

Maryland Overdose Fatality Review Program 2019 Annual Report Synopsis

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Acknowledgments

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Executive Summary

The purpose of this report is to detail the specific recommendations of the Maryland Local Overdose Fatality Review Teams (LOFRTs) and the data surrounding case review. LOFRTs play a critical role in addressing the opioid and drug epidemic in Maryland. This paper reports data and lists the recommendations submitted in their individual Annual Overdose Fatality Review (OFR) Reports. The report summary (see Appendix A) articulates challenges and barriers expressed by LOFRTs, Appendix B summarizes data from 356 decedents reviewed in the OFR Program in 2019, and Appendix C groups the recommendations together by category. This report provides a window into the unique perspectives of 17 of 19 Local Overdose Fatality Review Teams (LOFRTs) across the state of Maryland participating in the Overdose Fatality Review Program (OFR) in 2019.

Case Report Trends:

- Increase in Fentanyl-Related Overdoses.
- Histories of Mental Health and Somatic Health Conditions.
- Histories of Substance Use Disorder and Documented Treatment History.
- Family Members and Friends Impacted by Overdose Death of a Loved One.

Recommendations:

- Establish processes to follow-up and support individuals and families affected by overdose.
- Increase community and prescriber education around causes of overdose.
- Increase understanding, communication, and integration of medication assisted treatment providers.
- Increase harm reduction and support services for individuals and families affected by overdose.

Introduction and Background¹

The Office of Population Health Improvement (OPHI) provides oversight, training, technical assistance and other support services to Local Overdose Fatality Review Teams (LOFRTs) established in Maryland jurisdictions. These LOFRTs conduct confidential fatal and non-fatal overdose case reviews as a part of the Maryland Department of Health Overdose Fatality Review (OFR) Program as defined in Health General § 5-903 (Health General Article, Title 5, Subtitle 9, Annotated Code of Maryland (OFR Law)). The OFR Program is modeled after the Maryland State Child Fatality Review and Fetal and Infant Mortality review programs and provides a framework for analyzing deaths, understanding causes, and identifying strategies to prevent future similar deaths statewide.

LOFRTs are comprised of multi-disciplinary members including representation from organizations such as local health departments, school systems, law enforcement agencies, emergency medical services, and crisis services. LOFRTs follow a public health approach starting with the individual and then examining interpersonal, organizational, community and public policies surrounding overdose fatalities.

In Maryland, LOFRTs meet at a minimum quarterly, however, many of the LOFRTs meet monthly, or even bimonthly. The LOFRTs meet for approximately 60-90+ minutes to discuss a number of cases specific to their jurisdiction. In cooperation with the MDH Office of the Chief Medical Examiner (OCME) and Vital Statistics Administration (VSA), MDH provides LOFRTs access to the Overdose Death Registry, which includes detailed information on overdose decedents and the circumstances of their deaths. Statute further allows LOFRTs access to data from the Prescription Drug Monitoring Program (PDMP), which captures the dispensing of drugs scheduled II-V within the state of Maryland, for cases under review. This data is available to LOFRTs through the Overdose Fatality Review Data Tool (OFR Dashboard). LOFRT members are expected to bring additional information from their respective agencies to augment these data provided by MDH. LOFRTs identify the cases for review based on individual characteristics or trends important to their team and develop recommendations to address these trends.

LOFRTs are required to submit an annual report containing a number of metrics including but not limited to: the total number of cases reviewed, key recommendations, stakeholder engagement, and demographics related to case review. The jurisdictional level reports provide a unique and well-informed perspective to the challenges faced in addressing the opioid and drug epidemic specific to each LOFRT across the state. It is important to note that each LOFRT seeks to address a common goal of preventing the number of overdose fatalities in Maryland,

¹ All cases analyzed within this report represent aggregate summaries of cases reviewed, individual case reports, and annual reports submitted by Local Overdose Fatality Review Teams (LOFRTs) to the Office of Population Health Improvement (OPHI).

however, each faces challenges specific to their region such as: funding, capacity, community support and leadership, among other factors. The examination of quantitative and qualitative data provides a robust insight into the opioid and drug epidemic in Maryland and a framework for targeting prevention, surveillance, and policy initiatives.

LOFRT Case Review Summary – Reported Case Review Trends

LOFRTs reported 447 reviewed cases in the Annual Reports; however, only 356 case report forms (79.6%) were submitted to the OFR Dashboard. The submission of a case report includes detailed information related to location, demographics, substances involved and contact with other agencies. The following summarizes both the trends noted by each LOFRT and the information submitted to the OFR Dashboard. See **Appendix A** for a comprehensive review of Case Review Statistics.

Fentanyl-Related Overdoses

Nearly every LOFRT noted that most of the cases reviewed involved fentanyl as a cause of death. Others pointed out an increase in fentanyl involved deaths compared to previous years of review. 292 cases (82.0%) of the 356 submitted cases involved fentanyl as a cause of death; in some LOFRTs, fentanyl was involved in all cases reviewed.

