Please be advised that the Barry County Board of Commissioners has scheduled a Board of Commissioners meeting on August 9, 2022 at 9:00 a.m.
for the purpose of:

AGENDA
for Barry County Board of Commissioners
August 9, 2022; 9:00 a.m.; Commission Chambers
For more information go to: www.barrycounty.org

1. Call To Order at 9:00 a.m.

2. Moment of Silence/Invocation

3. Pledge of Allegiance

4. Roll Call

5. Approval of Written Agenda (including consent items & items for discussion)

6. Reports from State and County Officers

7. Limited Public Comment (3 minutes per person)

8. Various Correspondence

9. Consent Items (voted upon at one time by roll call vote):
   a. Approval of July 26, 2022 Board of Commissioners meeting minutes.
   b. Approval of August 2, 2022 Committee of the Whole meeting minutes.
   c. Approval of the 2022-2023 Child Care Fund Plan and Budget, and authorize the Chair to sign.
   d. Approval to spend approximately $40,000 from the Airport Fund for engineering/pre-construction for the Terminal Planning Project, as approved by the Airport Commission, in accordance with the Airport Commission Joint Operating Agreement.
   e. Approval to purchase a 2023 Chevy Silverado 6500HD for the amount of $78,042.58, with funds to be paid from the Vehicle Fund.
   (roll call vote)

10. Presentations: Dr, Joyce deJong, D.O., Medical Examiner – Medical Examiner Annual Report

11. Public Hearings – CDBG Emergency Program Income Guidelines

12. Items for Consideration (roll call vote indicated)
    Approval of transfers and disbursements:
    a. Approval of pre-paid invoices in the amount of $4,139,873.72 **(roll call vote)**
    b. Approval of claims in the amount of $52,520.48 **(roll call vote)**
    c. Approval of commissioner reimbursements (mileage) in the amount of $380.48 **(roll call vote)**
    d. Approval of the CDBG Program Income Emergency Repair Program and Guidelines. **(roll call vote)**
    e. Adoption of Resolution #22-12 To Exceed Maintenance Limit for Jordan Lake. **(roll call vote)**

13. Unfinished Business

14. New Business

15. County Administrator's Report

16. Chairperson's Report

17. Vice Chairperson's Report

18. Commissioner Reports (for items not on the Agenda)

19. Limited Public Comment (3 minutes per person)

20. Other Business

21. Commissioner Comments

22. Adjournment

Ben Geiger, Chair
Barry County Board of Commissioners

Unless otherwise posted in accordance with the Open Meetings Act, Board of Commissioners meetings are held at the Barry County Courthouse, Commissioners Chambers, 220 W. State St., Hastings, MI 49058. Questions regarding the meeting may be addressed to Michael Brown, Barry County Administrator, Barry County Courthouse, 220 W. State St., Hastings, MI 49058; (269) 945-1284.

Meetings of the Barry County Board of Commissioners are open to all without regard to race, sex, color, age, national origin, religion, height, weight, marital status, political affiliation, sexual orientation, gender identity or disability. Barry County will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting/hearing, to individuals with disabilities at the meeting/hearing upon four (4) business days notice to the County. Individuals with disabilities requiring auxiliary aids or services should contact the County by writing or calling: Michael Brown, County Administrator, Barry County, 220 W. State St., Hastings, MI 49058; 269-945-1284.

Only members of the Barry County Board of Commissioners shall be given the floor to speak during any Board meeting, except 1) Anyone who desires to speak under Limited Public Comment; 2) County officials and/or personnel may speak with the consent of the Chairperson; 3) Any person, with the consent of the Chairperson and/or a majority of the Board; 4) Public comment shall be limited to no more than three minutes per individual and at the times designated as stated above, except where extended privileges are granted by the Chairperson.

Barry County Board of Commissioners
July 26, 2022; 9:00 a.m.; Commission Chambers
MINUTES

1. Vice Chair Vivian Conner called the regular session of the Barry County Board of Commissioners to Order at 9:00 a.m.

2. Invocation led by Commissioner Campbell.

3. Those present stood and said the Pledge of Allegiance to the Flag of the United States of America.

4. Roll Call was taken. The following members were present: Bruce Campbell, Vivian Conner, Catherine Getty, Howard Gibson, David Jackson, and Jon Smelker. Absent: Ben Geiger. Also present: County Deputy Administrator Luella Dennison, and Clerk Pam Palmer.

5. Approval of Written Agenda (including consent items & items for discussion).

   Commissioner Smelker asked to have Item (c) removed from Consent Items to Items for Consideration. Joel Ibbotson asked to have item (b) removed from Consent Items to Items for Consideration. Moved by Smelker, seconded by Gibson to approve the written agenda as amended. All ayes. Nays: None. Absent: Geiger. Motion carried. The written agenda was approved as amended.

6. REPORTS FROM STATE AND COUNTY OFFICERS: None.

7. LIMITED PUBLIC COMMENT (3 minutes per person)

   - Rick Moore asked everyone to speak into the microphone.
   - Brandon Strong spoke about the 2023-25 Multi-Year Plan for Region 3B and the DEI Training.
   - Joel Ibbotson announced a meet the candidate meeting held at the Waldorff this Thursday at 7:00 pm.
   - Bethany Mathews echoed Bandon Strong's comments.

8. VARIOUS CORRESPONDENCE: None.

9. CONSENT ITEMS (voted upon at one time by roll call vote):
   a. Approval of July 12, 2022 Board of Commissioners meeting minutes.
   b. Approval of July 19, 2022 Committee of the Whole meeting minutes. (Moved to Items for Consideration).

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c. *Approval of the 2023-25 Multi-Year Plan for Region 3B Area Agency on Aging, d/b/a CareWell Services Southwest.* (Moved to Items for Consideration).
d. Approval to appoint David Shinavier as Officer Delegate, and Vivian Conner as Officer Alternate, to attend the 2022 Municipal Employees Retirement System Annual meeting, and to approve paying the expenses for the Officer Delegate and the Employee Delegate to attend on September 26-27, 2022 at the Grand Traverse Resort, Acme, MI.
e. Approval of replacement of County Clerk work stations by Interphase Interiors in the amount of $16,395.87, with funds to be paid from the Capital Replacement Fund.
f. Approval to replace a vacant full time Kennel Worker position with a second full time Animal Shelter Technician position, with funds to be transferred from the Animal Shelter Donation Fund to the General Fund for the additional cost in budget year 2022.
g. Approval of the recommendation by the Barry County Commission on Aging Board to hire Courtney Ziny as the Commission on Aging Executive Director as recommended by the Commission on Aging Board.
(roll call vote)

Moved by Getty, seconded by Gibson for approval of the above named Consent Items. Roll call vote. Ayes: Campbell, Conner, Getty, Gibson, Jackson, and Smelker. Nays: None. Absent Geiger. Motion carried.

10. PRESENTATIONS: 1. Allison Troyer Wiswell, Activate Director - Blue Zones Community Food Center Retail Market Analysis Report

11. PUBLIC HEARINGS: None

12. ITEMS FOR CONSIDERATION: (roll call vote indicated)

Approval of transfers and disbursements:

a. Approval of claims in the amount of $95,436.68 **(roll call vote)**

Moved by Smelker, seconded by Jackson for approval of claims in the amount of $95,436.68. Roll call vote. Ayes: Campbell, Conner, Getty, Gibson, Jackson, and Smelker. Nays: None. Absent: Geiger. Motion carried.

(b) *Approval of the 2023-25 Multi-Year Plan for Region 3B Area Agency on Aging, d/b/a Carewell Services Southwest.* Discussion.

Moved by Smelker, seconded by Getty for approval of the 2023-25 Multi-Year Plan for Region 3B Area Agency on Aging, d/b/a Carewell Services Southwest. Roll call vote. Ayes: Campbell, Getty, Gibson, and Jackson. Nays: Conner and Smelker. Absent Geiger. Motion carried.

Recess at 10:06 a.m. Resume meeting at 10:13 a.m. with all commissioners present, absent Geiger.

DRAFT

(c) Approval of July 19, 2022 Committee of the Whole meeting minutes. Discussion. Joel Ibbotson asked to have his comment in the last Public Comment section amended to read as follows: …, "but we seem determined to preserve its inverse".

Moved by Smelker, seconded by Gibson to amend the July 19, 2022 minutes public comment by Joel Ibbotson to read: Joel Ibbotson wants us to focus on helping our neighbors without the need to sign a disclaimer determining their eligibility contingent on what happens in their bedroom. He spoke of women's rights and the ability for women to defend themselves. We cannot legislate morality, but we seem determined to preserve its inverse". All ayes. Nays: None. Absent: Geiger. Motion carried.

Moved by Smelker, seconded by Getty to approve the July 19, 2022 minutes as amended. Roll call vote. Ayes: Campbell, Conner, Getty, Gibson, Jackson, and Smelker. Absent: Geiger. Motion carried.

13. UNFINISHED BUSINESS: None.

14. NEW BUSINESS: None.

15. COUNTY ADMINISTRATOR'S REPORT: None.

16. CHAIRPERSON'S REPORT: None.

17. VICE CHAIRPERSON'S REPORT: Vice Chair Conner attended the Planning Commission meeting and approved an accessory dwelling for a family in Barry Township. This morning she attended a Board of Public Works meeting regarding the Middleville water and sewer project with a good report from the contractor who stated the project is on schedule.

18. COMMISSIONER REPORTS: (FOR ITEMS NOT ON THE AGENDA) – Each commissioner reported on their various committees, boards, events and meetings.

19. LIMITED PUBLIC COMMENT: (3 MINUTES PER PERSON)

- Mike Snyder spoke about a company that moved from Hastings due to lack of workforce and housing availability.
- Michele Peltier asked for short updates on the ARPA projects that were approved approximately 4 months ago. She also expressed pleasure in hiring Courtney Ziny for the COA Director position.
- Joel Ibbotson spoke about discrimination against Asians. This is where diversion, equity and inclusion lead to – another form of segregation and racism.
- Gary White commented on the rules of the Board addressing the Board, not the public. Present plans that represent the people of Barry County, and if you treat people like they are people, you will get the best out of everyone.
- Elden Shellenbarger questioned why the 2023-25 Multi-Year Plan for Region 3B was on the agenda if the commissioners approval has no effect on them going forward.
- Charles Hertzler explained that the "E" in DEI stands for equity, not equality.

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- Adam Heikkila commended the board for allowing public comments. He also spoke about Kellogg Foundation donating $400,000 for DEI Training. It is big business.
- Mark Bonsignore reminded the Board that the same arguments expressed by one side of the room are the same arguments and sediments that were used to keep women in their place for many 100's of years. They are arguing against diversity, equity, and inclusion.

20. COMMISSIONER COMMENTS:
    - Commissioner Getty thanked Randy Eaton, Fire Chief and volunteer fireman for Thornapple Township Emergency Services who recently retired.
    - Commissioner Smelker clarified his no vote on the 2023-25 Multi-Year Plan, and he would have liked to have been able to ask more questions about the plan prior to voting.
    - Jackson spoke briefly about the Barry Township Water Tower project which is being funded by ARPA funds. He stated they are early in the process, but they are on time, on target and on budget.
    - Commissioner Smelker gave an update on the 911 tower. They are in the process of securing property for the tower.
    - Commissioner Conner reported that she has not heard back from the DNR regarding the shooting range, but she plans to follow up with it, as well as contacting Stacy Wines regarding the questions Commissioner Smelker asked about the 2023-25 Multi-Year Plan for Region 3B.

21. OTHER BUSINESS: None.

22. ADJOURNMENT: at 10:45 a.m.

_____
Vivian Conner, Vice Chair
Barry County Board of Commissioners

_____
Pamela A. Palmer, County Clerk

Approved: _____
Date & Initials

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Barry County Board of Commissioners - Committee of the Whole
August 2, 2022; 9:00 a.m.; Commission Chambers
MINUTES

Members Present: Commissioners Bruce Campbell, Vivian Conner, Ben Geiger, Catherine Getty, Howard Gibson, Dave Jackson, and Jon Smelker. Clerk Pam Palmer was also present.

Others present: Michael Brown, Jayson Bussa, Posse Mike Johnson, David Shinavier, Jack Miner, Mark Bonsignore, Rick Moore, Sharon Zebrowski, Brandon Strong, Scott Savage, Jim Dull, Stacy Hissong, Marilyn Smith, Tammy Hayes, Ines Straube, Angela Moore, Larry Bass, Gary White, Bob Vanderbough, Scott Savage, and Jason Sixberry.

Chair Geiger called the meeting to order at 9:00 a.m.

Those present stood and said the Pledge of Allegiance.

PUBLIC COMMENT:

- Jack Miner gave his perspective on diversity, equity and inclusion from as far back as the 1950's to today. He stated at the election today, we will see if the majority of voters want to return Barry County to the "old days".
- Dan Quanstrum, pastor from the Church of the Nazarene spoke of diversity, equity and inclusion, and the image that God has for being a good and beautiful community is diverse. We need to be intentional about promoting diversity, equity and inclusion.

JIM DULL/STACY HISSONG – Resolution to Exceed Maintenance Limit for Jordan Lake

Moved by Gibson, seconded by Smelker to recommend to the Board of Commissioners adoption of Resolution #22-12 to Exceed Maintenance Limit for Jordan Lake. Discussion. All ayes. Nays: None. Motion carried.

MARILYN SMITH – CDBG Program Income Emergency Repair Program and Guidelines

Moved by Getty, seconded by Jackson to recommend to the Board of Commissioners approval to schedule a public hearing regarding CDBG Emergency Program Income guidelines at the regular meeting of the Barry County Board of Commissioners on August 9, 2022, and after the public hearing, to approve the CDBG Program Income Emergency Repair Program and Guidelines. Discussion. All ayes. Nays: None. Motion carried.

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INES STRAUBE/DAVE PELON – FY 2022-2023 Child Care Fund Plan and Budget

Moved by Gibson, seconded by Smelker to recommend to the Board of Commissioners approval of the 2022-2023 Child Care Fund Plan and Budget, and authorize the Chair to sign. Discussion. All ayes. Nays: None. Motion carried.

JIM DULL – Request to Purchase New Truck for Drain Commission

Moved by Gibson, seconded by Conner to recommend to the Board of Commissioners approval to purchase a 2023 Chevy Silverado 65001ID for the amount of $78,042.58, with funds to be paid from the Vehicle Fund. This item is postponed.

