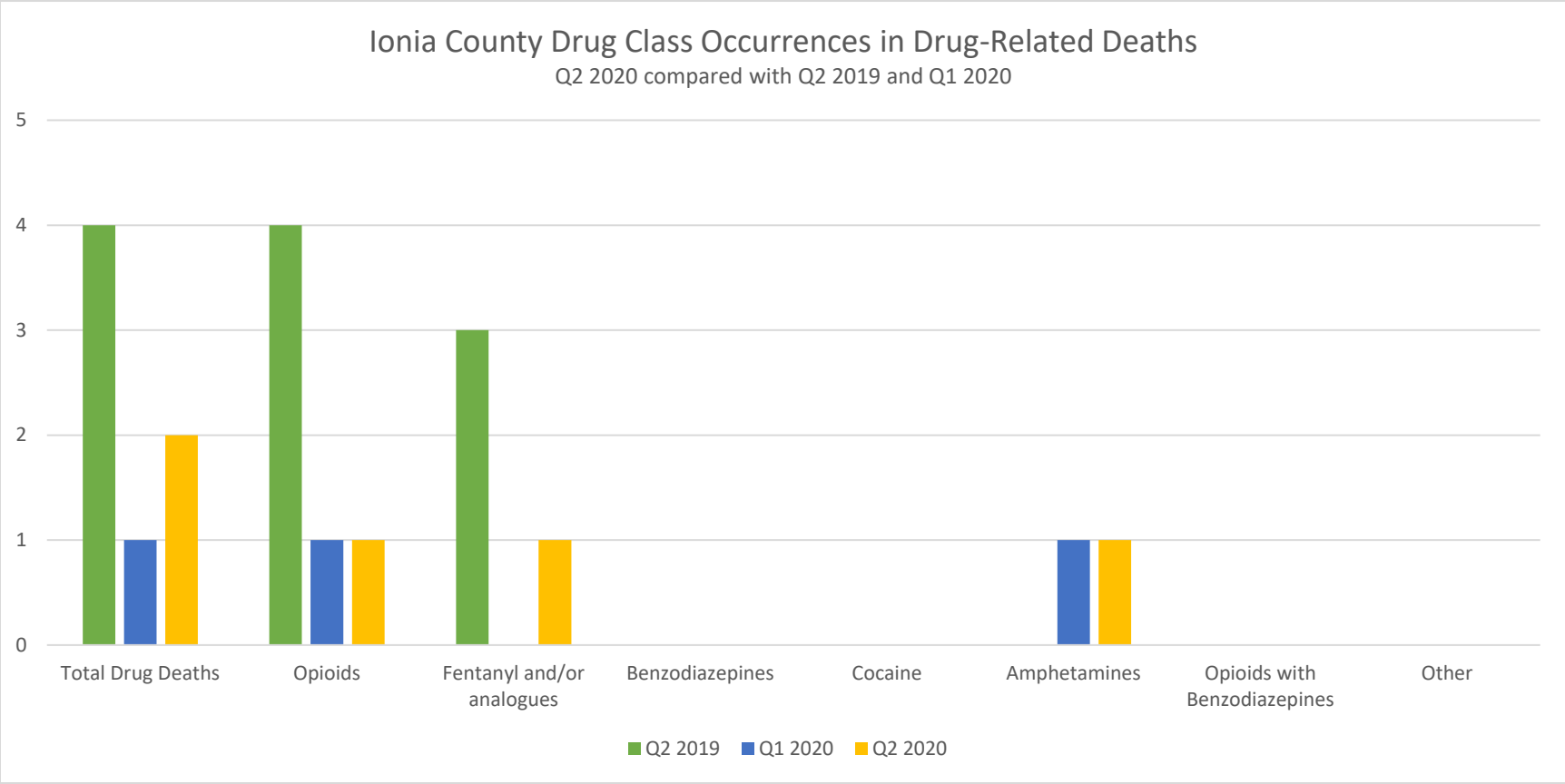
Ionia County

Drug-Related Deaths

2020 Q2 Ionia County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	24	methamphetamine	Accident
Female	42	fentanyl	Accident

