Overdose Fatality Review in Maryland

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Public Health Approach

- Public Policy: national, state, local laws and regulations
- Community: relationships between organizations
- Organizational: organizations, social institutions
- Interpersonal: families, friends, social networks
- Individual: knowledge, attitudes, skills
Overdose Fatality Review (OFR)

• State-supported, it is an in-depth review of OD deaths by local-level stakeholders
• Modeled after other mortality review teams such as Child Fatality Review and Fetal and Infant Mortality Review
• Provides a framework for analyzing deaths, understanding causes, and identifying prevention for future similar deaths
• Allows for data or information sharing within a protected space
• 3 approaches: provider, medical, community-based
• In Health General § 5-903 teams are granted authority to conduct case review
• On request of the team chair, agencies are obligated to provide information about the case under review
• Teams may review people that have died of a drug and/or alcohol overdose, their family members, and anyone convicted of a crime that led to the death
• 42 C.F.R. § 2.15(b) allows for non-consented disclosures of patient information relating to the death of the patient pursuant to “laws ... permitting inquiry into the cause of death,” as does HIPAA (42 CFR section 164.512.)
• The team’s investigatory function allows patient-identifying information about a deceased patient to be disclosed to the team as part of a case review without consent or a court order.
• Establishes confidentiality expectations
Overdose Fatality Review Goals

- Identify overdose risk factors to improve local prevention planning
- Identify missed opportunities for prevention/intervention
- Make recommendations to law/policies/programs to prevent future deaths
- In addition to identify risk factor trends and outcomes across various demographic characteristics and counties.
- Increase inter-agency communication/collaboration, trust and buy-in around overdose issue
Overdose Fatality Review Method (OFR)

Method

• Local OFR teams conduct confidential reviews on a monthly, bi-monthly, or quarterly basis of resident drug and alcohol overdose deaths. Examination of collected quantitative and qualitative data.

Case Management System

• Chesapeake Regional Information System for our Patients (CRISP) houses the OFR Database
  o A means to provide teams with detailed information on overdose decedents and the circumstances of death.
    ➢ MDH Office of the Chief Medical Examiner (OCME)
    ➢ Vital Statistics Administration (VSA)
    ➢ Prescription Drug Monitoring Program (PDMP)
    ➢ Additional clinical data
Overdose Fatality Review

Teams
  - Operational in 19 of 24 jurisdictions

  - Funded Teams Activities: Provider Outreach & Family Overdose Outreach
    - Through Harold Rogers Grant:
      - Baltimore Co.
      - Carroll Co.
    - Through CDC Grant:
      - Worcester Co.
      - Frederick Co.
Overdose Fatality Review

OFR Team members consists of:

<table>
<thead>
<tr>
<th>Local Health Department</th>
<th>Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Social Services</td>
<td>Prevention Office</td>
</tr>
<tr>
<td>Local Law Enforcement</td>
<td>Juvenile Services</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>Parole and Probation</td>
</tr>
<tr>
<td>Public Education</td>
<td>Crisis Services</td>
</tr>
<tr>
<td>Harm Reduction Services</td>
<td>Pharmacy</td>
</tr>
</tbody>
</table>
Team Collaboration

- We encourage teams to provide case information two weeks prior to meeting that allows time to adequately research case data and consider contributing factors.
- Case information is shared electronically via secured email - password protected documents or encrypted email service.
- Local OFR Coordinator facilitates meeting and collects data for reporting, solicits information from members re: team changes, new members, processes.
- Team members report their own case information- contributions may raise questions that lead to further insight.
- Open dialogue allows all stakeholders to verbally explore relationships between community resources and contributing factors, leading to more creative problem-solving and greater synergy.
Local OFR Team Workflow

Potential Cases Accessed through OFR Dashboard

Coordinator Research
Source: judiciary case search

Team Notification
Two weeks prior to meeting, via encrypted email with documentation for review

Case Selection
Criteria: local trends, common factors, team request, access to information

Documentation for Meeting Review

Team Research and Response
Team members research case information in their area of expertise

OFR Team Meeting

Case Reports
Team analyses and recommendations

Annual Report
Summarize team strategies and implementation
Case Reporting

- Case reporting form is based on
  - Maryland Violent Death Reporting System (MVDRS), suggestions of LOFRTs, recent overdose research, and gaps identified in OFR data.
  - New questions have been added
    - identify history of acquired brain injury
    - history of employment
    - identification of minor and/or adult children
    - pregnancy status

- Ability to access and download aggregate information, filterable by date range, from previously submitted case report forms for analysis at the local level.
Traumatic Brain Injury and the Opioid Crisis