MICHAEL BROWN – Approval of Expenditure from the Airport Fund for Terminal Planning Project

Moved by Smelker, seconded by Getty to recommend to the Board of Commissioners, in accordance with the Airport Commission Joint Operating Agreement, approval to spend approximately $40,000 from the Airport Fund for engineering/pre-construction for the Terminal Planning Project, as approved by the Airport Commission. Discussion. All ayes. Nays: None. Motion carried.

JIM DULL – Request to Purchase New Truck for Drain Commission

Moved by Gibson, seconded by Conner to recommend to the Board of Commissioners approval to purchase a 2023 Chevy Silverado 65001ID for the amount of $78,042.58, with funds to be paid from the Vehicle Fund. Discussion. All ayes. Nays: None. Motion carried..

PUBLIC COMMENT:

- Brandon Strong spoke about DEI and having a better understanding of DEI should have been a priority to assist us in Barry County. It is disingenuous to assume that just be cause those that spoke against DEI, does not mean they are bigoted.

COMMISSIONER COMMENTS:

- Commissioner Conner heard back from Stacy Wines and will be getting figures to her.
- Commissioner Getty heard from Randy Heinze and gave an update on the shooting range.
- Chair Geiger thanked Commissioner Conner for filling in for him for the last two weeks in his absence.
- Commissioner Jackson wished all the candidates on the ballot today “good luck”.

ADJOURNMENT: at 9:49 a.m.

DRAFT

_____
Ben Geiger, Chair
Barry County Board of Commissioners

_____
Pamela A. Palmer, County Clerk

Approved: _____
Date & Initials

DRAFT

AGENDA REQUEST FORM

PROPOSED FOR MEETING OF: August 9, 2022 – Board of Commissioners

DEPARTMENT: Barry County Trial Court

PREPARED BY: Dave Pelon, Deputy Court Administrator

SUBJECT: 2022 – 2023 Child Care Fund Plan and Budget

SPECIFIC ACTION(S) REQUESTED:
To recommend to the Board of Commissioners approval of the 2022-2023 Child Care Fund Plan and Budget, and authorize the Chair to sign.

SPECIFIC ACTION(S) RECOMMENDED BY THE COW (Admin. use only): Approval of the 2022-2023 Child Care Fund Plan and Budget, and authorize the Chair to sign.

DESCRIPTION OF ACTION: Request the that the Chair of Board sign the Child Care Fund Budget Summary for 2022-2023 in anticipation of expenditures and revenues, DHHS Form-2091.

TIME FRAME OF ACTION: The CCF is due 8/15/2022

FUNDING REQUIRED: YES X NO _____

IF YES, ANSWER THE FOLLOWING:

1. FUNDING SOURCE (Federal, State, or Local) Local, with State match
2. IF LOCAL, SPECIFY FUND: General Fund
3. AMOUNT REQUESTED: _____
4. AMOUNT OF ONGOING COST, AND INTERVAL (Monthly, Quarterly, Annual, etc.)_____
5. FINANCIAL IMPACT ON OTHER DEPARTMENTS: None

PERSONNEL IF REQUIRED: Within the CCF there are various positions (full and part-time) and funding for out-of-home placement. See attached plan and budget.

NEW OR RENEWAL: Renewal

ANY OTHER PERTINENT INFORMATION:
The Child Care Fund Plan and Budget is attached for detail.

CONTACT PERSON WITH PHONE NUMBER: Dave Pelon, 269-945-1400 ext. 1073

County Child Care Budget Summary (DHS-2091)

Michigan Department of Health and Human Services (MDHHS)
Children's Services Agency
Barry County for October 1, 2022 through September 30, 2023

Organization	Court Contact Person	Telephone Number	Email Address
Barry County	Ines Straube - CCF Organization Management	(269) 945-1404	istraube@barryco.org
Fiscal Year	**MDHHS Contact Person**	**Telephone Number**	**Email Address**
October 1, 2022 through September 30, 2023	Noelle Bair - CCF Organization Management	(269) 615-7121	bairn@michigan.gov

Cost Sharing Ratios	County 50% / State 50%	Anticipated Expenditures		
		MDHHS	Court	Combined
A. Out of Home Care - Court or Tribal Supervised		$333,554.50	$333,554.50	$667,109.00
B. In-Home Care		$0.00	$672,457.14	$672,457.14
C. County/Court-Operated Facilities		$0.00	$0.00	$0.00
D. Subtotals (A+B+C)		$333,554.50	$1,006,011.64	$1,339,566.14
E. Revenue		$0.00	$0.00	$0.00
F. Net Expenditure		$333,554.50	$1,006,011.64	$1,339,566.14

Cost Sharing Ratios	County 50% / State 50%	Anticipated Expenditures		
		MDHHS	Court	Combined
A. Out of Home Care - Neglect Abuse		$0.00	$0.00	$0.00

Please Note: The *Neglect/Abuse Out-of-Home Care* amount reflects ONLY the county court's share of these expenditures. Effective October 2019 the State of Michigan pays 100% of Neglect/Abuse Out-of-Home placements and the county then reimburses the state 50%.

Cost Sharing Ratios	County 0% / State 100% $15,000.00 Maximum	MDHHS	Court	Combined
Basic Grant		$0.00	$15,000.00	$15,000.00

Total Expenditure	$1,354,566.14

BUDGET DEVELOPMENT CERTIFICATION

THE UNDERSIGNED HAVE PARTICIPATED IN DEVELOPING THE PROGRAM BUDGET PRESENTED ABOVE. We certify that the budget submitted above represents an anticipated gross expenditure for the fiscal year: October 1, 2022 through September 30, 2023; and any requests for reimbursement shall adhere to all state law, administrative rules and child care fund handbook authority.

Presiding Judge	Date
County Director of MDHHS Signature	Date
Chairperson, Board of Commissioner's Signature	Date
And/or County Executive Signature	Date

Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

AUTHORITY: Act 87, Publication of of 1978, as amended.
COMPLETION: Required.
PENALTY: State reimbursement will be withheld from local government.

In-Home Care Summary (DHS-2093)

Michigan Department of Health & Human Services (MDHHS)
Children's Services Agency
Barry County for October 01, 2022 through September 30, 2023

I. List all service components which make up the IHC program and specify the requested information for each.

	Court Service Components	Administration Unit	Gross Expenditure	Public Funding	CCF Net Expenditure
1	COURT APPOINTED SPECIAL ADVOCATE 2023	Court	$27,000.00	$0.00	$27,000.00
2	HOME INTENSIVE CARE PROBATION 2023	Court	$522,772.00	$0.00	$522,772.00
3	WRAPAROUND 2023	Court	$122,685.14	$0.00	$122,685.14
		Subtotals - Court	$672,457.14	$0.00	$672,457.14
		Total IHC	$672,457.14	$0.00	$672,457.14

II. For each service component listed above, complete a separate IN-HOME CARE/BASIC GRANT BUDGET DETAIL REPORT (DHS-2094), filling in the appropriate budget items.

AUTHORITY: Act 87,Public Acts of 1978, as amended.
COMPLETION: is Required.
PENALTY: State reimbursement will be withheld from local government

Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

Component Detail Report (DHS-2094)

Michigan Department of Health & Human Services (MDHHS)
Children's Services Agency
Barry County for October 01, 2022 through September 30, 2023

Service Component (Full Title/Name)	Component Type
COURT APPOINTED SPECIAL ADVOCATE 2023	In-Home Care

A. Personnel

Administrative Unit: ○ MDHHS ⊙ Court

1. Salary and Wages			
Name(s)	Job Title	Hours/Week	Yearly Cost
2. Fringe Benefits			
		Total Personnel	$0.00

B. Program Support (For employees identified in "A" above)

1. Travel	Rate/Mile	Estimate No. of Miles	Yearly Cost
2. Supplies and Materials (Description/Examples)			Yearly Cost
3. Other Costs (Description/Examples)	Rate/Unit		Yearly Cost
		Total Program Support	$0.00

* Must comply with the definitions and limits listed for court operated facilities in the Child Care Fund Handbook.

C. Contractual Services

1. Unit Rates				
Name(s)	Rate	Unit Type	Total Units/ Contract	Yearly Cost
2. Closed End Contracts				
CASA PROGRAM				$27,000.00
			Total Contractual	$27,000.00

D. Non-Scheduled Payments

Type of Service (Description)	Anticipated No. Units to be Provided	Average Cost of Each Service Unit	Yearly Cost
		Total Non-Scheduled	$0.00

E. Service Component - In-Home Care or Basic Grant

(Add Totals for A, B, C, and D above)	Total Service Component Cost	$27,000.00

F. Public Revenue:

If you plan to fund any portion of this service component with other public revenue including other Child Care Funds or Basic Grant monies, or if this component is generating revenue (i.e. third party payments) specify the following:

SOURCE	To Be Provided	Yearly Cost
	Total Public Revenue	$0.00

G. Subtract Total Public Revenue from Total Service Component Cost (E-F)

Total Cost to Basic Grant, Net Anticipated IHC Matchable Expenditure (Gross Costs Less Other Revenue)	$27,000.00

H. Program Specific Information:

1. Component Status

☑ Continued ☐ Terminated ☐ Revised ☐ New

2. Target Population(s) Served - Check all that apply.

A. Children Under Jurisdiction of Court

☐ Delinquent ☑ Neglect

B. Children NOT Under Jurisdiction of Court

☐ Written Complaint ☐ CPS Category I or II ☐ Children likely to come under Jurisdiction of the Court

3. Area(s) of Intended Impact - Check primary area(s) only.

A Reduction In:

☐ Number of Youth Petitioned
☐ Number of Adjudications
☑ Number of Days of Family Foster Care
☐ Number of Days of Out-of-Home Detention
☐ Number of Days of Shelter Care
☑ Number of Days of Residential Treatment Care
☐ Number of State Wards Committed (Act 150 & 220)

4. Service Focus - Check all that apply.

☐ Provide early intervention to treat within the child's home
☑ Effect early return from foster or institutional care

I. Program Description - Must be completed for all components, except those being terminated, each year.

Court Appointed Special Advocates (CASA) is a program which supports neglected and/or abused children who come under jurisdiction of the Court. CASA are assigned from the bench by Court order. The strength of the CASA program is in matching trained volunteers with youth who have become involved in the Court through a protective proceeding. Most of the time the youth are in foster care while the parents are working toward reunification. Occasionally, the Court may have established an in-home court wardship and a CASA will be assigned. CASA volunteers are assigned to one case (or sibling group) per volunteer.

The CASA volunteer serves various roles that include but are not limited to being a mentor, a listening caring adult, and another source of information to provide to the Court. Each CASA volunteer provides written reports to the Court at each proceeding and may be called to testify if appropriate. Program funds are not used for basic family needs available through other funding sources. The funds requested for this program are used to assist with a portion of staffing costs, supplies, mileage reimbursement for volunteers having case contacts, and costs of training volunteers. This is a closed end contract for services, CASA program has various funding sources, none of which are used for judicial costs.

The CASA program adheres to all national CASA standards, and any national CASA or Michigan CASA policies and in accordance with MCR 3.917, and as evidenced by the Certificate of Membership granted by Michigan CASA.

AUTHORITY: Act 87,Public Acts of 1978, as amended. COMPLETION: is Required. PENALTY: State reimbursement will be withheld from local government	Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

Component Detail Report (DHS-2094)

Michigan Department of Health & Human Services (MDHHS)
Children's Services Agency
Barry County for October 01, 2022 through September 30, 2023

Service Component (Full Title/Name)	Component Type
HOME INTENSIVE CARE PROBATION 2023	In-Home Care

A. Personnel **Administrative Unit:** ○ MDHHS ⊙ Court

1. Salary and Wages

Name(s)	Job Title	Hours/Week	Yearly Cost
VACANT JUVENILE TREATMENT SPECIALIST	JUVENILE TREATMENT SPECIALIST	40.00	$59,800.00
ALEXIS MCKENDRICK	JUVENILE PROBATION OFFICER	40.00	$51,072.00
JENNIFER DAILEY	JUVENILE PROBATION OFFICER	40.00	$56,638.00
REBECCA PROWDLEY	CHIEF COURT SERVICES SPECIALIST I	20.00	$24,440.00
DAVE PELON	DEPUTY COURT ADMINSTRATOR/PROJECT DIRECTOR	8.00	$15,463.00
VACANT JUVENILE PROBATION OFFICER	JUVENILE PROBATION OFFICER	40.00	$46,970.00
TANYA SPITZLEY	COURT SERVICES SPECIALIST	14.00	$14,095.00

2. Fringe Benefits

HEALTH INSURANCE IN LIEU OF	$6,718.00
LONGEVITY	$700.00
FICA	$18,246.00
HEALTH INSURANCE	$51,713.00
LIFE INSURANCE	$347.00
DENTAL/OPTICAL	$3,240.00
RETIREMENT	$73,054.00
DISABILITY	$983.00
DISABILITY ADM	$122.00
WORKMANS COMP	$2,449.00
UNEMPLOYMENT	$371.00
SICK PAY	$5,430.00
HCSP CONTRIBUTION	$1,458.00
Total Personnel	$433,309.00

B. Program Support (For employees identified in "A" above)

1. Travel	Rate/Mile	Estimate No. of Miles	Yearly Cost
MILEAGE FOR CASE SUPERVISION AND TRAINING	$0.63	29,750.00	$18,593.75

2. Supplies and Materials (Description/Examples)	Yearly Cost
General office supplies such as: PAPER/PENS/COPIES/STAMPS/MARKERS/FLIP CHARTS/DISC/FACE MASKS/ETC	$4,388.00
Drug Testing Supplies (Instant Drug tests & Gloves)	$3,100.00

3. Other Costs (Description/Examples)	Rate/Unit	Yearly Cost
PROFESSIONAL EMPLOYEE MEMBERSHIP/DUES	$0.00	$675.00
CELL PHONES	$0.00	$3,775.00
TRAINING/MEALS	$0.00	$4,875.00
	Total Program Support	$35,406.75

* Must comply with the definitions and limits listed for court operated facilities in the Child Care Fund Handbook.