Histories of Mental Health and Somatic Health Conditions

Many LOFRTs reported that most of their reviewed cases had histories of mental health conditions, including suicidality and trauma. Several LOFRTs noted that decedents had Adverse Childhood Experiences or were victims of intimate partner violence. Several LOFRTs also noted that decedents commonly coped with somatic health conditions (54.5% of submitted cases reported chronic somatic health conditions).

Histories of Substance Use Disorder and Documented Treatment History

55.6% of submitted cases were known to have received substance use disorder treatment prior to their overdose; this included medication-assisted treatment, residential treatment, and outpatient substance-related treatment.

Family Members and Friends Impacted by Overdose Death of a Loved One

Several LOFRTs observed that decedents were found by family members or friends, or had interacted with family or friends shortly before their death. Others noted that many children were likely impacted by the death of a parent; 61.1% of decedents submitted to the OFR dashboard were primary caretakers of children under 18.

LOFRT Recommendation Summary

The following represents recommendations LOFRTs developed through case reviews that are suggested for implementation within the team membership (internal) and at the state and local level (external laws, policies, or practices). The recommendations are made with the intention to improve coordination of services and investigations and advise on needed changes to prevent drug overdose deaths.

Establish processes to follow-up and support individuals and families affected by overdose.

Outreach and engagement recommendations highlight the need for an established process or instrument for identifying the impact of fatal or nonfatal drug overdose on families and survivors. Establishing a uniformed protocol for follow-up and support could help LOFRTs better identify, direct, and utilize resources or support harm reduction efforts. Engaging community members regarding naloxone education at public facilities and the distribution of naloxone kits were identified as recommendations by LOFRTs both externally and as a team.

Increase community and prescriber education around causes of overdose.

The need for increased community education and prescriber education is also expressed as an external recommendation by LOFRTs. Specifically, LOFRTs indicate the need for increased messaging surrounding Fentanyl, opioids and other illicit drugs in the community. Education on prescriber use of the PDMP and a need to engage pharmacists in the OFR case review process was also listed as an external recommendation.

Increase understanding, communication, and integration of medication assisted treatment providers.

Increased collaboration with medication assisted treatment (MAT) providers was expressed as both an internal team recommendation and state and local level recommendation. Opportunities exist to clarify and enhance MAT data available to LOFRTs is indicated as a recommendation for improving OFR effectiveness and case review. Coordination and collaboration with MAT providers would strengthen the process of case review and better inform LOFRTs to the treatment history of individuals in review.

Increase harm reduction and support services for individuals and families affected by overdose

Perhaps the most noted and important recommendation is the need for outreach, support and harm reduction services to individuals and families who have experienced a fatal or near fatal drug overdose. Many LOFRTs indicate that these services should be extended to individuals involved in the criminal justice system and as part of reentry planning for individuals who are incarcerated. Strengthening the use and availability of community level supports to families and survivors may provide key insights to reducing opioid overdose death in Maryland in the future.

Conclusion

Since the Overdose Fatality Review Program began in 2014, LOFRTs have developed robust stakeholder engagement with other agencies and disciplines where they may not have previously engaged them surrounding the issue of fatal and non-fatal drug overdose. This has resulted in greater synergy and community focused problem solving surrounding the issue of substance use disorder. LOFRT recommendations have inspired collaboration and collegial support with local and statewide programs, as well as, highlighted a need for education to Local Health Departments (LHDs) to better understand addiction and effective ways of working with people who use drugs. Specifically, this has included primary prevention; the Opioid Misuse Prevention Program; overdose education and naloxone distribution; the Overdose Response Program; expansion of sterile syringe programs; and the work of the Opioid Intervention Teams.

The intention of this report is to utilize information from the OFR Program to improve prevention programming, policy, and laws at the local and state levels. By sharing this information with the public, state and local agencies, recommendations specific to their work can be recognized. This is the first report produced by the Office of Population Health Improvement that takes both a quantitative and qualitative look at fatal and non-fatal overdose deaths. The OFR program will continue to disseminate the findings contained in annual reports and promote collaboration among departments, agencies and providers statewide.

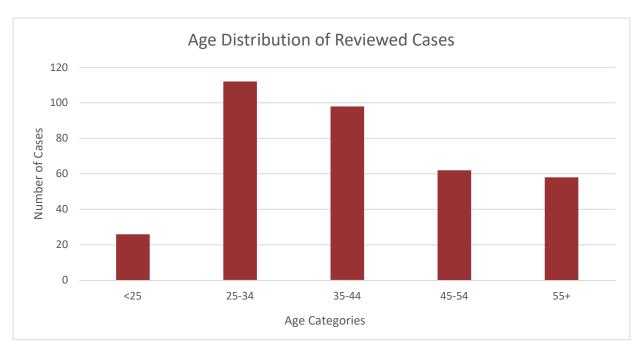
Appendix A: Detailed LOFRT Case Review Report Statistics

LOFRTs reported 447 total reviewed cases in the Annual Reports; 356 cases (79.6%) were submitted to the OFR Dashboard. The following statistics contain information <u>only</u> from the 356 cases that were submitted to the OFR Dashboard.