- People who have a history of a moderate to severe traumatic brain injury (TBI) are 11 times more likely to die from an overdose than those without a history of TBI.
- Researchers report that people with TBI are at a significantly greater risk for opioid misuse and overdose.
- Contributing to this risk, 70-80% of people with TBI are discharged from inpatient rehabilitation with an opioid prescription.
- If the brain is starved of oxygen for more than 5-6 minutes due to an overdose, people who survive their overdose may sustain an Acquired Brain Injury (ABI).
### Overdose Fatality Review

#### Open Cases

<table>
<thead>
<tr>
<th>OCME #</th>
<th>Resident County</th>
<th>Date Of Death</th>
<th>Cause of Death</th>
<th>Incident Jurisdiction</th>
<th>Case Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Washington</td>
<td></td>
<td>ACUTE ALCOHOL INTOXICATION</td>
<td>Washington</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frederick</td>
<td></td>
<td>COMBINED FENTANYL AND COCAINE INTOXICATION</td>
<td>Frederick</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frederick</td>
<td></td>
<td>ALCOHOL INTOXICATION COMPLICATED BY DROWNING</td>
<td>Frederick</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Washington</td>
<td></td>
<td>OXYMORPHONE AND TRAZODONE INTOXICATION WITH COCAINE USE</td>
<td>Washington</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Washington</td>
<td></td>
<td>FENTANYL INTOXICATION COMPLICATING HYPERTENSIVE CARDIOVASCULAR DISEASE</td>
<td>Washington</td>
<td></td>
</tr>
</tbody>
</table>

#### Available to Review

<table>
<thead>
<tr>
<th>OCME #</th>
<th>Resident County</th>
<th>Date Of Death</th>
<th>Cause of Death</th>
<th>Incident Jurisdiction</th>
<th>Case Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cecil</td>
<td></td>
<td>COMBINED EFFECTS OF HEROIN AND FENTANYL</td>
<td>Cecil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cecil</td>
<td></td>
<td>METHADONE AND FENTANYL INTOXICATION</td>
<td>Cecil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cecil</td>
<td></td>
<td>HEROIN FENTANYL AND ALCOHOL INTOXICATION</td>
<td>Cecil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allegany</td>
<td></td>
<td>COMBINED EFFECTS OF HEROIN FENTANYL AND ALCOHOL</td>
<td>Cecil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allegany</td>
<td></td>
<td>MIXED DRUG (HEROIN, COCAINE, METHADONE, FURANYL, 4- )</td>
<td>Allegany</td>
<td></td>
</tr>
</tbody>
</table>

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Health-General Article 35-906. Annotated Code of Maryland, establishes that, with certain exceptions, the proceedings, records, and files of a LOFRT are confidential and not discoverable or admissible as evidence in any civil action. Much of the information provided to the LOFRT by the Maryland Department of Health, including investigative records of the Office of the Chief Medical Examiner, is confidential, privileged and protected from or limited in disclosure under state and federal laws and regulations.
Overdose Fatality Review Dashboard Cont:
Case Attributes

<table>
<thead>
<tr>
<th>2017 Trends Observed in 518 Cases</th>
<th>2018 Trends Observed in 415 Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Diagnoses or treatment history</td>
<td>Mental Health Comorbidity</td>
</tr>
<tr>
<td>Previous Overdose</td>
<td>Cause of Death Fentanyl Combination</td>
</tr>
<tr>
<td>Somatic Health Condition</td>
<td>Caucasian Males</td>
</tr>
<tr>
<td>Pain Management</td>
<td>Criminal Justice History</td>
</tr>
<tr>
<td>Intimate Partner Violence</td>
<td>Homelessness</td>
</tr>
<tr>
<td>Recent time of abstinence</td>
<td>Visit the Emergency Room</td>
</tr>
</tbody>
</table>

**Emerging trends**

- Overdose deaths occurring in a hotel or motel
- History of traumatic brain injury
- History of childhood trauma
### OFR 2018 Annual Report Data by County