C. Contractual Services

1. Unit Rates

Name(s)	Rate	Unit Type	Total Units/ Contract	Yearly Cost
Mental Health Services	$250.00	1	106.00	$26,500.00
Co PAY for SA or Mental Health Services	$75.00	1	120.00	$9,000.00

2. Closed End Contracts

	Total Contractual	$35,500.00

D. Non-Scheduled Payments

Type of Service (Description)	Anticipated No. Units to be Provided	Average Cost of Each Service Unit	Yearly Cost
Gas Cards or Bus Passes	196.00	$3.00	$588.00
PSYCHOLOGICAL COUNSELING/EVALS/CO-PAY	9.00	$750.00	$6,750.00
SUBSTANCE ABUSE TESTING	22.16	$75.00	$1,662.00
HEALTH SERVICES/LAB DRUG TESTS	80.00	$50.00	$4,000.00
Reward/Incentives	118.25	$25.00	$2,956.25
YASI Risk Assessment	2.00	$550.00	$1,100.00
YLS Risk Assessment	100.00	$15.00	$1,500.00
		Total Non-Scheduled	$18,556.25

E. Service Component - In-Home Care or Basic Grant

(Add Totals for A, B, C, and D above)	Total Service Component Cost	$522,772.00

F. Public Revenue:

If you plan to fund any portion of this service component with other public revenue including other Child Care Funds or Basic Grant monies, or if this component is generating revenue (i.e. third party payments) specify the following:

SOURCE	To Be Provided	Yearly Cost
	Total Public Revenue	$0.00

G. Subtract Total Public Revenue from Total Service Component Cost (E-F)

Total Cost to Basic Grant, Net Anticipated IHC Matchable Expenditure (Gross Costs Less Other Revenue)	$522,772.00

H. Program Specific Information:

1. Component Status

☐ Continued ☐ Terminated ☑ Revised ☐ New

2. Target Population(s) Served - Check all that apply.

A. Children Under Jurisdiction of Court

☑ Delinquent ☐ Neglect

B. Children NOT Under Jurisdiction of Court

☑ Written Complaint ☐ CPS Category I or II ☑ Children likely to come under Jurisdiction of the Court

3. Area(s) of Intended Impact - Check primary area(s) only.

A Reduction In:

☐ Number of Youth Petitioned

☑ Number of Adjudications

☑ Number of Days of Family Foster Care

☑ Number of Days of Out-of-Home Detention

☐ Number of Days of Shelter Care

☑ Number of Days of Residential Treatment Care

☐ Number of State Wards Committed (Act 150 & 220)

4. Service Focus - Check all that apply.

☑ Provide early intervention to treat within the child's home ☑ Effect early return from foster or institutional care

I. Program Description - Must be completed for all components, except those being terminated, each year.

The purpose of Home Intensive Care Probation (HIC) is to provide intensive services to delinquent youth who are within, or likely to come within, the jurisdiction of the Family Division of the Circuit Court due to delinquent behaviors. A youth may simultaneously participate in a number of services coordinated within the HIC component to address needs, reduce risk to reoffend, and ultimately to avoid an out-of-home placement.
Participating youth are able to obtain these services when a written complaint, referral or petition has been received and accepted by the court. Youth are either court ordered to receive these services and/or the youth and parent/guardian/custodian have signed the Terms and Conditions form, Diversion Agreement or other agreement. A youth may also be ordered into HIC at the dispositional hearing as an alternative to out-of-home placement.
Court ordered services are intensive and not available through existing state and/or federal programs:
- Juvenile Probation Officers and the Treatment Specialist (therapist) maintain a worker to case ratio that does not exceed 1 to 20;
- Juvenile Probation Officers have case management responsibility, as defined by the Child Care Fund Handbook;

The following programs/services are included within the IHC component:
- Intensive Probation Phase Program: Home Detention (HD) and Home Intensive Care (HIC);
- Juvenile Diversion;
- Tether Surveillance;
- Risk/needs and other assessments, per Court policy, to understand the youths risk to reoffend and target areas for risk reduction; risk/needs data is entered, compiled, and analyzed in the Youth Center client-based case management system. Youth and parents have access to their risk/needs information to monitor progress;
- Sex offender assessments, Evidence based sex offender programming and individual and group treatment;
- CHOICE (Individual and family therapy and other therapeutic interventions, as appropriate);
- Family engagement activities and events;
- Substance abuse testing and treatment;
- Community Probation (using several evidence-based models, including EPICS, Thinking for Change, and ART);
- MRT group (Moral Reconation Therapy)
- The juvenile diversion program targets juvenile delinquents who are first time offenders, those with minor or less serious offenses, and those whom the court deems is in the best interest to avoid formal court adjudication. The diversion officer is assigned a caseload of no more than 20 open cases at a time, and maintains consistent and regular contact with the delinquent and delinquents' family to monitor compliance with the diversion agreement. In every diversion case, both the juvenile delinquent and parent sign a diversion agreement. Each agreement has specific goals and/or accomplishments which must be completed in a designated amount of time for successful discharge from diversion. The diversion officer makes weekly face-to-face contact with the juvenile delinquent until the diversion agreement is successfully completed. If unsuccessful, the diversion agreement is revoked and the petition may be placed on the court's formal docket. The diversion program lowers petitions in the majority of cases.

Through the diversion program, referrals are often made to alternative agencies to address issues with mental health, substance abuse, and personal accountability, and to identify community and family supports for the juvenile delinquent. Each juvenile delinquent's diversion agreement is individually tailored to meet the needs of that delinquent with specific, measurable, and attainable goals with a primary focus on rehabilitation and avoidance of the juvenile justice system. The diversion program helps to reduce the number of formal juvenile adjudications by empowering families to put services in place to address the issues that led to court involvement, all while the juvenile delinquent is being monitored informally by a court officer. The diversion program is intended to reduce the risk of out-of-home placement before the court takes formal jurisdiction of the juvenile delinquent and orders services, rehabilitative supports, and possible out-of-home placement. The juvenile delinquent is able to take accountability for the harm caused, participate voluntarily in services, and avoid any further formal court involvement. The length of a diversion case varies. Many cases are open for only a few days while others are ongoing for weeks or even several months. Often there are cases opened and closed within the same month.

The Court ensures each worker maintains, at a minimum, an average of one face-to-face contact per week during the period a case is open for service. If a youth ordered into an HIC program requires temporary or short-term out-of-home placement in a residential or treatment facility, face-to-face contacts may occur once per 30-day period during the term of the short-term out-of-home placement.

Each service provided is intended to reduce the number of days a youth may spend in out-of-home detention or residential care. Program funds are not used for basic family needs available through state and/or federal programs. The funds are used when no other funding is available to cover the at-risk youth's needs. None of the expenditures for any of these programs are used for judicial costs.

AUTHORITY: Act 87,Public Acts of 1978, as amended. COMPLETION: Is Required. PENALTY: State reimbursement will be withheld from local government	Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

Component Detail Report (DHS-2094)

Michigan Department of Health & Human Services (MDHHS)
Children's Services Agency
Barry County for October 01, 2022 through September 30, 2023

Service Component (Full Title/Name)	Component Type
WRAPAROUND 2023	In-Home Care

A. Personnel **Administrative Unit:** ○ MDHHS ⊙ Court

1. Salary and Wages			
Name(s)	Job Title	Hours/Week	Yearly Cost
SHERYL OVERMIRE	CASEWORKER	40.00	$61,006.00
TANYA SPITZLEY	SECRETARY	4.00	$4,027.00
DAVE PELON	DEPUTY COURT ADMINISTRATOR	2.00	$3,866.00

2. Fringe Benefits	
FICA	$5,962.00
HEALTH INSURANCE	$2,618.00
LIFE INSURANCE	$99.00
DENTAL INSURANCE	$920.00
RETIREMENT	$23,115.00
DISABILITY	$310.00
DISABILITY ADM	$35.00
WORKERS COMPENSATION	$839.00
UNEMPLOYMENT	$117.00
SICK TIME	$1,714.00
HEALTH INSURANCE IN LIEU OF	$6,718.00
LONGEVITY	$600.00
HCSP CONTRIBUTION	$414.00
Total Personnel	$112,360.00

B. Program Support (For employees identified in "A" above)

1. Travel	Rate/Mile	Estimate No. of Miles	Yearly Cost
MILEAGE FOR CASE SUPERVISION AND TRAINING	$0.63	8,571.43	$5,357.14

2. Supplies and Materials (Description/Examples)	Yearly Cost
General Office supplies such as: PAPERS,PENS,POSTAGE,MARKERS, FLIP CHARTS,TAPE,DISCS,FACE MASKS, ETC	$1,560.00

3. Other Costs (Description/Examples)	Rate/Unit	Yearly Cost
EMPLOYEE TRAINING, TRAINING SUPPLIES/MEALS	$0.00	$1,208.00
CELL PHONE	$0.00	$1,650.00
	Total Program Support	$9,775.14

* Must comply with the definitions and limits listed for court operated facilities in the Child Care Fund Handbook.

C. Contractual Services

1. Unit Rates				
Name(s)	Rate	Unit Type	Total Units/ Contract	Yearly Cost
2. Closed End Contracts				
			Total Contractual	$0.00

D. Non-Scheduled Payments

Type of Service (Description)	Anticipated No. Units to be Provided	Average Cost of Each Service Unit	Yearly Cost
YASI RISK/NEEDS ASSESSMENT	1.00	$550.00	$550.00
		Total Non-Scheduled	$550.00

E. Service Component - In-Home Care or Basic Grant

(Add Totals for A, B, C, and D above)	Total Service Component Cost	$122,685.14

F. Public Revenue:

If you plan to fund any portion of this service component with other public revenue including other Child Care Funds or Basic Grant monies, or if this component is generating revenue (i.e. third party payments) specify the following:

SOURCE	To Be Provided	Yearly Cost
	Total Public Revenue	$0.00

G. Subtract Total Public Revenue from Total Service Component Cost (E-F)

Total Cost to Basic Grant, Net Anticipated IHC Matchable Expenditure (Gross Costs Less Other Revenue)	$122,685.14

H. Program Specific Information:

1. Component Status

☐ Continued ☐ Terminated ☑ Revised ☐ New

2. Target Population(s) Served - Check all that apply.

A. Children Under Jurisdiction of Court

☑ Delinquent ☑ Neglect

B. Children NOT Under Jurisdiction of Court

☑ Written Complaint ☑ CPS Category I or II ☑ Children likely to come under Jurisdiction of the Court

3. Area(s) of Intended Impact - Check primary area(s) only.	
A Reduction In:	☐ Number of Days of Out-of-Home Detention
☐ Number of Youth Petitioned	☐ Number of Days of Shelter Care
☐ Number of Adjudications	☑ Number of Days of Residential Treatment Care
☑ Number of Days of Family Foster Care	☐ Number of State Wards Committed (Act 150 & 220)

4. Service Focus - Check all that apply.	
☑ Provide early intervention to treat within the child's home	☑ Effect early return from foster or institutional care

I. Program Description - Must be completed for all components, except those being terminated, each year.

The Wraparound Program (WA) provides the Court, Department of Health and Human Services, Community Mental Health, Family Kinship Care and the various school systems within the County a program whereby youth and family members are provided services within their own home and community as an alternative to out-of-home care or as an alternative to prevent out-of-home care.

WA is a team planning process that provides for the coordination of services to youth and families in an attempt to accelerate the early return of the youth from out-of-home care or as an alternative to prevent out-of-home care. WA is an established practice of coordinating services and supports for families and their children who are involved with multiple systems, have a serious emotional disturbance and where other forms of intervention have not had successful outcomes. The areas of intended impact are: a reduction of days in out-of-home placement, specifically foster care and residential treatment; and as an alternative to prevent out-of-home care.

WA services for youth involves highly individualized planning. WA utilizes a Family Team approach with team members being determined by the family and may include clinicians, Child Welfare Workers, Juvenile Probation, schools, community agencies, other family members and anyone else the family finds supportive. The WA caseworker assists the family with the coordination of services and support for the youth and family.

The target population for this program are: delinquent youth for whom a petition, complaint, or referral has been filed and accepted by the court or the youth has been ordered into Home Intensive Care (HIC) at disposition; receives intensive services or is involved in court ordered out-of-home care; youth in abuse or neglect cases and youth with a Category I or II Child Protective Services case. At risk youth may be referred to WA by the Court, School, Counselors, Department of Health and Health Services, Community Mental Health, Youth Service Bureau, or Law Enforcement. The caseworker must receive a written referral from a referring agency and the youth and family served must meet two or more of the following criteria:

- Youth has been involved in multiple youth serving systems.
- Youth is at risk of out-of-home placement or is currently in out-of-home placement.
- Youth has been served through other mental health services with minimal improvement in functioning.
- The risk factors exceed capacity for traditional community-based options.
- Numerous providers are serving youth in the family and the identified outcomes are not being met.

The HIC early return option is used to accelerate the early return of youth from foster care, institutional care, or other out-of-home care and:

- The case plan identifies an early return goal
- The case plan identifies all the parties and services
- The parent/guardian/custodian and the youth have agreed in writing to receive HIC services. If the youth is younger than 14 years of age and/or unable to consent to receive services, the court must order the youth into the program.
- The court will document that the caseworker responsible for case plan development and monitoring meets the qualification outlined by SCAO Order No. 1985-5 or MDHHS policy.

The parent/guardian must agree in writing to participate in the WA program. Youth who are within, or likely to come within the jurisdiction of the court must also agree in writing to participate in the WA program.

The Intake Assessment/Evaluation provides comprehensive evaluation and assessment of juveniles. Participating youth are able to obtain these services when a written complaint, referral or petition is accepted by the court. The purpose of this comprehensive evaluation and assessment is to ensure all possible diversion and disposition alternatives are considered based upon the individual needs of the juvenile, the juvenile's family and the community. This program will reduce the number of juveniles in out of home-placement by providing case management and intensive community monitoring with the goal of treating the juvenile in their home. The caseworker provides case management and intensive community monitoring with the goal of treating the juveniles in their home without formal court involvement and placement in foster care or residential services.

This evaluation and assessment consists of:

1. A thorough social history based upon interviews with the juvenile, his/her parent(s) or other parties such as extended family members who can provide pertinent information regarding the juvenile.

2. Risk/needs and other assessments, per Court policy, to understand the youths risk to reoffend and target areas for risk reduction; risk/needs data is entered, compiled, and analyzed in the Youth Center client-based case management system. Youth and parents have access to their risk/needs information to monitor progress.

3. A comprehensive review of the juvenile's school history.

4. A review of any existing psychological, psychiatric or other evaluations that may have been conducted on the juvenile. Many

Juveniles petitioned for delinquent offenses have a history with a variety of community agencies and/or counseling agencies. A review of these prior interventions is critical to avoid duplication of services or to consider re-instituting services that were successful in addressing the underlying issues resulting in the delinquent behavior.

5. A referral and review of any necessary evaluations in addition to those indicated above. This may include new or updated psychological evaluations, psychiatric evaluations, sex-offender assessments or evaluations of the juvenile's parent(s).

6. A thorough review of any existing record of prior court involvement including delinquency history and/or history of abuse/neglect petitions filed with the court.