Demographics

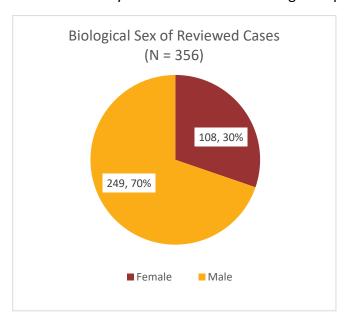
Age

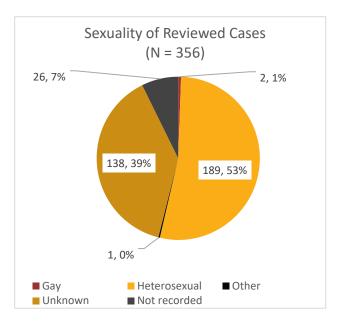
The average age of the 356 overdose fatality cases was 40.3 years. Most cases were between the ages of 25 and 44 (N=210; 58.9%). Twenty-six cases (7.3%) were under the age of 25. Sixty-two cases (17.4%) were between the ages of 45 and 54, and 58 cases (16.3%) were older than 55 years of age.



Gender, Sex, and Sexuality

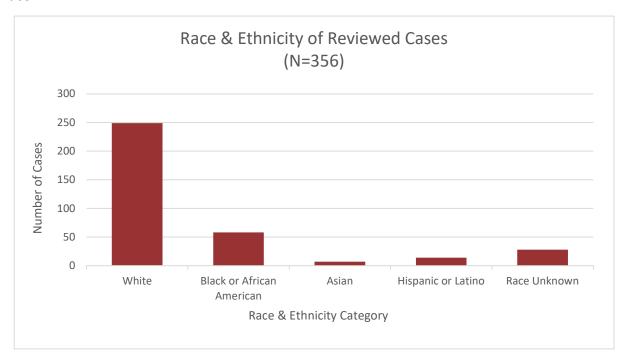
No cases reviewed were transgender. The biological sex of 108 cases (30.3%) were female; 249 cases (69.8%) were male. 189 cases (53.1%) were heterosexual. In 164 cases (46.1%), sexuality was either unknown or not recorded. Two decedents (0.6%) were gay, and 1 decedent (0.3%) had a sexuality that was not listed among the options.





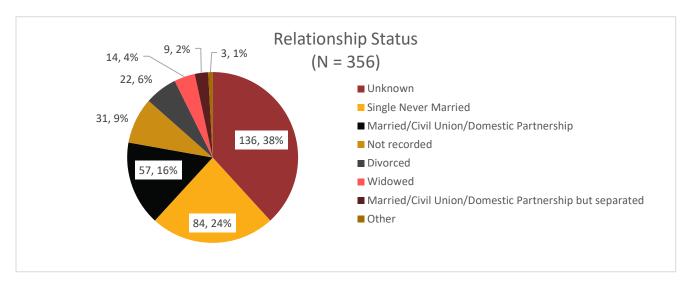
Race and Ethnicity

The majority of cases were white (N=246; 69.9%). Fifty-eight cases (16.3%) were Black or African American; 14 (3.9%) were Latino; 7 (1.9%) were Asian; 28 (7.9%) did not have a known race.

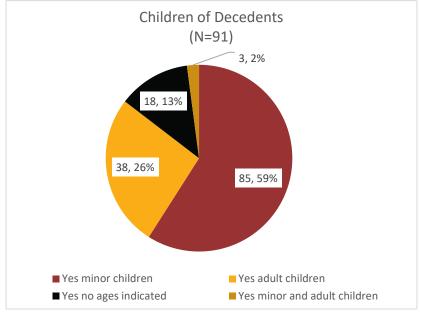


Relationship Status and Children

In most reviewed cases (167, 46.9%), the relationship status was unknown or left blank. Eighty-four decedents (23.6%) were single and never married; 57 decedents (16.0%) were either married, in a civil union, or a domestic partnership; 22 decedents (6.2%) were divorced; 14 decedents (3.9%) were widowed; 9 decedents were in a marriage, civil union, or a domestic partnership but separated from their partners; 3 decedents (0.8%) were in another kind of relationship not listed.

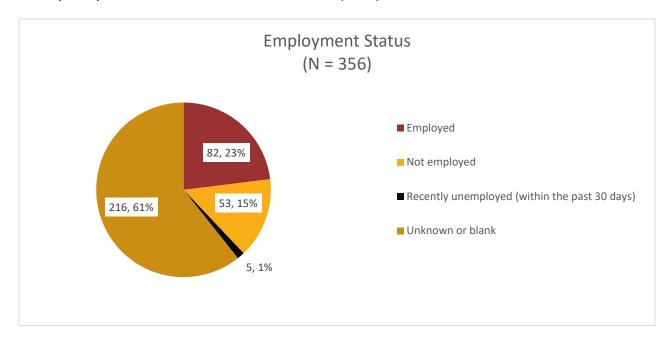


One hundred forty-four decedents (40.4%) had children. Of the decedents who were found to have children, 85 (59.0%) had minor children, 38 decedents (26.4%) had adult children, 18 decedents (12.5%) had children of unknown age, and 3 decedents (2.1%) had both minor and adult children. Five decedents (5.3%) were pregnant at the time of death.