Ionia County

Drug-Related Deaths



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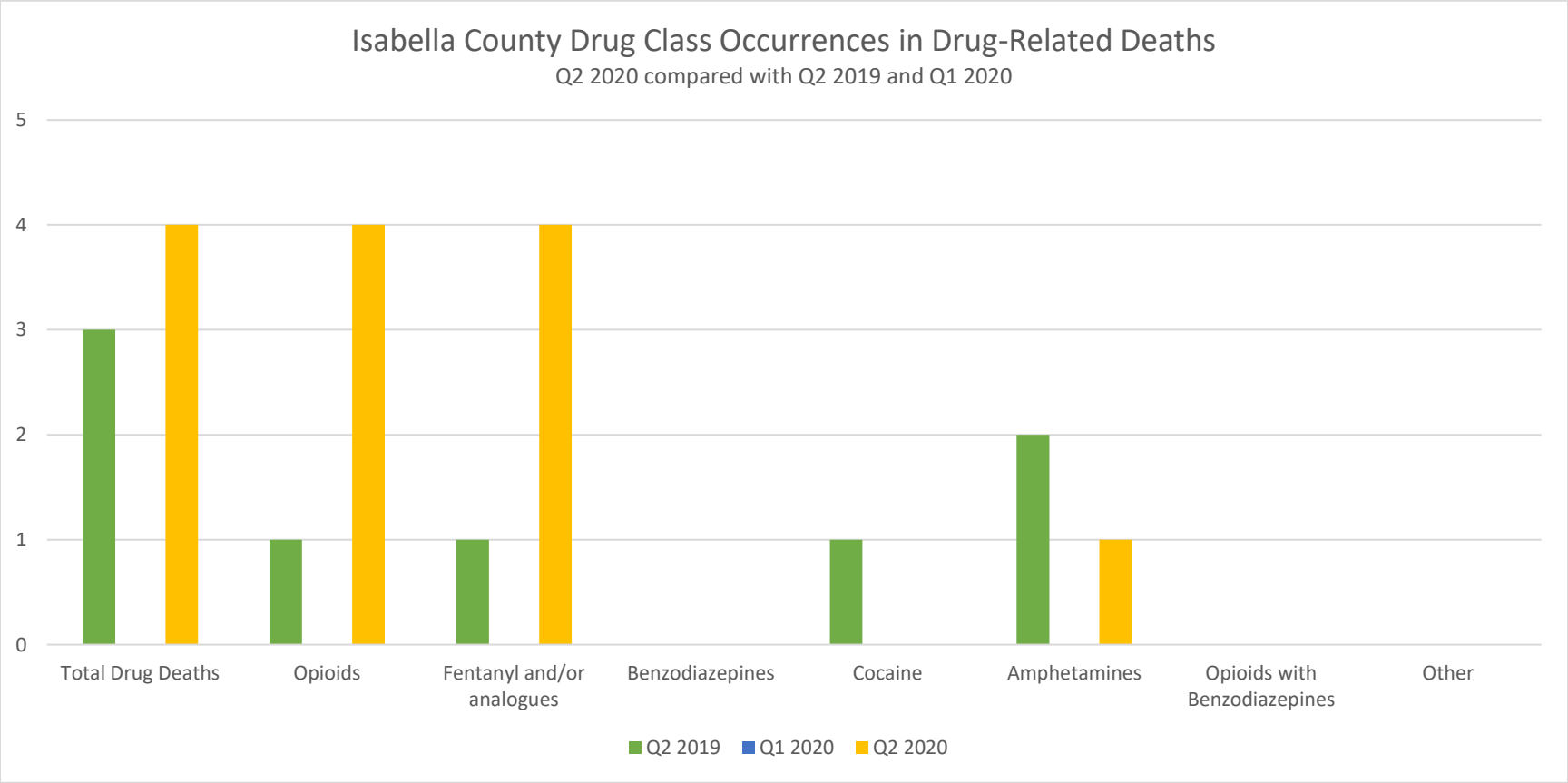
Isabella County

Drug-Related Deaths

2020 Q2 Isabella County Drug-Related Deaths			
Sex	Age	Substance(s) Causing Death	Manner of death
Male	23	fentanyl	Accident
Female	30	fentanyl, heroin	Accident
Male	39	fentanyl, heroin, methamphetamine	Accident
Male	43	fentanyl	Accident