Services are intensive. The worker-to-case ratio is not more than 1 to 20 and there is not less than an average of one face-to-face contact per week. Expenditures for this program do not cover judicial costs. The Deputy Court Administrator dedicates 2 hours per week supervising WA programming, WA staff, Intake Assessment/Evaluation and monitoring spending. Program funds are not used for basic family needs available through other state or federal funding sources. The funds are used when no other funding is available to cover the at-risk youths needs.

AUTHORITY: Act 87,Public Acts of 1978, as amended. COMPLETION: Is Required. PENALTY: State reimbursement will be withheld from local government	Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

In-Home Care Certification (DHS-167)

Michigan Department of Health and Human Services (MDHHS)
Children's Services Agency

Barry County for October 01, 2022 through September 30, 2023

In-Home Care (IHC) program expenditures are restricted to new or expanded programs that are alternatives to out-of-home institutional or foster care. IHC funds may not be used to duplicate services.

A. ELIGIBLE CLIENT/STAFFING

1. Children under the jurisdiction of the Court, as an alternative to removal from the child's home, provided that:
   a. such care is an alternative to detention or other out-of-home care and:
      - a written complaint has been received and accepted by the Court
      - the expenditures are not for judicial cost
      - the caseload size or services are intensive
      - non-scheduled payments are not made to pay for basic family needs otherwise available through public assistance programs
      - the parent(s) and the youth have agreed in writing to receive IHC services, or a temporary order has been entered pending an adjudication hearing; or

   b. such care is provided to children who at the dispositional hearing are ordered into IHC as an alternative to foster care or other out-of-home care, and:
      - the expenditures are not for judicial costs
      - the services are intensive, and
      - non-scheduled payments are not made to pay for basic family needs otherwise available through public assistance programs
2. The IHC early return option may be used to accelerate the early return of a youth from family foster care, institutional care, or other out-of-home care when the case identifies an early return goal and the services are provided to members of the child's family. The case plan should identify the family strengths and deficiencies which, if corrected, would permit the youth to be returned home early. IHC services would typically be provided to the family during the time that the youth is in out-of-home care and, if necessary, for a period of time after the youth has returned to the family.
3. The County Michigan Department of Health and Human Services (MDHHS) may provide IHC services if the juvenile court orders care and supervision of a court ward.
4. The County MDHHS may provide IHC services from its subaccount for CPS category I or category II cases provided that:
   - such IHC services prevent the need to petition the juvenile court for removal or prevent placement in voluntary foster care, and
   - non-scheduled payments are not made to cover basic family needs otherwise available through public assistance programs.
5. IHC funds shall not be used to meet the court staff-to-youth population ratio of 1 to 6,000 as specified in the Juvenile Court Standards and Administrative Guidelines for the Care of Children.
6. Court staff hired after 4/30/85, who are responsible for case plan development and monitoring, must meet the qualifications established in the Juvenile Court Standards and Administrative Guidelines for the Care of Children.
   - Supervisory Personnel
   - Probation Officers
   - Counselors
7. County MDHHS staff and supervisor staff providing direct IHC services must meet the standards set forth in Rules 400.6124, 400.6126 and 400.6128 of the Administrative Rules for Child Placing Agencies.
8. County MDHHS staff and supervisory staff providing direct IHC services must be state civil servants assigned to classifications and levels equivalent to staff and supervisors in the state foster care program.
9. In IHC programs, county MDHHS or Juvenile Court contractual staff, who are responsible for case plan development and monitoring, must meet the requirement of staff supervising children in foster care, as established in the Juvenile Court Standards and Guidelines for the Care of Children.
10. IHC reimbursements for program and administrative office space, county purchased supplies, salaries and wages for county employees who provide direct services or support for these services are subject to the same restrictions as reimbursements in county-operated institutions.

B. USE OF THE IN-HOME CARE OPTION FOR NON-SCHEDULED PAYMENTS

If all other IHC requirements are met, budgeted non-scheduled payments for services available to youth in foster care may be provided to youth in their own home. (Non-scheduled payments are defined in the Child Care Handbook).

C. CASE RECORD DOCUMENTATION REQUIREMENTS

Individual case documentation is required for all IHC clients. A caseload list is required for every IHC component. As a minimum, case records must include the following:

- o family case assessment which identifies, by service component, the problems and need for IHC services
- o day of intake
- o type of complaint/allegation, supported as follows:
  - (1) delinquency - a copy of the complaint or court order, when applicable, placing the child in IHC as part of a formal disposition.
  - (2) abuse/neglect - allegation and substantiation entered on the DHS-133 in Department cases;
- o treatment plan which identifies the treatment, objectives and the action steps and timetables which will be used to reach the objectives
- o case plan changes as a result of supervisor/case worker or contractee/contractor case reviews
- o quarterly progress reports
- o dates, type and purpose of service contacts made with the client. Note: weekly face to face contact is required
- o legal status of youth and the family, and
- o the living arrangement of the youth at termination of IHC services.

Note: Case record content for all foster care cases, under the supervision of a county MDHHS, should be maintained according to Services Manual Item 722 (6a-9). It is suggested that all IHC material be kept in the first inside section of the foster care file.

IHC service purchases from a private or public provider require a contract unless the service is supportive of a large component (i.e., clothing or dental work for a youth serviced through an established IHC program as for example, intensive supervision). These non-scheduled payments do not require contracts.

Only IHC expenditures described in the Annual Plan and Budget and approved by Child and Family Services are reimbursable.

IHC funds and services are subject to state review and audit and non-compliance with the above restrictions and requirements may result in withholding or repayment of state reimbursement.

All IHC contractual services purchased with county appropriated monies shall be the sole responsibility of the county. The signature of the County MDHHS Director must be with authority from the County to enter into contractual agreements on behalf of the County for the expenditure of the County Child Care Funds.

The county must have all IHC contracts processed through the county's formal contract approval procedures.

The signatures below certify that IHC policy stated in the document has been reviewed. It is understood that these are conditions for claiming IHC fund reimbursement.

_____ Date: _____

Presiding Judge of Family Division of Circuit Court,
Juvenile Division

_____ Date: _____

County Director of Michigan Department of Health and Human Services as Agent of the County

Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.	AUTHORITY: P.A. 87 of 1978. RESPONSE: Is Required CONSEQUENCE FOR NON COMPLETION: Child care funds will not be reimbursed.

Basic Grant Summary (DHS-2095)

Michigan Department of Health and Human Services (MDHHS)
Children's Services Agency
Barry County for October 01, 2022 through September 30, 2023

I.List all service components which make up the county Basic Grant program, and specify the requested information for each.

	Court Service Components	Administration Unit	Cost to Basic Grant
1	YOUTH SERVICE BUREAU/TRUANCY DIVERSION 2023	COURT	$15,000.00
		Subtotals - Court:	$15,000.00

	MDHHS Service Components	Administration Unit	Cost to Basic Grant
1			
		Subtotals - MDDHS:	

Total Basic Grant: $15,000.00

II. For each service component listed above, complete a separate IN-HOME CARE/BASIC GRANT BUDGET DETAIL REPORT (DHS-2094), filling in the appropriate budget items.

AUTHORITY: Act 87, Public Acts of 1978, as amended
RESPONSE: Required.
PENALTY: State reimbursement will be withheld from local government.

Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

Component Detail Report (DHS-2094)

Michigan Department of Health & Human Services (MDHHS)
Children's Services Agency
Barry County for October 01, 2022 through September 30, 2023

Service Component (Full Title/Name)	Component Type
YOUTH SERVICE BUREAU/TRUANCY DIVERSION 2023	Basic Grant

A. Personnel **Administrative Unit:** ○ MDHHS ⊙ Court

1. Salary and Wages			
Name(s)	Job Title	Hours/Week	Yearly Cost
VACANT JUVENILE CASEWORKER	CASEWORKER	40.00	$50,648.00

2. Fringe Benefits	
FICA	$3,971.00
LIFE INSURANCE	$86.00
HEALTH INSURANCE	$20,669.00
DENTAL/OPTICAL	$800.00
RETIREMENT	$16,846.00
DISABILITY	$228.00
DISABILITY ADM	$30.00
WORKMANS COMP	$658.00
UNEMPLOYMENT	$86.00
SICK TIME	$1,260.00
LONGEVITY	$0.00
HCSP CONTRIBUTION	$360.00
Total Personnel	$95,642.00

B. Program Support (For employees identified in "A" above)

1. Travel	Rate/Mile	Estimate No. of Miles	Yearly Cost
MILEAGE FOR CASE SUPERVISION AND TRAINING	$0.63	4,464.29	$2,790.18

2. Supplies and Materials (Description/Examples)	Yearly Cost
General office supplies such as: PAPERS, PENS, COPIES,STAMPS, MARKERS, FLIP CHARTS,FACE MASKS, ETC.	$824.00

3. Other Costs (Description/Examples)	Rate/Unit	Yearly Cost
MEMBERSHIPS	$0.00	$50.00
EMPLOYEE TRAINING/MEALS	$0.00	$600.00
CELL PHONE	$0.00	$979.00
	Total Program Support	$5,243.18

* Must comply with the definitions and limits listed for court operated facilities in the Child Care Fund Handbook.

C. Contractual Services

1. Unit Rates				
Name(s)	Rate	Unit Type	Total Units/ Contract	Yearly Cost

2. Closed End Contracts	
Total Contractual	$0.00

D. Non-Scheduled Payments

Type of Service (Description)	Anticipated No. Units to be Provided	Average Cost of Each Service Unit	Yearly Cost
PSYCHOLOGICAL EVALUATIONS/CO-PAYS	2.00	$350.00	$700.00
		Total Non-Scheduled	$700.00

E. Service Component - In-Home Care or Basic Grant

(Add Totals for A, B, C, and D above)	Total Service Component Cost	$101,585.18

F. Public Revenue:

If you plan to fund any portion of this service component with other public revenue including other Child Care Funds or Basic Grant monies, or if this component is generating revenue (i.e. third party payments) specify the following:

SOURCE	To Be Provided	Yearly Cost
COUNTY GENERAL FUND JJ APPROPRIATION	SUPPLEMENTAL PROGRAM	$86,585.18
	Total Public Revenue	$86,585.18

G. Subtract Total Public Revenue from Total Service Component Cost (E-F)

Total Cost to Basic Grant, Net Anticipated IHC Matchable Expenditure (Gross Costs Less Other Revenue)	$15,000.00

H. Program Specific Information:

1. Component Status

☐ Continued ☐ Terminated ☑ Revised ☐ New

2. Target Population(s) Served - Check all that apply.

A. Children Under Jurisdiction of Court

☑ Delinquent ☐ Neglect

B. Children NOT Under Jurisdiction of Court

☑ Written Complaint ☐ CPS Category I or II ☑ Children likely to come under Jurisdiction of the Court

3. Area(s) of Intended Impact - Check primary area(s) only.

A Reduction In:

☑ Number of Youth Petitioned

☑ Number of Adjudications

☐ Number of Days of Family Foster Care

☐ Number of Days of Out-of-Home Detention

☐ Number of Days of Shelter Care

☐ Number of Days of Residential Treatment Care

☐ Number of State Wards Committed (Act 150 & 220)

4. Service Focus - Check all that apply.	
☑ Provide early intervention to treat within the child's home	☐ Effect early return from foster or institutional care

I. Program Description - Must be completed for all components, except those being terminated, each year.

YOUTH SERVICE BUREAU
BASIC GRANT

The Youth Service Bureau (YSB) program is designed to provide early intervention to treat within the child's home in order to divert youth prior to formal processing within the Juvenile Court. YSB serves as both a pre-arrest diversion program and a pre-court diversion program. The target population for this program are status offenders and delinquent youth who have come under jurisdiction of the Court or those who have a written complaint and are likely to come under the Court's jurisdiction. Youth eligible for the YSB program must meet two of the six risk factors: (1) history of confirmed abuse and/or neglect of the youth, (2) history of school truancy, suspensions, or expulsions, (3) youth has run away from home, (4) use of alcohol or drugs, (5) ineffective, inconsistent, or nonexistent parental control, and (6) negative or delinquent peer relations. YSB's areas of intended impact includes reduction in number of youth petitioned and/or adjudicated by offering services to those children and their families. These cases are handled less expensively than court involvement, and the services, independent of the Court, are at least as successful, if not more so. Expenditures for this program do not cover judicial costs. Program funds are not used for basic family needs available through other state or federal funding sources.

AUTHORITY: Act 87,Public Acts of 1978, as amended. COMPLETION: is Required. PENALTY: State reimbursement will be withheld from local government	Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.

Basic Grant Certification (DHS-168)

Michigan Department of Health and Human Services (MDHHS)
Children's Services Agency

Barry County for October 01, 2022 through September 30, 2023

1. Basic Grant funded programs are restricted to youth who are within or are likely to come within the jurisdiction of the probate court as defined under MCL 712A.1 to 712A.28.

Eligible Youth

- o All youth who are under court jurisdiction or for whom a complaint or petition has been filed with the court.
- o Youth who are at risk.

Youth are considered to be at risk and "likely to come within court jurisdiction" if any two or more of the following risk factors apply to the youth and are documented in case files:

a. Reported abuse and/or neglect of the youth.
b. History of school truancy, suspensions or being expelled.
c. Run away from home.
d. Use of alcohol or drugs.
e. Ineffective, inconsistent or nonexistent parental control.
f. Negative or delinquent peer relationship(s).

2. The Basic Grant cannot be used to supplant existing service costs or to pay for any judicial functions that are the responsibility of the court. In general, such "judicial functions" relate to court administration and adjudication costs. (See Child Care Fund Handbook).

3. Basic Grant funds shall not be used to pay for court case services personnel hired after April 30, 1985, who do not meet the minimum standards of education and training as stated in the Juvenile Court Standards and Guidelines for the Care of Children. The following positions are included:
   - o Supervisory Personnel
   - o Probation Officers
   - o Counselors

4. Non-scheduled payments may not be made to pay for basic family needs otherwise available through public assistance programs.

5. In Basic Grant programs, County Michigan Department of Health and Human Services staff responsible for individual case plan development and monitoring must meet the requirements for staff supervising children in foster care, as specified in the Administrative Rules for Child Placing Agencies.

6. In Basic Grant programs, department or juvenile court contractual staff who develop and/or monitor case plans, must meet the requirements for staff supervising children in foster care, as established in the Juvenile Court Standards and Guidelines for the Care of Children.

7. Court administered child specific services provided through Basic Grant reimbursement shall be documented in individual files which conform to the record keeping requirements in the Juvenile Court Standards and Guidelines for the Care of Children. A caseload list must be maintained for each Basic Grant component.