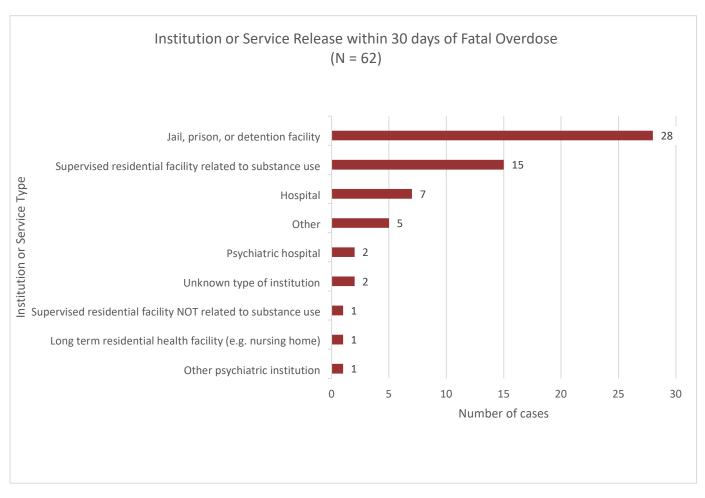
Education and Employment

Education status was known for 122 decedents (34.2%). Of those, 64 decedents (52.5%) had a highest educational attainment of high school graduation or completion of GED. Seventeen decedents (13.9%) had an educational attainment of 12th grade or lower. Nineteen decedents (15.5%) had some college credit but no degree. Five decedents (4.6%) had an educational attainment higher than college. Fifty decedents (20.0%) were employed at the time of death. The employment status of 216 decedents (60.7%) was either unknown or left blank. Eighty-two decedents (23.0%) were not employed. Fifty-four decedents (1.4%) were unemployed within the 30 days before their death. Nineteen decedents (5.4%) were involved in the military at some point prior to their deaths. Four decedents (1.1%) were involved in sex work.



Homeless Status and Institutional Interactions

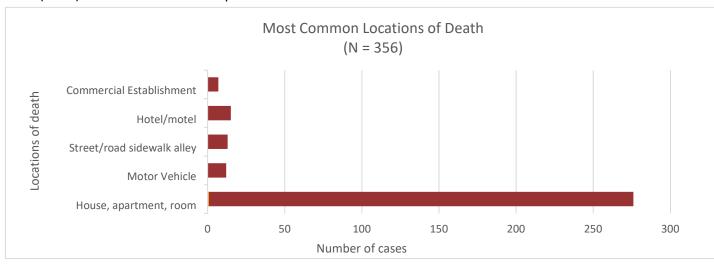
Twenty-four decedents (6.7%) were homeless at the time of death. Thirty-seven decedents (10.4%) were not homeless at the time of death, but had a history of homelessness indicated. Sixty-two decedents had recent release from an institution or service (within 30 days of decedent's fatal overdose). Of those decedents, most (N=28, 45.2%) were recently released from jail, prison, of a detention facility. Fifteen (24.2%) had been recently released from a supervised residential facility related to alcohol or substance abuse treatment. Seven (11.3%) were recently released from a hospital. Twelve decedents (19.4%) were released from a variety of institutions, including psychiatric institutions, long term residential health facilities, unknown institutions, and other institutions.



Circumstances of Death

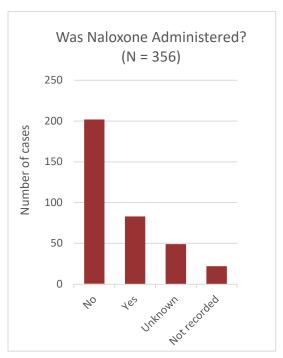
Location of Death

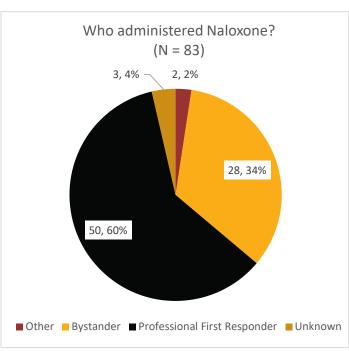
Two hundred seventy six cases (77.5%) passed in a house or apartment room (Including a driveway, porch, yard, or garage). The remaining cases passed in a variety of locations, with 12 (3.4%) passing in motor vehicles, and 13 (3.6%) passing in a street, road, sidewalk, or alley. Nine (2.4%) cases did not have a specified location of death.