Isabella County

Drug-Related Deaths



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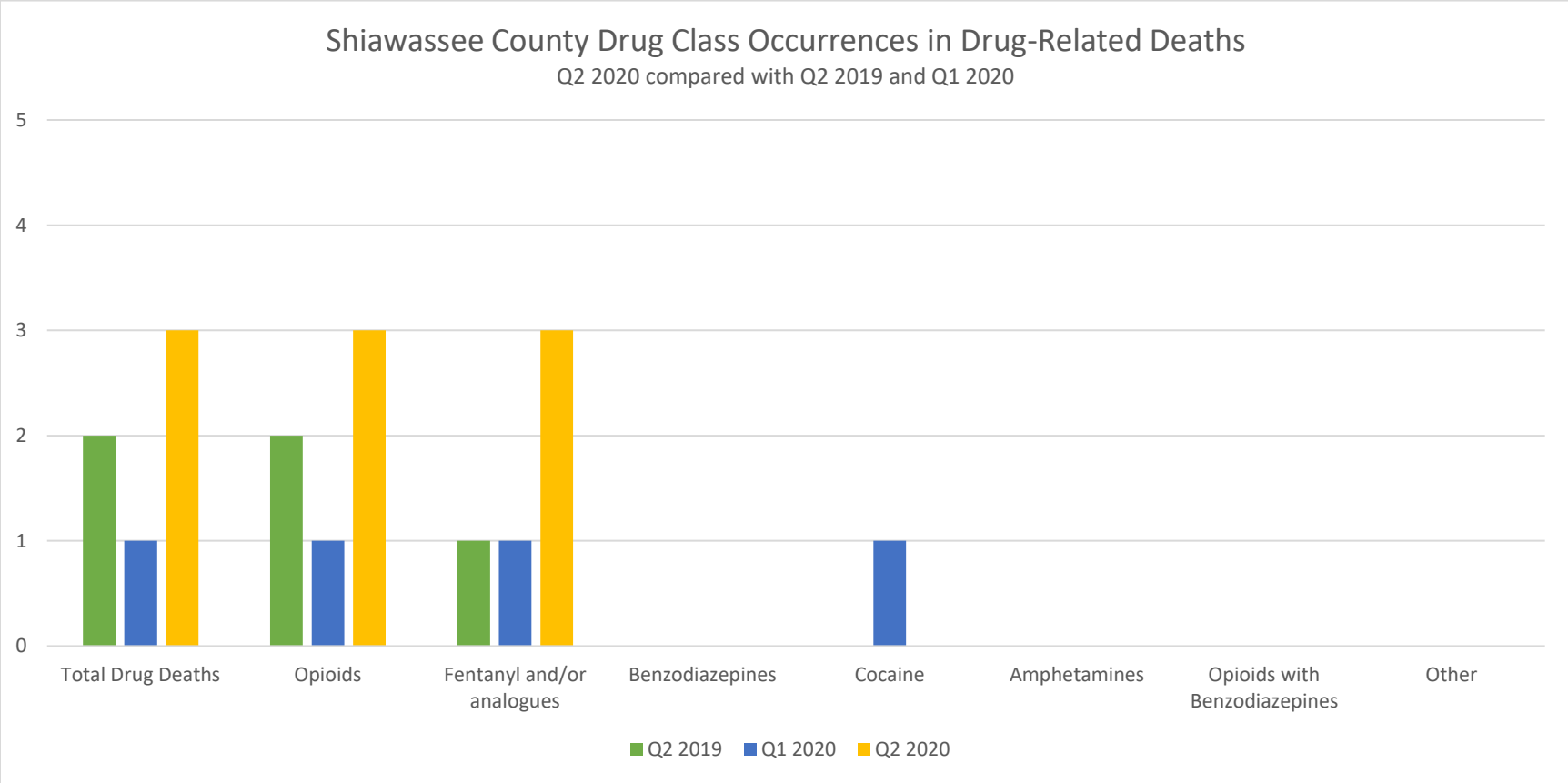
Shiawassee County

Drug-Related Deaths

2020 Q2 Shiawassee County Drug-Related Deaths			
Sex	**Age**	**Substance(s) Causing Death**	**Manner of death**
Male	40	fentanyl	Accident
Male	49	fentanyl, heroin	Accident
Male	53	fentanyl, ethanol	Accident

Shiawassee County

Drug-Related Deaths



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