8. County Michigan Department of Health and Human Services administered child specific services provided through Basic Grant reimbursement, shall be documented in individual case files which conform to record keeping requirements in the Administrative Rules for Child Placing Agencies. A caseload list must be maintained for each Basic Grant component.

Only Basic Grant expenditures described in the Annual Plan and Budget and approved by Child and Family Services are reimbursable.

Basic Grant services purchased from a private or public provider require a contract unless the service is supportive of a large component (i.e., clothing or dental work for a youth serviced through an established Basic Grant program as for example, intensive supervision). These non-scheduled payments do not require contracts.

Basic Grant funds are subject to state review and audit and non-compliance with the above restrictions and requirements may result in withholding or repayment of state reimbursement.

All Basic Grant contractual services purchased with county appropriated monies shall be the sole responsibility of the county. The signature of the County MDHHS Director must be with authority from the County to enter into contractual agreements on behalf of the County for the expenditure of the County Child Care Funds.

The county must have all Basic Grant contracts processed through the county's formal contract approval procedures.

The signatures below certify that Basic Grant policy stated in the document has been reviewed. It is understood that these are conditions for claiming Basic Grant fund reimbursement.

_____ Date: _____

Presiding Judge of Family Division of Circuit Court, Juvenile Division

_____ Date: _____

County Director of Michigan Department of Health and Human Services as Agent of the County

Michigan Department of Health & Human Services (MDHHS) will not discriminate against any individual or group because of race, religion, age, national origin, color, height, weight, marital status, sex, sexual orientation, gender identity or expression, political beliefs or disability. If you need help with reading, writing, hearing, etc., under the Americans with Disabilities Act, you are invited to make your needs known to an MDHHS office in your area.	AUTHORITY: P.A. 87 of 1978. RESPONSE: Is Required CONSEQUENCE FOR NON COMPLETION: Child care funds will not be reimbursed.

AGENDA REQUEST FORM

PROPOSED FOR MEETING OF: 8/9/22, Board of Commissioners

DEPARTMENT: Airport Commission

PREPARED BY: Luella Dennison, Deputy County Administrator

SUBJECT: Approval of Expenditure for Terminal Building Planning Project

SPECIFIC ACTION(S) REQUESTED:
To recommend to the Board of Commissioners, in accordance with the Airport Commission Joint Operating Agreement, approval to spend approximately $40,000 from the Airport Fund for engineering/pre-construction for the Terminal Planning Project, as approved by the Airport Commission.

SPECIFIC ACTION(S) RECOMMENDED BY THE COW (Admin. use only): Approval to spend approximately $40,000 from the Airport Fund for engineering/pre-construction for the Terminal Planning Project, as approved by the Airport Commission, in accordance with the Airport Commission Joint Operating Agreement.

DESCRIPTION OF ACTION:
The Hastings City / Barry County Airport Commission is requesting approval from the County Commission and City Council to expend approximately $40,000 from the Airport Fund for engineering/pre-construction work for the Terminal Planning Project. The work will be performed by Mead & Hunt. As described in the attached email correspondence, the funds will be reimbursed by the grant in FY23.

The Airport Commission approved this expenditure at their meeting on July 27, 2022. The minutes from the meeting will be distributed when they are available.

TIME FRAME OF ACTION: Immediate.

FUNDING REQUIRED: YES___X_____ NO _____

IF YES, ANSWER THE FOLLOWING:

1. FUNDING SOURCE (Federal, State, or Local) __Airport Fund_____
2. IF LOCAL, SPECIFY FUND: ____Airport Fund (295)_____
3. AMOUNT REQUESTED: _____Approximately $40,000.00_____
4. AMOUNT OF ONGOING COST, AND INTERVAL (Monthly, Quarterly, Annual, etc.) __NA_____
5. FINANCIAL IMPACT ON OTHER DEPARTMENTS:___None_____

PERSONNEL IF REQUIRED: NA

NEW OR RENEWAL: New.

ANY OTHER PERTINENT INFORMATION: NA

CONTACT PERSON WITH PHONE NUMBER: Mark Noteboom, Airport Manager, 269-838-8056; Michael Brown, County Administrator, 269-945-1284

From: "Mark Noteboom" <mn9d9r@gmail.com>
Date: July 28, 2022 at 8:09:28 AM EDT
To: <jsmelker@barrycounty.org>, "Vivian Conner" <vconner@barrycounty.org>, "'Lois Bowers'" <don-lois-bowers@hotmail.com>, <davidtossava@sbcglobal.net>, "Ron Holley" <ronholley1222@hotmail.com>
Subject: FW: 9D9 ACIP and Terminal Project

For the pre construction deposit. Mark

From: Sean Thompson [mailto:Sean.Thompson@meadhunt.com]
Sent: Monday, July 25, 2022 4:03 PM
To: Mark Noteboom (mn9d9r@gmail.com)
Cc: Bob Leisenring
Subject: 9D9 ACIP and Terminal Project

Mark,

I plan to have your ACIP ready by the end of the week based on our meeting last week. More information to follow on that one.

The other item is that looking at the terminal building project I think we will need to approach this one with several projects.

1. Terminal planning project. This will likely be required by MDOT. It establishes what we plan to do with the terminal and an eligibility report.
2. Final design – FY 2023
3. Construction – FY2024

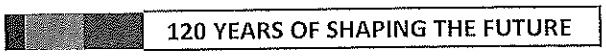
In order to hit the spring grant deadline for design next year I would suggest that we initiate the terminal planning project ASAP. This will require the airport to front the project until it can be reimbursed in FY23. From past projects this effort has been in the $40k area.

If that sounds agreeable I will get started working with our architecture partner.

FYI, Mead & Hunt was selected for terminal rehab in the last selection so we should be good to perform this work.

SEAN THOMPSON, PE, CM

PROJECT MANAGER, AVIATION
Mead & Hunt
Direct: 517-908-3103 | Cell: 517-614-9765 | Transfer Files
meadhunt.com | LinkedIn | Twitter | Facebook | Instagram



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Hastings City / Barry County Airport Commission
Draft Meeting Minutes
July 27, 2022

1. **Call to Order.** The meeting was called to order by Chairperson Holley at 4:30 p.m.

2. **Pledge of Allegiance.** Holley led the recitation of the Pledge of Allegiance.

3. **Roll Call.** Roll was taken. Present: Holley, Tossava, Bowers, Conner and Smelker.

4. **Approval of Agenda.** Holley asked for any additions or amendments to the agenda. Noteboom asked to have Mead and Hunt and the rehab project added to new business.

   Motion by Connor, support by Bowers, to approve the agenda as amended.

   In favor: Bowers, Conner, Holley, Smelker and Tossava.
   Opposed: None.
   Motion carried.

5. **Limited Public Comment.** Holley asked if there was any limited public comment.

   Ross DeMaadg reported on the Dawn Patrol that happened at the airport on July 9, 2022. Ross also talked about the price of fuel.

6. **Approval of Minutes.** Holley asked for comments regarding the draft minutes of the June 22, 2022 regular meeting of the Airport Commission.

   Motion by Smelker, support by Conner to approve the minutes of the June 22, 2022 regular meeting of the Airport Commission as presented.

   In favor: Bowers, Connor, Smelker, Holley and Tossava.
   Opposed: None.
   Motion carried.

7. **Financial Reports.** Holley introduced discussion regarding the June 2022 Airport Fund financial reports. Mark Noteboom gave an overview and answered questions.

   Motion by Smelker, second by Bowers to accept and place on file the financial reports for June, 2022.

   In favor: Tossava, Smelker, Connor, Bowers and Holley.
   Opposed: None.

   Motion carried.

8. **Old Business.**

13. **Adjournment.** Motion by Smelker, support by Connor to adjourn at 5:20 p.m.

In favor: Smelker, Connor, Holley, Bowers and Tossava.
Opposed: None.

Submitted by: David J. Tossava, Board Secretary

AGENDA REQUEST FORM

PROPOSED FOR MEETING OF: 8/9/22 BOC

DEPARTMENT: Drain Commissioner

PREPARED BY: Tammy Hayes/Jim Dull

SUBJECTD: Truck purchase

SPECIFIC ACTION(S) REQUESTED:
To recommend to the Board of Commissioners approval to purchase a 2023 Chevy Silverado 6500HD for the amount of $78,042.58, with funds to be paid from the Vehicle Fund.

SPECIFIC ACTION(S) RECOMMENDED BY THE COW (Admin. use only): Approval to purchase a 2023 Chevy Silverado 6500HD for the amount of $78,042.58, with funds to be paid from the Vehicle Fund.

DESCRIPTION OF ACTION:
We are requesting approval of funds for the purchase of a 2023 Chevy Silverado 6500HD; we have put a request in our 2023 Capital budget however, we are requesting approval before this; we were told if we wait until the beginning of the year to order, inventory won't be available until months later; we would like to order it now.

TIME FRAME OF ACTION: Immediate

FUNDING REQUIRED: YES x NO _____

IF YES, ANSWER THE FOLLOWING:

1. FUNDING SOURCE (Federal, State, or Local) County
2. IF LOCAL, SPECIFY FUND: Vehicle Fund
3. AMOUNT REQUESTED: $78,042.58
4. AMOUNT OF ONGOING COST, AND INTERVAL (Monthly, Quarterly, Annual, etc.)
5. FINANCIAL IMPACT ON OTHER DEPARTMENTS:

PERSONNEL IF REQUIRED: N/A

NEW OR RENEWAL: New

ANY OTHER PERTINENT INFORMATION: N/A

CONTACT PERSON WITH PHONE NUMBER:
Jim Dull or Tammy Hayes 945-1385

LaFontaine Automotive Group
3625 S. Pennsylvania Ave.
Lansing, MI 4891
517-574-7137-Direct
517-795-9834-Cell
kmartin@lafontaine.com

QUOTATION

Name:	Barry County Drain Commission				
Address:	1725 W M43				
City:	Hastings	State:	MI	Zip:	49058
Contact:	Jim Dull				
Phone:	269-838-5704				
Email:	jdull@barrycounty.org				

Date:	6/30/2022
Quote:	6322

CK56403 2023 Chevrolet Silverado 6500HD Regular Cab Chassis 4WD		$71,479.00
GAZ	Summit White	
H2Q	Dark Ash Vinyl Seats With Jet Black Accents	
L5D	6.6L Duramaz Turbo Diesel V8 Engine	
GZJ	GVWR 22,500 LBS	
I03	4.2" Diagonal Color Display Audio System - Standard	
R6G	GCWR 26,000 LBS	
MIA	Rugged Duty Service Allison 6 Speed Double Overdrive Automatic Transmission	
ED9	Wheelbase 165", 84" CA	
9L7	Upfitter Switch Kit	
SFW	Back-Up Alarm Calibration	
	General Motors Municipal Discount	-$7,400.00
	BS00006603 Knapheide Quote for 11' Dump Body and Accessories	$13,948.58
	State Of Michigan Title Registration	$15.00
	Note per contract delivery is available @ $2.00 per one way mileage.	
	THIS QUOTE IS AN ESTIMATE OF 2023 PRICING	
	Total Cost:	$78,042.58

Signed: *Kim Martin*

WESTERN MICHIGAN UNIVERSITY
Homer Stryker M.D.
SCHOOL OF MEDICINE

MEDICAL EXAMINER AND
FORENSIC SERVICES

2021
Annual Report

OFFICE OF THE MEDICAL EXAMINER

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, and Van Buren Counties

Physical Address:
300 Portage Street
Kalamazoo, MI 49007
Phone: (269) 337-6173
After Hours: (844) 337-6001

Mailing Address
1000 Oakland Drive
Kalamazoo, MI 49008

Hours of Operation:
Our office operates 24 hours per day, 7 days per week, 365 days per year.
Our administrative office is open from 8:00 a.m. to 5:00 p.m. Monday through Friday, with holiday exceptions.

Contact Information:
If you have any questions or would like to schedule a meeting, please contact Dr. deJong via email at Joyce.deJong@med.wmich.edu.

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Editor's note: Every effort has been made to provide the most accurate data in this report by the Quality and Research Manager within the Department of Pathology, Abigail Grande, MPH.

Department of Pathology Faculty

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Medical Examiner

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Vice Chair and Professor
Deputy Medical Examiner

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Deputy Medical Examiner

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Chief, Division of Neuropathology
Deputy Medical Examiner

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Prentiss Jones, Jr., PhD
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Forensic Toxicologist

Christine M. Pink, PhD
Assistant Professor
Forensic Anthropologist

Christopher Ramos, MD
Forensic Pathology Fellow

Anna Tart, MD
(Start date: August 22nd, 2022)
Assistant Professor
Deputy Medical Examiner

Which Deaths Do We Investigate?

The Michigan Compiled Laws (MCL) 52.202 require the county medical examiner or deputy county medical examiner to investigate the cause and manner of death of an individual under each of the following circumstances:

- The individual dies by violence.
- The individual's death is unexpected.
- The individual dies without medical attendance by a physician, or the individual dies while under home hospice care without medical attendance by a physician or a registered nurse during the 48 hours immediately preceding the time of death, unless the attending physician, if any, is able to determine accurately the cause of death.
- The individual dies as the result of an abortion, whether self-induced or otherwise.
- If a prisoner in a county or city jail dies while imprisoned, the county medical examiner or deputy county medical examiner, upon notification of the death of the prisoner, shall examine the body of the deceased prisoner.

We also consider the National Association of Medical Examiners (NAME) standards in deciding which deaths to investigate, which include:

- Deaths due to violence.
- Known or suspected non-natural deaths.
- Unexpected or unexplained deaths when in apparent good health.
- Unexpected or unexplained deaths of infants and children.
- Deaths occurring under unusual or suspicious circumstances.
- Deaths of persons in custody.
- Deaths known or suspected to be caused by diseases constituting a threat to public health.
- Deaths of persons not under the care of a physician.

Identification of Decedent

In Michigan, MCL 52.205 requires a scientific identification in cases where visual identification of a decedent is impossible as a result of burns, decomposition, or other disfiguring injuries or the death is the result of an accident that involved two or more individuals who were approximately the same age, sex, height, weight, hair color, eye color and race. In these cases, the county medical examiner is required to verify the identity of the decedent through fingerprints, dental records, DNA or another definitive identification procedure.