Naloxone and Sterile Syringe Use

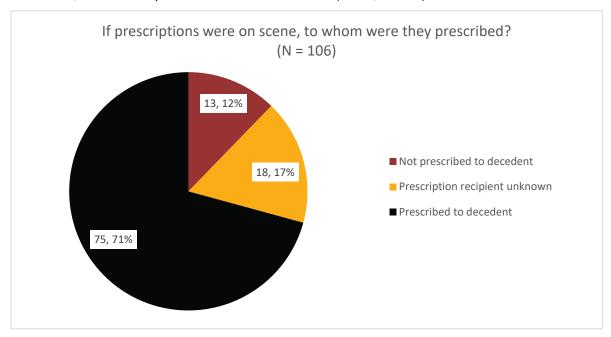
In 202 (56.7%) of the cases reviewed, naloxone was not administered. Naloxone was administered in 83 cases (23.3%). In 13.7% of the cases reviewed, it was not known if naloxone was administered, and in 6.1% of cases the field was left blank. Seventy-eight cases (31.2%) had a record of previous overdose. In the 83 cases where naloxone was administered, most were performed by a professional first responder (N=50, 60.0%). In 28 cases (33.7%), naloxone was administered by a bystander. Two cases (0.6%) had a record of accessing sterile syringes. Forty decedents (11.2%) completed an overdose prevention and naloxone training.





Other circumstances of death variables

In 49 cases (13.8%), there was a delay in calling 911 indicated at the scene. One hundred twelve cases (31.5%) had a prior EMS call in the previous year. One hundred fifty-six cases (43.8%) had an encounter with a hospital emergency department within the previous twelve months. In 105 cases (29.4%), there were indications of injection drug use at the scene. In 29.8% of cases (106), prescription drugs were found at the scene. Of the cases where prescription drugs were found at the scene, most were prescribed to the decedent (N=75, 70.8%).



Health History

One hundred fifty-six reviewed cases (43.8%) were found to have had a history of chronic somatic health conditions. Acquired brain injury was found in 3.1% cases (11 decedents).

One hundred ninety-eight decedents (55.6%), had a co-occurring mental health condition. Seventy decedents (19.7%) had a history of suicide attempts and/or suicidal ideation; 52 decedents (14.6%) were enrolled in a substance use treatment program at the time of death; 11 decedents (4.4%) had a history of DUI/DWI; 27 decedents (7.6%) were found to have been enrolled in a pain management program; 33 decedents (9.3%) were enrolled in medication assisted treatment at the time of death; and 99 decedents (27.8%) had a history of enrollment in public benefits, including food stamps and medical assistance.

Family history

In 45 cases (12.6%), family member interviews were conducted. In 40 cases (11.2%), the decedent had a history of intimate partner violence (IPV). In 42.5% of cases (17 cases) with a history of IPV, the decedent was a perpetrator of violence. In 65.0% of cases (26 cases) where IPV was indicated, the decedent was a victim.

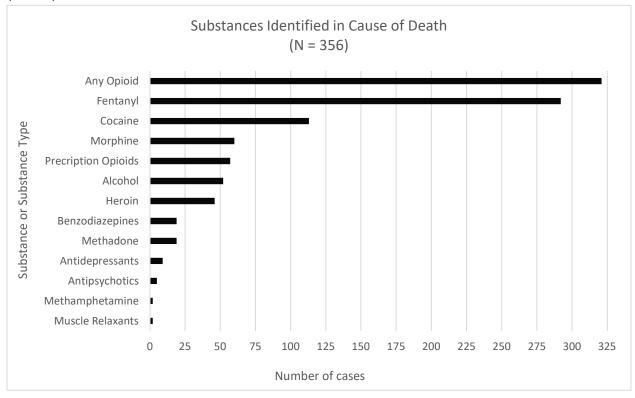
Judicial System

None of the reviewed cases had a suspect charged in the decedent's death, however, in one case (0.3%) there were charges pending. None of the cases reviewed were found to have participated in a law enforcement assisted diversion (LEAD) program. No cases had a suspect prosecuted in the decedent's death, however, three cases (0.8%) had charges pending or in progress.

Twenty-one decedents (5.9%) were enrolled in drug treatment programs while incarcerated. Seven decedents (2%) were enrolled in mental health treatment while incarcerated. Forty-nine clients (13.8%) were under community supervision at the time of death.