<table>
<thead>
<tr>
<th>County</th>
<th># of Reviewed Cases</th>
<th>Average age or age range of Decedent</th>
<th>Substance Used</th>
<th>Gender of Majority of Decedent</th>
<th>Race of majority of decedent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegany Co</td>
<td>22</td>
<td>40yrs</td>
<td>92% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Anne Arundel Co</td>
<td>23</td>
<td>20-35yrs</td>
<td>40% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Baltimore City</td>
<td>15</td>
<td>35yrs</td>
<td>Fentanyl or a Fentanyl analogue</td>
<td>Male</td>
<td>African American</td>
</tr>
<tr>
<td>Baltimore Co</td>
<td>41</td>
<td>23-73yrs</td>
<td>Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Calvert Co</td>
<td>12</td>
<td>19-59yrs</td>
<td>Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Carroll Co</td>
<td>12</td>
<td>39yrs</td>
<td>Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Cecil Co</td>
<td>42</td>
<td>38yrs</td>
<td>Mixed Drugs</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Charles Co</td>
<td>25</td>
<td>38yrs</td>
<td>Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Frederick Co</td>
<td>30</td>
<td>24-34yrs</td>
<td>81% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Garret Co</td>
<td>5</td>
<td>37yrs</td>
<td>Mixed Drugs involving Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Harford Co</td>
<td>14</td>
<td>40yrs</td>
<td>Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Howard Co</td>
<td>38</td>
<td>31-40yrs</td>
<td>Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Montgomery Co</td>
<td>17</td>
<td>22-59%</td>
<td>71% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Prince George's Co</td>
<td>7</td>
<td>28-75yrs</td>
<td>43% Fentanyl</td>
<td>Male</td>
<td>African American</td>
</tr>
<tr>
<td>Somerset Co</td>
<td>8</td>
<td>35yrs</td>
<td>75% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>St. Mary's Co</td>
<td>30</td>
<td>24-60yrs</td>
<td>70% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Washington Co</td>
<td>24</td>
<td>20-66yrs</td>
<td>Mixed Opioids</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Wicomico Co</td>
<td>33</td>
<td>38yrs</td>
<td>85% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Worcester</td>
<td>17</td>
<td>42yrs</td>
<td>82% Fentanyl</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
</tbody>
</table>
Number of Fentanyl-Related Deaths Occurring in Maryland from January-September of Each Year

* 2018, 2019 counts are preliminary.
Total Number of Unintentional Intoxication Deaths Occurring in Maryland from January-March of Each Year.

* 2018, 2019 counts are preliminary.
Top Gaps in Services OFR Teams Observed

- Access to treatment for substance use
- Education to families and concerned others regarding Naloxone
- Access to Co-occurring treatment
- Communication between agencies
- Re-entry services/linkage to care
- Harm Reduction referrals
## Local Recommendations

<table>
<thead>
<tr>
<th>Case Attribute</th>
<th>Recommendation</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal overdoses occurring in local hotel</td>
<td>Train hotel staff to administer Naloxone</td>
<td>Opioid Prevention Coalition coordinator reached out to hotel manager, Overdose Response Program coordinator conducted Naloxone training</td>
</tr>
<tr>
<td>Prescribed medications were contributors to overdose fatalities in majority of cases</td>
<td>Train prescribers of risks and consequences of prescription drug misuse; encourage prescribers to follow best practices</td>
<td>Opioid Misuse Prevention Program coordinator organized training programs and distributed CDC prescribing guidelines</td>
</tr>
<tr>
<td>Decedent was found by a family member in a majority of cases</td>
<td>Develop targeted outreach protocol and family support information materials</td>
<td>OFR Coordinator and Overdose Prevention Peer Support Specialist developing resource materials for distribution to family of overdose victims</td>
</tr>
</tbody>
</table>
Macro Recommendations

- Prevention Education: Drug education and outreach to families
- Integrated Care: Increase use of peer support counselors
- Harm Reduction: Good Samaritan Law Education/Naloxone education
- Criminal Justice Institution: Judge education and outreach
- Underserved population: Support for children of overdose patients
- Services enhancing: More accessible to trauma counseling
- Information sharing: Focus on communication among agencies
- Standardization: Need for standardized shelter services
- Law Enforcement and Forensic Intervention: Police with mental health focus
Lessons learned – 4 years of OFR

• Find balance between data collection function and maintaining space for open dialogue and conversation.
• Make connections with local and statewide programs. In Maryland, this has included primary prevention, the Opioid Misuse Prevention Program, naloxone and the Overdose Response Program, expansion of sterile syringe programs, and the work of the Opioid Intervention Teams.
• Create space for local jurisdictions to make the program useful for them through case selection, data analysis capacity, and meeting structure.
• Provide opportunities for learning through presentations on calls and in-person.
• Acknowledge and find ways to address team member fatigue as they review overdose cases.
Special Thanks

Anastasia Edmonston, MS CRC
Coordinator, Traumatic Brain Injury Partner Grant

Maryland Behavioral Health Administration
Thank you!

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Overdose Fatality Review Coordinator

Office of Population Health Improvement
Maryland Department of Health-Public Health Services


References


Opioids and Brain Injury Fact Sheet, (2019). This fact sheet is a collaboration of the Brain Injury Association of Maryland Traumatic Brain Injury Partner Grant, and is supported in part by grant number 90TBSG0027-01-00, FROM THE U.S. Administration for Community Living, Department of Health and Human Services, Washington, D.C. 20201. Grantees undertaking projects with government sponsorship are encouraged to express freely their findings and conclusions. Point of view or opinions do not, therefore, necessarily represent official ACL policy. https://www.medicalnewstoday.com/articles/308156.php.