Indications for Complete Autopsy

The decision regarding whether a complete autopsy should be performed is based on the NAME Autopsy Performance Standards. Consequently, an autopsy is performed when the:

1. Death is known or suspected to have been caused by apparent criminal violence.
2. Death is unexpected and unexplained in an infant or child.
3. Death is associated with police action.
4. Death is apparently non-natural and in custody of a local, state, or federal institution.
5. Death is due to acute workplace injury.
6. Death is caused by apparent electrocution.
7. Death is by apparent intoxication by alcohol, drugs, or poison, unless a significant interval has passed, and the medical findings and absence of trauma are well documented.
8. Death is caused by unwitnessed or suspected drowning.
9. Body is unidentified and the autopsy may aid in identification.
10. Body is skeletonized.
11. Body is charred.
12. Forensic pathologist deems a forensic autopsy is necessary to determine cause or manner of death, or document injuries/disease, or collect evidence.
13. Deceased is involved in a motor vehicle incident and an autopsy is necessary to document injuries and/or determine the cause of death.

What is the difference between Cause of Death & Manner of Death?

The cause of death is (a) the disease or injury that initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence that produced fatal injury.

Manner of death determination is something that originated in the United States. Unlike the cause of death, with thousands of possibilities, in Michigan, manner of death is limited to: *Natural*, *Suicide*, *Accident*, *Homicide* and *Indeterminate*. The fundamental purpose for determining the manner of death is for public health surveillance and vital statistics.

- ***Natural*** deaths are due solely or nearly totally to disease and/or the aging process.
- ***Accident*** applies when an injury or poisoning (such as a drug overdose) causes death and there is little or no evidence that the injury or poisoning occurred with intent to harm or cause death. In essence, the fatal outcome was unintentional.
- ***Suicide*** results from an injury or poisoning as a result of an intentional, self-inflicted act.
- ***Homicide*** occurs when the death results from a volitional act committed by another person to cause fear, harm, or death. Intent to cause death is a common element but is not required for classification as a homicide. It has to be emphasized that the classification of homicide for the purpose of death certification is a "neutral" term and neither indicates nor implies criminal intent, which remains a determination within the province of legal processes.

- ***Indeterminate*** is a classification used when the information pointing to one manner of death is no more compelling than one or more other competing manners of death, in thorough consideration of all available information.

In general, when death involves a combination of natural processes and external factors, such as injury or poisoning, preference is given to the non-natural manner of death.

The Death Investigation Process

A medical examiner investigator (MEI) responds to nearly all of the death scenes. The medical examiner investigator is trained to recognize the vast majority of the deaths requiring postmortem examinations and, in those cases, immediately arranges for transport to WMed for a postmortem examination. Homicides, infant deaths, and drug overdoses are examples of the deaths that are immediately sent.

If the death does not appear to meet the requirements for a postmortem examination, the MEI contacts the on-call medical examiner to discuss the case before releasing the body to a funeral home. The MEI writes a report documenting their findings and uploads images obtained at the investigation. These reports and photos are reviewed by the medical examiner or deputy medical examiner.

The medical examiner or a deputy medical examiner is assigned to each case and generally uses one of the following approaches in each of the deaths for which our office is responsible:

- ***Declined Jurisdiction****:* A reported death classified as an attended natural death should be documented as a Declined Jurisdiction case. Jurisdiction is declined when the death does not meet the required reporting criteria per Michigan statutes.
- ***Direct Release****:* The body is released directly from the scene to the funeral home. The MEI at the scene views the body and collects information on the scene, medical history, and social history. This information is provided to the on-call medical examiner who may decide to release a body directly to the funeral home chosen by the family.
- ***Storage****:* The body will be taken to WMed for temporary storage until a funeral home has been chosen. If family cannot be found or if the family does not take responsibility for the disposition of the remains, an unclaimed remains process ensues.
- ***External Examination****:* An external examination includes a careful evaluation of the circumstances of the death and an examination of the external surfaces of the body, with possible laboratory/toxicology testing.
- ***Limited Examination****:* A limited examination generally is within an anatomic boundary (such as a brain only examination) to recover a foreign body or to answer specific questions. This type of examination may also include toxicology testing. This type of exam is rare and used in only special circumstances.
- ***Complete Autopsy****:* A complete examination includes external and internal examination, with toxicology.

Cremation Permit Authorizations

MCL 52.210 requires funeral directors and embalmers to obtain a signed permit from the medical examiner for the county in which the death occurred. Our office reviews thousands of cremation permit requests each year. The requests for authorization to cremate involves reviewing the death certificate provided by the funeral director to ascertain that deaths that should have been reported to our office were, in fact, reported. Deaths that were not properly reported are investigated before cremation is authorized. We provide monthly detailed reports to the counties that charge for cremation permits to allow them to send invoices, as needed.

Public Health & Safety

The major purpose of the Medical Examiner's Office is to conduct death investigations. The information obtained from individual death investigations may also be studied collectively to gather information that may be used to address public health and safety issues. Our office participates with the Child Death Review Team in all counties, providing significant information regarding how children died with the goal of preventing future deaths.

With funding from the Michigan Department of Health and Human Services (MDHHS), our team grew in 2020 to include a public health data analyst specifically to assist with tackling the opioid epidemic. This has involved increased surveillance of all drug-related deaths and more detailed death certification in these types of cases across each county we serve. Our team is now working with MDHHS, the Michigan Public Health Institute (MPHI), and multiple counties to create legislation to create and support Opioid Fatality Review Teams across the state. This opioid-specific review team will identify demographical and geographical trends of drug-related deaths to guide prevention efforts.

In addition to this report, a separate analysis of our office's improved surveillance is available and should be viewed for additional detail of all drug-related deaths reported.

Unclaimed Investigations

When a death occurs, there is not always someone available who is willing and able to claim the decedent and arrange for final disposition with a funeral director. The process varies with whether the decedent had resources to cover the cost of final disposition. If not, our staff members work with the State of Michigan DHHS and area funeral directors to have the decedent cremated. As this process results in an accumulation of unclaimed cremains, we started working with St. Martin of Tours Episcopal Church in Kalamazoo, Michigan in 2019 to bury the cremains. The names of each of the decedents buried in small coffins on the grounds of the church are located on plaques on the outside of the church. This annual event did not occur in 2020 due to the COVID-19 pandemic; however, we were able to resume this respectful disposition of remains in October, 2021.

Terms

- "MEI Scene Investigations" are those reported deaths for which an MEI went to the death scene.
- "Deaths Investigated" include MEI Scene Investigations as well as reported deaths that, while may not allow for a scene investigation, involved an investigation beyond the initial report of the death, usually in the form of a records review in response to information provided as part of a cremation request.

- The category "Referrals to Gift of Life" does not include in-hospital deaths reported to the Medical Examiner's Office, which are referred to Gift of Life by hospital staff rather than the Medical Examiner's Office.
- For "Accidental Deaths," the subcategory "Vehicle" consists of deaths that were classified as transportation-related fatalities and includes all forms of transport; drivers/operators, passengers and pedestrians; and types of death that might otherwise fall into a different sub-classification, such as vehicle fires and traumatic asphyxia.

Important note regarding the data in this report:

The data reflects the county where the individual was pronounced dead rather than the county of residence or the county in which the incident leading to death might have occurred. If a motor vehicle collision occurs in County A, and an individual injured in the collision is transported to and eventually reported dead in County B, the death is reported to the Medical Examiner of County B. Consequently, counties with major medical centers typically have a much higher number of deaths with injuries that may have occurred in another county.

ALLEGAN COUNTY

Summary of All Allegan County Cases

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Deaths in the County	602	657	705	753	745	788	772	819	974[1]	958[2]
Deaths Reported to the ME	162	182	193	176	203	188	197	219	291	279
Deaths Investigated	145	164	189	170	192	164	191	199	278	264
MEI Scene Investigations	143	160	177	152	174	158	185	179	250	228
Death Certificates by ME	78	76	97	77	85	76	88	88	120	108
Bodies Transported to WMed	63	58	74	66	62	69	72	69	90	80
Complete Autopsy	43	49	63	32	36	45	41	37	54	51
Limited Autopsy	6	1	2	2	5	2	2	3	6	3
External Examination	11	5	7	18	17	13	24	21	23	19
Storage Only at WMed	3	3	2	14	4	9	5	8	7	7
Total Cases with Toxicology	54	54	70	47	52	54	59	55	79	69
Unidentified Remains After Exam	0	0	2	1	0	0	1	2	0	0
Referrals to Gift of Life	38	32	62	64	63	73	61	55	97	103
Tissue Donations	4	0	5	8	5	6	4	11	9	8
Cornea Donations	5	0	6	7	4	7	4	5	5	2
Unclaimed Investigations	2	1	2	3	1	2	2	8	9	10
Exhumations	0	0	0	0	0	0	0	0	0	0

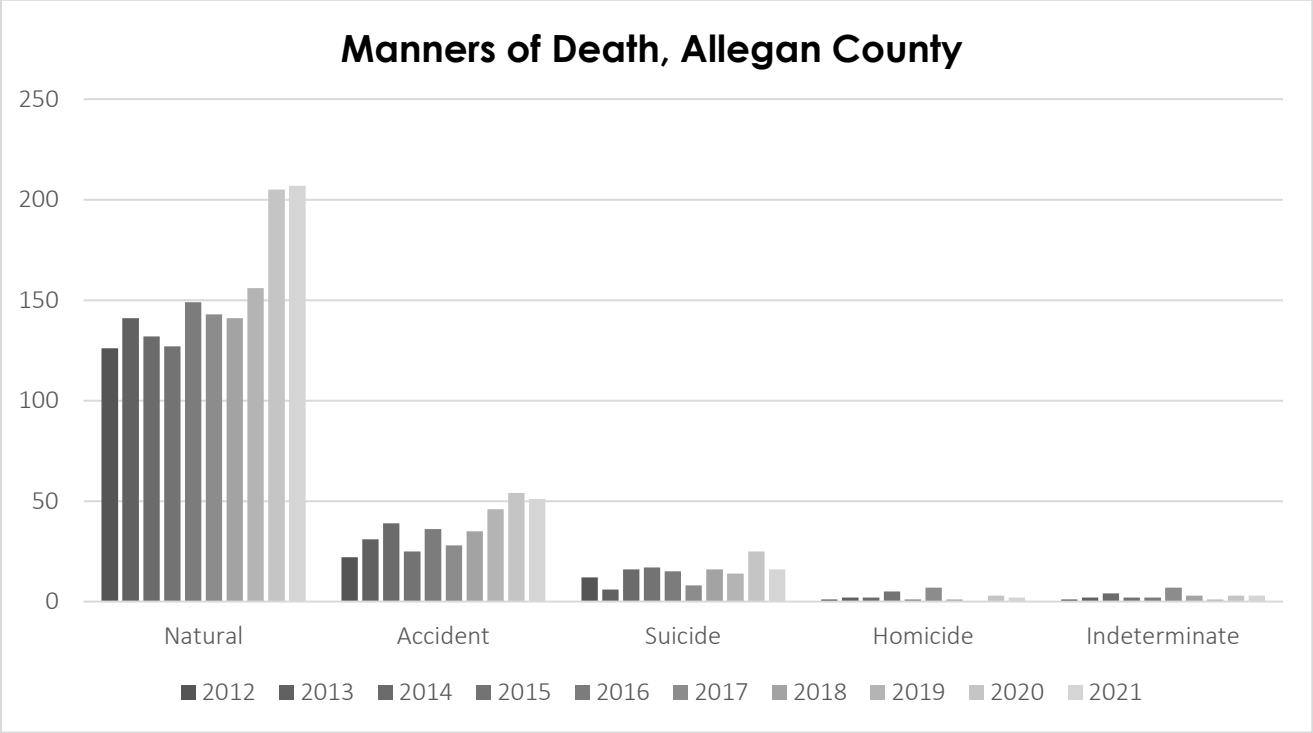
Cremation Permit Authorizations, Allegan County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cremation Permits	299	350	409	404	442	469	487	519	650	644
% of Total Deaths with Cremation	50%	53%	58%	54%	60%	60%	63%	63%	67%	67%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county

Manners of Death Reported, Allegan County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Natural	126	141	132	127	149	143	141	156	205	207
Accident	22	31	39	25	36	28	35	46	54	51
Suicide	12	6	16	17	15	8	16	14	25	16
Homicide	1	2	2	5	1	2	1	0	3	2
Indeterminate	1	2	4	2	2	7	3	1	3	3[1]
Total	**162**	**182**	**193**	**176**	**203**	**188**	**196**	**217**	**290**	**279**



Deaths Reported by Age (in years), Allegan County[2]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2012	0	0	0	0	5	20	63	74
2013	2	0	0	0	7	17	57	99
2014	3	0	0	1	6	16	73	92
2015	0	1	1	5	7	15	59	87
2016	0	1	0	0	5	26	58	112

[1] (1) Thermal injuries and inhalation of products of combustion, residential fire of unknown etiology; (1) Skeletal remains, unknown cause and manner of death; (1) Blunt force injuries of head of unknown etiology

[2] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

2017	3	1	0	2	3	17	54	106
2018	1	3	0	2	4	29	55	102
2019	1	0	0	0	6	22	57	131
2020	0	0	0	4	7	33	99	147
2021	0	0	0	1	3	30	89	156

Pediatric Deaths, Allegan County

The one death of individuals under 18 years of age include:

1. 11-17 years old
    a. (1) Cerebral palsy with seizure disorder associated with prematurity; natural