Causes of Death

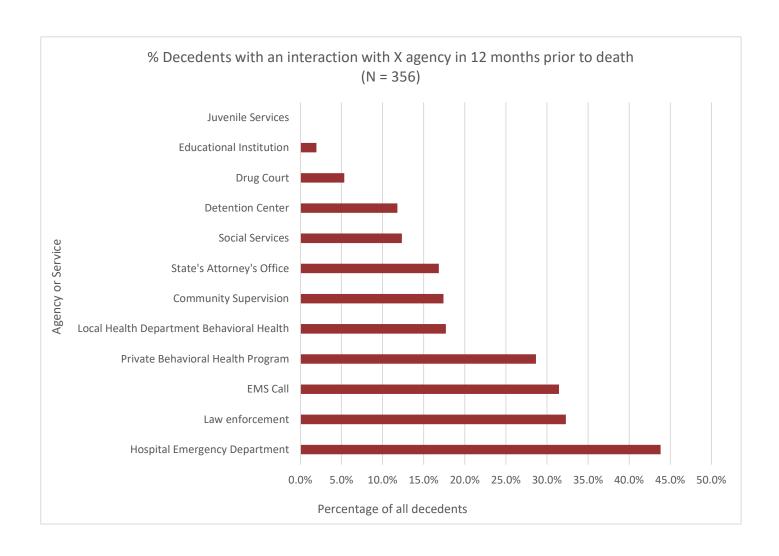
Three hundred twenty-one deaths (90.2%) involved an opioid of some kind. Fentanyl was involved in 292 deaths (82.0%). Cocaine (31.7%), morphine (16.9%), and prescription opioids (16.0%) were the next most common substances identified as a cause of death.



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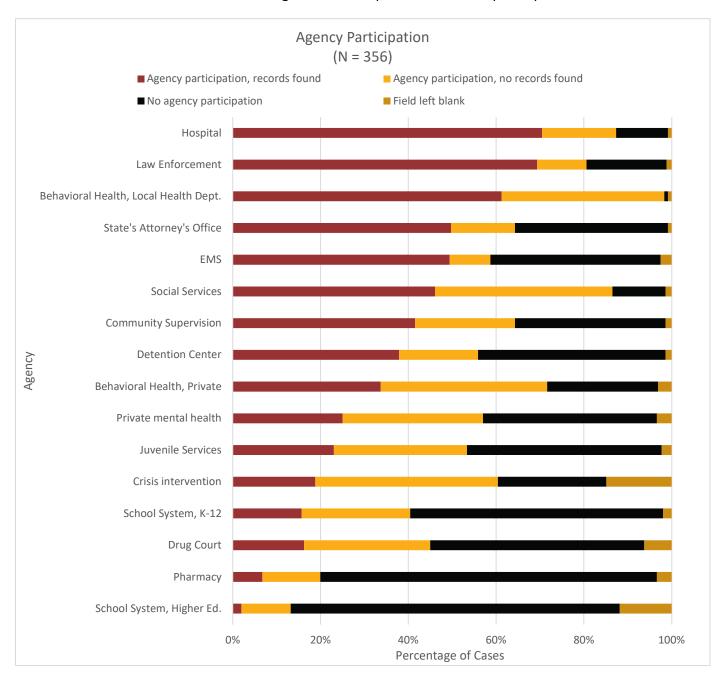
Agency Interaction

Decedents interacted with a variety of agencies in the 12 months prior to their fatal overdoses. Decedents interacted most frequently with hospital emergency departments (N=135, 43.8%), followed by law enforcement (N=115, 32.3%) and emergency medical services (N=112, 31.5%). Drug court and educational institutions were the least likely to interact with decedents in the 12 months prior to death. No decedents had records indicating and interaction with juvenile services.



Agency Participation

LOFRTs had a variety of participation from different agencies. The chart below displays the percentage of cases that different types of agencies participated in reviewing, as well as the percentage of cases they were able to contribute information from their own records. Hospitals, law enforcement, and behavioral health departments within local health departments were able to provide information from their own records more frequently than other agencies. Behavioral health departments within local health departments were among the most frequent participants in case reviews. Drug courts, pharmacies, and higher educational institutions were among the least frequent case review participants.



Appendix B: 2019 Annual Report Summaries by County²

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Allegany Co	83% of cases reviewed involved fentanyl as a COD. 30% of reviewed cases had a previous overdose. In many cases, individuals were heard snoring prior to overdose, but were left to sleep by family members.	Continue prescriber education, Fentanyl awareness, and Naloxone training. 121 trainings conducted on prescribing education, maintained community billboards, and increased Naloxone training programs.	Facilitate outreach to families experiencing a loss as a result of fatal or nonfatal overdose death.

² Appendix B identifies the category and type of recommendation as well as state specific recommendations made by the LOFRTs, in their own words.

³ Highlighted trends reported by jurisdictions includes trends related to all overdose fatalities that occurred within a jurisdiction and/or the trends related to the cases reviewed by each team. "Cases Reviewed" represents a subset of 1) fatal overdose cases within a jurisdiction and 2) fatal overdoses by residents of that jurisdiction. This subset is not necessarily reflective of all cases that occurred within the jurisdiction during 2019, and represents a varying proportion of all fatal overdoses related to each jurisdiction. In some instances, trends expressed in raw numbers have been recalculated as percentages to protect personally identifiable information.