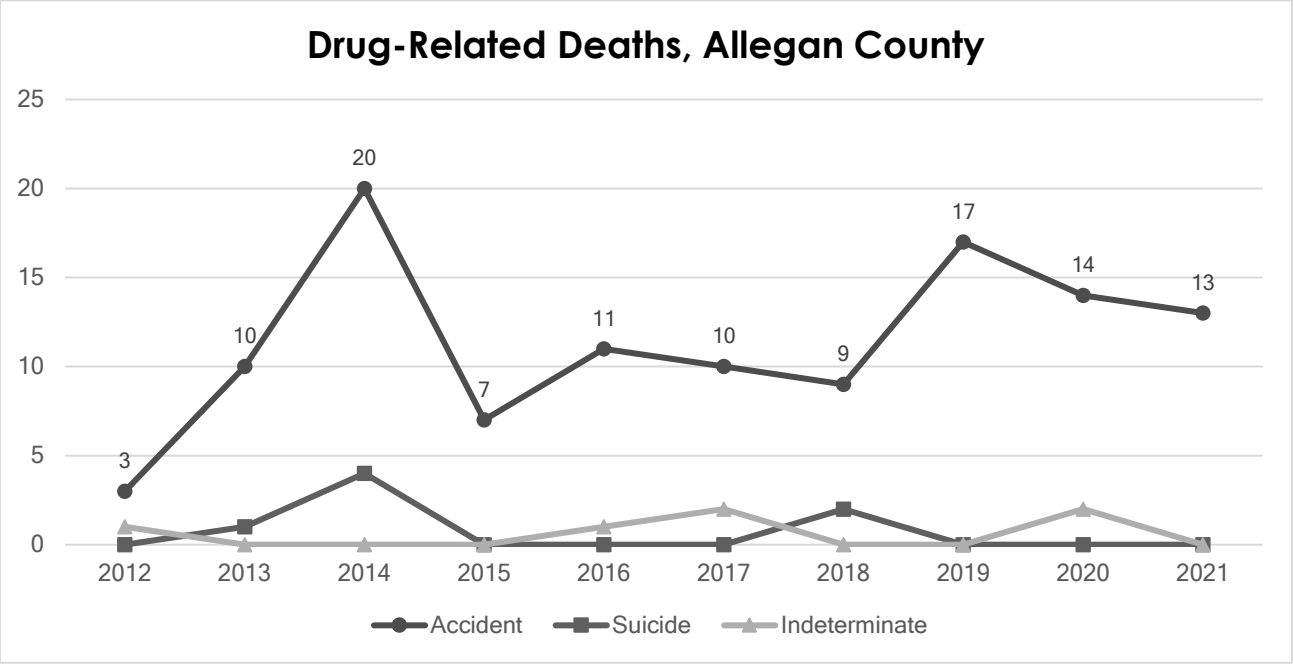
Accidental Deaths by Mechanism, Allegan County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Vehicle	13	9	11	10	9	12	12	9	18	8[1]
Drug-Related	3	10	20	7	11	10	9	17	14	13
Drowning	0	1	1	0	1	3	3	1	3	6[2]
Fall	2	7	5	5	10	3	10	12	15	21[3]
Fire	3	1	0	0	0	0	0	1	0	2
Environmental Exposure	0	1[4]	0	2	1	0	0	1	2	0
Asphyxia	1	0	0	0	2	0	2	3	2	0
Other	0	2	2	1	2	0	0	2	0	1[5]
Total	**22**	**31**	**39**	**25**	**36**	**28**	**35[6]**	**46**	**54**	**51**

[1] Includes (1) Sudden cardiac event associated with a motor vehicle collision and illicit drug use
[2] Includes (1) Drowning (bathtub) associated with mixed drug intoxication
[3] Includes (1) Fall associated with acute alcohol intoxication
[4] After careful review, this number was corrected from 2 to 1
[5] (1) Electrocution (autoerotic)
[6] (1) Death categorized twice (drowning & drug-related)

Drug-Related Deaths by Manner, Allegan County[1]

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Accident	3	10	20	7	11	10	9	17	14	13[2]
Suicide	0	1	4	0	0	0	2	0	0	0
Indeterminate	1	0	0	0	1	2	0	0	2	0
Total	**4**	**11**	**24**	**7**	**12**	**12**	**11**	**17**	**16**	**13**
Total involving opioid(s)	N/A	N/A	N/A	6	8	6	8	13	11	9
% of Accidental and Indeterminate Deaths Involving Opioids	N/A	N/A	N/A	86%	67%	50%	78%	76%	69%	69%

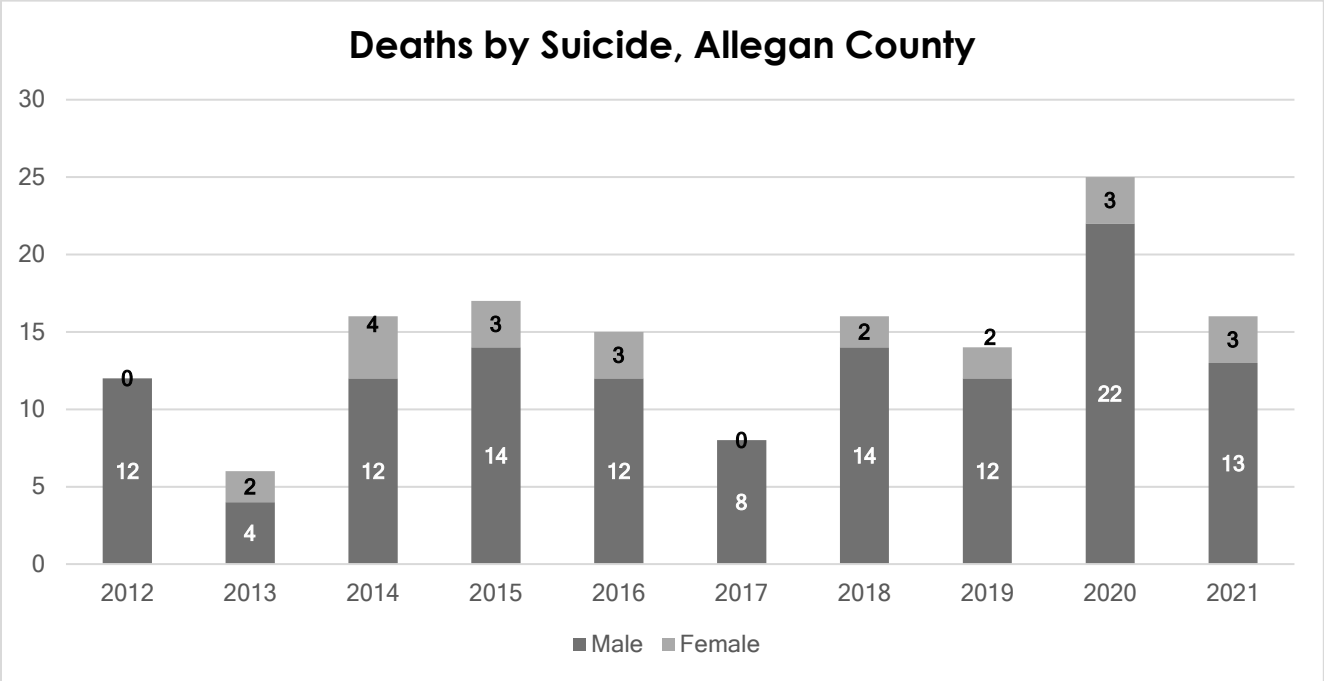


Suicides by Sex & Age, Allegan County

Year	Total	Male	Female	0 – 17	18 - 25	26 - 44	45 - 64	65 +
2012	**12**	12	0	0	1	3	6	2
2013	**6**	4	2	0	1	2	2	1
2014	**16**	12	4	0	1	4	8	3
2015	**17**	14	3	2	4	1	5	5
2016	**15**	12	3	0	3	6	3	3

[1] Acute alcohol intoxications are defined as drug-related deaths and are included in this data
[2] Includes (1) Chloroethane (toxic chemical) inhalation

2017	**8**	8	0	0	2	0	3	3
2018	**16**	14	2	0	0	7	7	2
2019	**14**	12	2	0	3	4	3	4
2020	**25**	22	3	2	1	5	14	3
2021	**16**	13	3	0	1	5	7	3



Suicides by Mechanism, Allegan County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Firearm	9	3	11	11	10	7	8	6	15	12
Hanging	3	0	1	4	4	0	5	6	7	3
Carbon Monoxide	0	1	0	0	1	1	0	0	1	0
Drug Intoxication	0	1	4	0	0	0	1	0	0	0
Motor Vehicle	0	1	0	0	0	0	1	0	1	0
Sharp Force Trauma	0	0	0	0	0	0	0	1	0	1
Asphyxia/Suffocation	0	0	0	2	0	0	0	0	0	0
Other	0	0	0	0	0	0	1	1	1	0
Total	**12**	**6**	**16**	**17**	**15**	**8**	**16**	**14**	**25**	**16**

BARRY COUNTY

Summary of All Barry County Cases[1]

	2015	2016[2]	2018	2019	2020	2021
Total Deaths in the County	416	399	390	399	453[3]	529[4]
Deaths Reported to the ME	125	130	146	121	161	155
Deaths Investigated	118	124	131	108	147	143
MEI Scene Investigations	112	120	128	103	132	135
Death Certificates by ME	53	57	52	54	52	53
Bodies Transported to WMed	43	47	41	38	35	41
Complete Autopsy	35	37	25	28	22	23
Limited Autopsy	1	0	1	2	2	1
External Examination	6	8	12	8	7	13
Storage Only at WMed	1	2	3	0	4	4
Total cases with Toxicology	N/A	N/A	35	37	28	35
Unidentified Remains After Exam	N/A	N/A	0	0	0	0
Referrals to Gift of Life	40	48	44	22	44	54
Tissue Donations[5]	6	17	3	3	2	6
Cornea Donations	N/A	N/A	0	1	1	4
Unclaimed Investigations	1	0	1	0	4	2
Exhumations	N/A	N/A	0	0	0	0

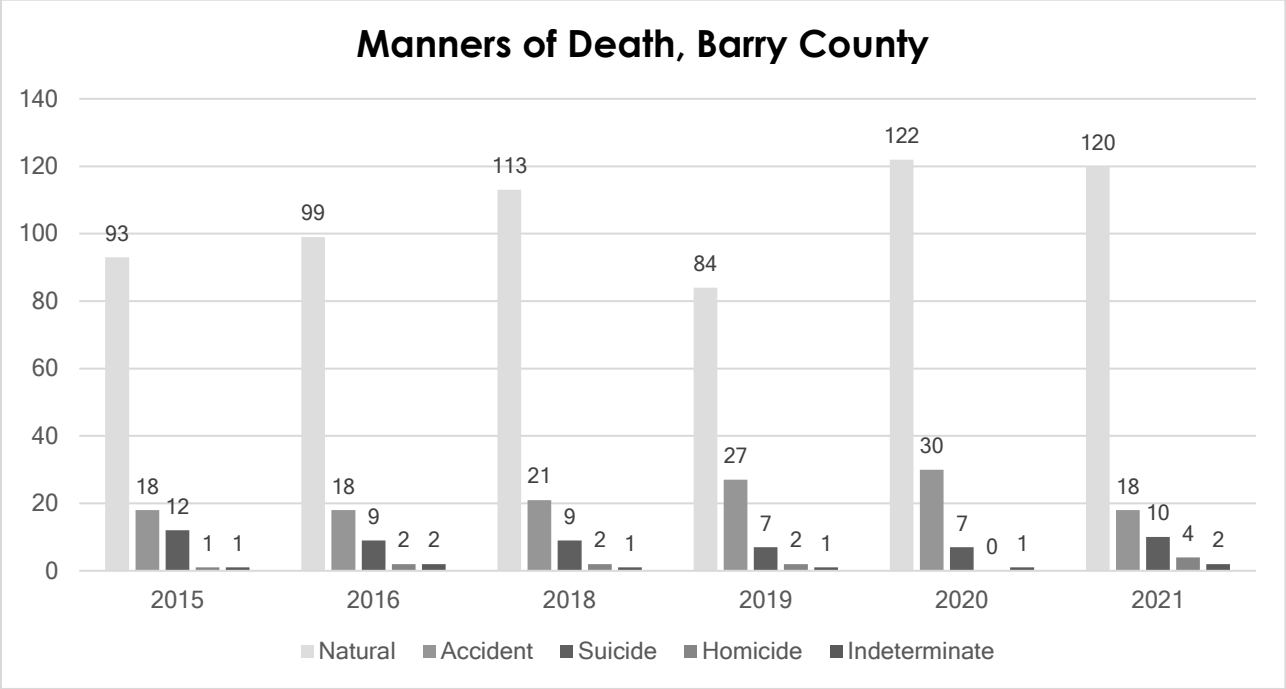
Cremation Permit Authorizations, Barry County

	2018	2019	2020	2021
Cremation Permits	262	251	303	354
% of Total Deaths with Cremation	67%	63%	67%	67%

[1] Data for 2017 is not available at the time this report is authored
[2] Data from years 2015-2016 obtained from Sparrow Hospital
[3] Updated total number of deaths occurring in the county
[4] Provisional total number of deaths occurring in the county
[5] 2015 and 2016 data include both tissue and cornea donations combined

Manners of Death Reported, Barry County[1]

	2015	2016	2018	2019	2020	2021
Natural	93	99	113	84	122	120
Accident	18	18	21	27	30	18
Suicide	12	9	9	7	7	10
Homicide	1	2	2	2	0	4
Indeterminate	1	2	1	1	1	2[2]
Total	**125**	**130**	**146**	**121**	**160**	**154[3]**



Deaths Reported by Age (in years), Barry County[4]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	0	0	0	1	0	8	46	89
2019	1	0	0	2	5	12	30	71
2020	3	0	0	0	4	13	42	98
2021	0	0	0	2	3	13	33	103

[1] Data from years 2015-2016 obtained from Sparrow Hospital
[2] (1) Skeletonized remains located outdoors, unknown cause and manner of death; (1) Multiple methods of asphyxiation, skeletonized remains
[3] Does not include (1) Stillbirth investigation
[4] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Pediatric Deaths, Barry County

The two deaths of individuals under 18 years of age include:

1. 11-17 years old
    a. (1) Arrow wound of chest; homicide
    b. (1) Intraoral gunshot wound; suicide

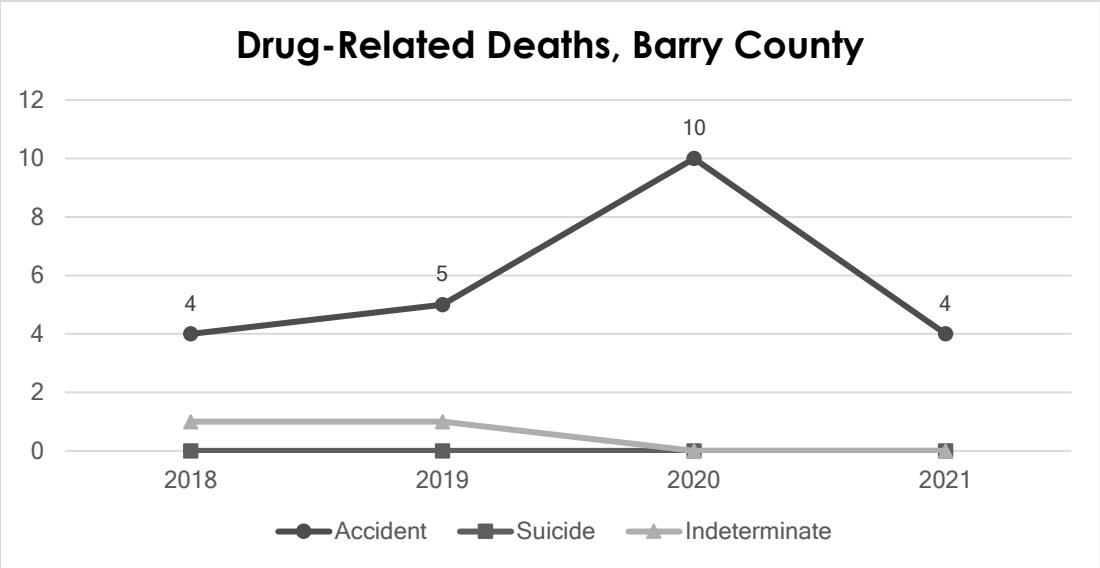
Accidental Deaths by Mechanism, Barry County