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Anne Arundel Co	93% of reviewed cases had a history of substance abuse with a documented treatment history. 54% had documented mental health comorbidity, 54% had documented somatic health comorbidity.	Expand the Overdose Survivors Outreach Services (ODSOS) Program to be 24 hours a day, 7 days a week. Increased outreach and treatment for people with mental health disorders to prevent self- medication through the use of street drugs.	Add Substance Use Resources for Families (SURF) Navigator to Fatal Overdose Response Team (FORT). Develop a resource list for families who have a loved one with a SUD.
Baltimore	The number of annual	Targeted overdose	Increased supports for
City	overdose deaths overall continues to increase, though at a slower rate than previous years. The share of fentanyl involved deaths continues to increase. 93% of cases reviewed involved fentanyl. 50% of cases involved cocaine in some way.	prevention education for children of fatal/non-fatal overdose victims and Naloxone training at public facilities with multiple overdoses. Develop legislation that increases collaboration between medication assisted treatment (MAT) Providers and LOFRTs.	individuals with suicidal ideations, veterans reintegrating into society, and neighborhoods with higher rates of drug overdose and near fatal overdose.

Jurisdiction	Highlighted Case Report	External	Internal
	Trends ³	Recommendation	Recommendation
Baltimore Co	Increase in reports of fentanyl related deaths. A large percentage of decedents had received treatment from providers who had been sanctioned by the Maryland Board of Physicians 58% were known to have received substance use disorder treatment in the public behavioral health system. In many cases reviewed, individuals engaged in multiple brief treatment episodes, but long-term retention was not achieved.	Provided intensive case and care management for high utilizers of services, including implementation of trauma informed care at all levels. Implement a system to identify providers through the Prescription Drug Monitoring Program (PDMP) and/or DOLRT data and provide education about safe prescribing practices.	Exploration of how the DOLRT, the Board of Physicians, and other provider groups might develop a partnership to support education and engagement of providers around safe prescribing and expanded SUD screening processes. Solicit providers to share information to the team related to clinical issues and challenges to include using and accessing the PDMP, providing ongoing follow-up after discharge from care, and other clinical decisions and concerns related to DOLRT cases.

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Calvert Co.	Many cases reviewed had been enrolled in pain management, often after having been in an accident. Several cases identified had recent abstinence from drug use, primarily due to incarceration.	Increased outreach to pain management centers, Strengthened Re-Entry and Work Release Programs with the local Detention Center	Increased the number of healthcare providers attending Overdose Fatality Review meetings, increase training and resources on factors related to drug overdose i.e., traumatic brain injury and infectious diseases.
Carroll Co	78% of cases reviewed occurred in private residences where the decedent lived. In most cases that occurred in the jurisdiction, the decedent was found by a family member or friend who then called 911.	That there be a centralized point of contact for the gathering of information about all overdose victims, both fatal and non-fatal	Continued to develop protocols and implement outreach programs to surviving family members/significant others and increased support for nonfatal case review. Enhance community participation in OFR process.

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Cecil Co	71% of cases reviewed involved multiple substances, fentanyl was involved in 85% of cases reviewed. At least 40 children under 18 lost a parent due to overdose. A majority of cases reviewed had a history of involvement with entities represented in the LOFRT.	Continued expansion of Overdose Prevention and Response Training/Increase access to Naloxone. Increase outreach and support to families experiencing substance use disorder related trauma. Increase availability of recovery supports to community agencies and the individuals with substance use disorder they serve.	Expand Local Overdose Fatality Review Team (LOFRT) membership and expand information sharing throughout the community.

Jurisdiction	Highlighted Case Report	External	Internal
	Trends ³	Recommendation	Recommendation
Charles Co	79% of cases reviewed involved fentanyl. 52% of cases reviewed resided in the northeastern region of the county. Several cases were previously referred to the health department's division of substance use services by the court system, but did not complete an assessment.	Attend OFRT meetings in Prince George's County, Anne Arundel, and Baltimore County to discuss shared cases. The location of death may be a known location to other counties. It is theorized that some of the cases may have been homeless, hanging out in other counties, but still listed a family address in Charles County as their contact information.	The separation of the OFRT and the OIT into two specific groups. An established OIT will allow us to implement the recommendations made by the OFRT, improving the policies we have in place and making the necessary changes to our system of care that directly affects those most at risk for overdosing.
Frederick Co	91% of all cases involved an opioid. Of overdoses involving an opioid, most involved fentanyl. Fentanyl was the predominant substance contributing to death in cases reviewed.	Increase Harm Reduction messaging throughout the community. Increase low barrier overdose response training. Increase utilization of peers in supporting individuals with substance abuse.	Attend training to better understand pain management practices. Increase services offered for survivors of an overdose fatality.

Jurisdiction	Highlighted Case Report	External	Internal
	Trends ³	Recommendation	Recommendation
Harford Co	50% of reviewed cases had received medication-assisted treatment, including methadone and buprenorphine. 69% of reviewed cases were previously admitted to an outpatient substance-related treatment program. 44% of decedents had been prescribed and opioid previously.	Begin communication with Behavioral Health Administration (BHA) to expedite the referral process for pregnant females seeking inpatient treatment. More resources and referrals for homeless services	Establish a process that allows Harford's OFR program to review cases for non-fatal incidents. Work with OFR leadership at OPHI in order to be able to reach out to family members of decedents. Work with team members to assess the need for meetings that focus on implementing recommendations.

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Howard Co	63% of cases reviewed involved fentanyl. Many decedents had long histories of substance use, suicidality, somatic health conditions, and contact with crisis services. Non-fatal case reviews showed multiple interactions with the police department.	Improve Prescription Drug Monitoring Program (PDMP) utilization, Developed Fentanyl Awareness Campaign and Test Strip Distribution	Engage pharmacists in Case Review and Prescriber Outreach
Montgomery	86% of reviewed cases had a history of polysubstance use, 79% had co-occurring disorders. The leading cause of death was fentanyl-related intoxication followed by cocaine and heroin use. 21% had a history of homelessness; 79% were involved in the criminal justice system.	Widen the availability of Overdose Prevention education in the community and distribution of Naloxone kits to include family, friends, teachers, students, inmates, and other potential bystanders of overdose. Provide Fentanyl strips to those who use drugs and ensure care to those who had experienced an overdose.	House Bill 116, Medication Assisted Treatment (Jail-Based, Identify and partner with a Peer Recovery Coach)

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Prince George's Co	Although fentanyl was the most common cause of death, there was an increase in utilization of other drugs 66% of decedents has a history of criminal justice involvement. Several individuals were involved in pain management or had a history of pain disorder.	Broaden prevention and intervention activities to all people who use drugs, Increased Naloxone availability, and develop additional services for the Justice-Involved Population	Increase focus on Department of Corrections and individuals with traumatic brain injury.
Somerset Co	There was in increase in non-heroin fatal overdoses over all cases in the jurisdiction. Fentanyl was involved in all cases reviewed. Justice system involvement for drugrelated offenses and prior engagement in substance use treatment were observed across reviewed cases.	Continued expansion of the availability of Naloxone in the community, Increase the availability of Vivitrol to individuals release from prison/detention	Increase community education and awareness, increase the availability of services for individuals being released from prison/detention.

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Washington	96% of reviewed cases involved fentanyl. Narcan was only used in 13% of the reviewed cases. Non-fatal cases reported their peers were scared to call the police or 911 and did not seem to be aware of the good Samaritan law. 33% of cases had a history of somatic complications.	Create a mandatory group for individuals that experienced a nonfatal overdose to address harm reduction.	Increase number of stakeholders at OFRT Meetings, Implement Qualitative and Quantitative Data Analysis, Increase number of Non-Fatal Overdose Reviews

Jurisdiction	Highlighted Case Report Trends ³	External Recommendation	Internal Recommendation
Wicomico Co	Substance use and mental health comorbidity were noted in roughly half the cases reviewed. 39% of cases reviewed had a previous overdose. 80% of cases determined that fentanyl was a cause of death 32% of cases had a history of trauma, including adverse childhood experiences.	Increase Trauma informed care, Support advocacy and treatment for individuals in recovery and recently released from incarceration, provide resources and/or support services to families of those experiencing overdose and of the deceased. Engage with local physicians and other prescribers through Academic Detailing.	Increase community education and awareness, and continue to develop support for harm reduction activities.
Worcester Co.	73% of reviewed cases involved fentanyl. The presence of alcohol contributing to deaths appears to be trending downward. In most cases, family members were present in the home at the time of death. 60% of cases had prior record or treatment in Behavioral health services by the local health department.	Increase prescriber education, engage with medication assisted treatment providers, continue focus on high risk populations, and strengthen connections with emergency department and opioid care coordination.	

Appendix C: LOFRTs Recommendations by Category

The following table contains a summary of the recommendations listed in **Appendix B** that are specifically suggested for implementation at the state level.

Category and Type	State Level Recommendations
Care Integration and Harm Reduction	 Provide intensive case and care management for high utilizer of services Increase funding for recovery support agencies Increase access to fentanyl test strips Increase treatment/education for nonfatal overdose survivors Engage emergency departments on protocols for opioid users
Special Populations	 Expand Overdose Survivors Outreach Program (OSOP) to individuals with mental illness, and citizens reintegrating into society Increase availability of housing and homeless services resources for individual in recovery
Process Improvement, Policy, and Legislation	 Develop legislation that increases collaboration between medication assisted treatment (MAT) Providers and LOFRTs Provide education surrounding overdoses classified as a suicide by OCME Link PDMP and prescriber education to increase PDMP usage Develop Statewide information repository for fatal and non-fatal overdose Expedite BHA referral process for pregnant women seeking inpatient opioid treatment
Community Engagement	 Increase Overdose Survivors Outreach Program (OSOP) services Target overdose education to children and families of fatal and nonfatal overdose
Education and Information Sharing	 Continue and enhance prescriber education, Fentanyl awareness, and naloxone training Target overdose education to children and families of fatal and nonfatal overdose Increase trauma informed care activities
Law Enforcement and Criminal Justice	 Strengthen reentry and work release programs at detention centers locally with individuals suffering from opioid addiction Support advocacy and treatment for individuals in recovery and recently released from incarceration