	2018	2019	2020	2021
Vehicle	7	11	6	4
Drug-Related	4	5	10	4
Drowning	0	3	1	2[1]
Fall	8	4	10	7
Fire	0	1	0	0
Environmental Exposure	0	1	0	0
Asphyxia	1	2	1	0
Other	1	0	2	1[2]
Total	**21**	**27**	**30**	**18**

Drug-Related Deaths by Manner, Barry County[3]

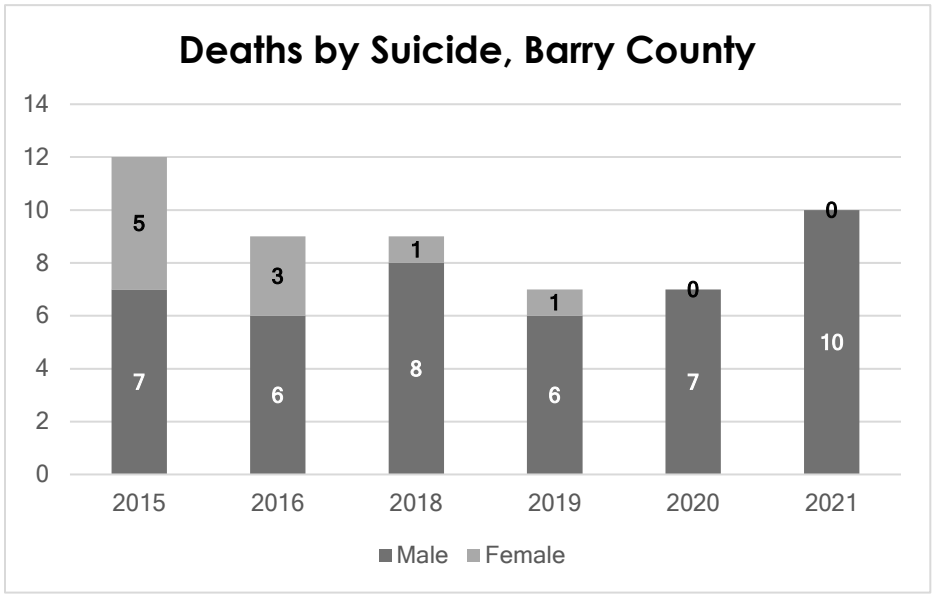
	2018	2019	2020	2021
Accident	4	5	10	4
Suicide	0	0	0	0
Indeterminate	1	1	0	0
Total	**5**	**6**	**10**	**4**
Total involving opioid(s)	2	4	8	4
% of Accidental and Indeterminate Deaths Involving Opioids	40%	67%	80%	100%

[1] Includes (1) Drowning (in bathtub) associated with illicit drug use
[2] (1) Acute hemorrhage due to extremity wound of unknown etiology
[3] Acute alcohol intoxications are defined as drug-related deaths and are included in this data



Suicides by Sex & Age, Barry County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2015	12	7	5	1	0	7	4	0
2016	9	6	3	1	0	1	5	2
2018	9	8	1	1	0	1	4	3
2019	7	6	1	1	1	0	3	2
2020	7	7	0	0	1	2	3	1
2021	10	10	0	1	1	1	3	4



Suicides by Mechanism, Barry County

	2015	2016	2018	2019	2020	2021
Firearm	7	7	7	4	4	9
Hanging	3	1	1	3	2	1
Carbon Monoxide	0	0	0	0	1	0
Drug Intoxication	2	1	0	0	0	0
Motor Vehicle	0	0	0	0	0	0
Sharp Force Trauma	0	0	0	0	0	0
Asphyxia/Suffocation	0	0	0	0	0	0
Other	0	0	1	0	0	0
Total	**12**	**9**	**9**	**7**	**7**	**10**

BERRIEN COUNTY

Summary of All Berrien County Cases

	2019	2020	2021
Total Deaths in the County	1,622	1,873[1]	1,913[2]
Deaths Reported to the ME	430	596	604
Deaths Investigated	399	540	548
MEI Scene Investigations	353	461	484
Death Certificates by ME	152	207	215
Bodies Transported to WMed	132	152	159
Complete Autopsy	90	103	116
Limited Autopsy	5	4	3
External Examination	26	25	26
Storage Only at WMed	11	20	14
Total Cases with Toxicology	110	126	134
Unidentified Remains After Exam	1	3	1[3]
Referrals to Gift of Life	80	137	156
Tissue Donations	7	8	7
Cornea Donations	4	7	4
Unclaimed Investigations	10	19	17
Exhumations	1	0	2

Cremation Permit Authorizations, Berrien County

	2019	2020	2021
Cremation Permits	1,045	1,218	1,219
% of Total Deaths with Cremation	64%	65%	64%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county
[3] (1) Human remains exhumed for potential identification purposes

Manners of Death Reported, Berrien County

	2019	2020	2021
Natural	321	470	458
Accident	71	87	105
Suicide	21	21	10
Homicide	8	8	13
Indeterminate	9	6	12[1]
Total	**430**	**592**	**598[2]**

Deaths Reported by Age (in years), Berrien County[3]

	< 1	1 - 5	6 - 10	11 - 17	18 – 25	26 - 44	45 - 64	65 +
2019	6	1	1	2	6	58	108	246
2020	2	2	0	5	16	55	172	340
2021	5	0	0	4	12	60	152	367

Pediatric Deaths, Berrien County

The nine deaths of individuals under 18 years of age include:

1. <1 year old
   a. (1) Viral pneumonitis; natural
   b. (3) Sudden unexplained infant death associated with unsafe sleep; indeterminate
   c. (1) Extreme prematurity; natural
2. 11-17 years old
   a. (1) Gunshot wounds of head; homicide
   b. (1) Multiple injuries, passenger in motor vehicle collision; accident
   c. (1) Hanging; suicide
   d. (1) Sepsis; natural

[1] (1) Choking associated with seizure disorder of unknown etiology (possibly trauma-related); (1) Complications of remote traumatic brain injury of unknown etiology; (1) Complications of splenic laceration of unknown etiology; (1) Acute drug intoxication; (4) Smoke inhalation and thermal injuries, residential fire; (1) Gunshot wound of head; (3) Sudden unexplained infant death associated with unsafe sleep

[2] Does not include (3) Stillbirth investigations; (1) Human remains exhumed for potential identification purposes; (2) Pending cause and manner at the time of this report

[3] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Accidental Deaths by Mechanism, Berrien County

	2019	2020	2021
Vehicle	21	15	24
Drug-Related	23	37	36
Drowning	4	9	3
Fall	12	15	34
Fire	2	2	1
Environmental Exposure	3	4	2
Asphyxia	3	4	3[1]
Other	3	1	2[2]
Total	**71**	**87**	**105**

Drug-Related Deaths by Manner, Berrien County[3]

	2019	2020	2021
Accident	23	37	36
Suicide	2	1	0
Indeterminate	1	0	1
Total	**26**	**38**	**37**
Total involving opioid(s)	22	29	28
% of Accidental and Indeterminate Deaths Involving Opioids	92%	78%	76%

[1] (3) Asphyxia due to choking (food)
[2] (1) Probable electrocution; (1) Exsanguination from scalp due to blunt head injury
[3] Acute alcohol intoxications are defined as drug-related deaths and are included in this data

Suicides by Sex & Age, Berrien County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2019	**21**	17	4	1	0	9	4	7
2020	**21**	18	3	1	2	4	8	6
2021	**10**	9	1	1	2	3	0	4

Suicides by Mechanism, Berrien County

	2019	2020	2021
Firearm	16	14	7
Hanging	3	5	3
Carbon Monoxide	0	0	0
Drug Intoxication	2	1	0
Motor Vehicle	0	0	0
Sharp Force Trauma	0	0	0
Asphyxia/Suffocation	0	0	0
Other	0	1	0
Total	**21**	**21**	**10**

CALHOUN COUNTY

Summary of All Calhoun County Cases

	2014	2015	2016	2017	2018	2019	2020	2021
Total Deaths in the County	1,390	1,378	1,427	1,396	1,495	1,521	1,786[1]	1,796[2]
Deaths Reported to the ME	377	429	411	443	475	508	585	582
Deaths Investigated	335	392	361	400	415	442	518	534
MEI Scene Investigations	296	311	307	352	387	381	450	444
Death Certificates by ME	178	180	186	191	200	176	194	244
Bodies Transported to WMed	138	164	165	176	170	146	172	188[3]
Complete Autopsy	103	109	103	102	103	81	112	112
Limited Autopsy	1	5	4	3	8	8	6	3
External Examination	20	28	36	46	38	32	27	45
Storage Only at WMed	14	20	22	25	21	25	27	27
Total Cases with Toxicology	122	131	113	141	139	112	136	156
Unidentified Remains After Exam	0	0	0	0	0	0	0	0
Referrals to Gift of Life	119	115	118	146	107	72	102	135
Tissue Donations	8	3	11	10	11	6	11	9
Cornea Donations	8	8	11	8	9	3	5	10
Unclaimed Investigations	13	8	11	23	24	29	40	32
Exhumations	1	0	0	0	0	0	0	0

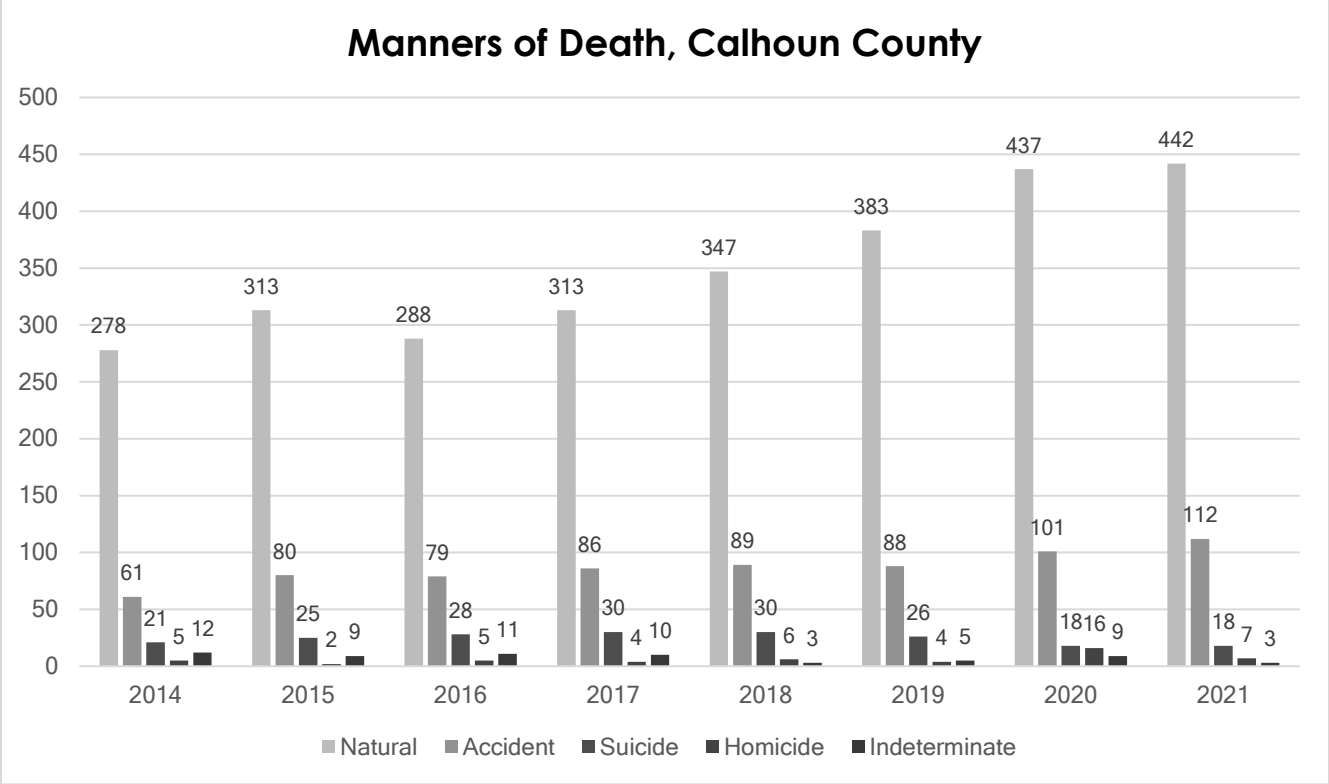
Cremation Permit Authorizations, Calhoun County

	2014	2015	2016	2017	2018	2019	2020	2021
Cremation Permits	721	742	811	857	901	997	1,176	1,224
% of Total Deaths with Cremation	52%	54%	57%	61%	60%	66%	66%	68%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county
[3] Includes (1) Toxicology only examination

Manners of Death Reported, Calhoun County

	2014	2015	2016	2017	2018	2019	2020	2021
Natural	278	313	288	313	347	383	437	442
Accident	61[1]	80	79	86	89	88	101	112
Suicide	21	25	28	30	30	26	18	18
Homicide	5	2	5	4	6	4	16	7
Indeterminate	12	9	11	10	3	5	9	3[2]
Total	**377**	**429**	**411**	**443**	**475**	**506**	**581**	**582**



Deaths Reported by Age (in years), Calhoun County[3]

	< 1	1 - 5	6 - 10	11 - 17	18 – 25	26 - 44	45 - 64	65 +
2014	6	4	0	3	8	34	148	171
2015	4	0	1	6	11	59	128	215
2016	4	0	2	2	9	53	122	208

[1] After careful review, this number was corrected from 60 to 61

[2] (1) Blunt force injuries, pedestrian vs train; (1) Partially skeletonized remains, cause and manner of death could not be determined; (1) Found in river, cause and manner of death could not be determined

[3] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

2017	3	1	1	1	14	65	140	206
2018	1	0	2	2	9	45	164	241
2019	0	0	1	0	12	53	157	283
2020	6	2	0	0	12	63	184	314
2021	3	0	0	0	10	67	173	329

Pediatric Deaths, Calhoun County

The three deaths of individuals under 18 years of age include:

1. <1 year old
   a. (1) Sepsis and meningitis due to Haemophilus influenza; natural
   b. (2) Extreme prematurity; natural

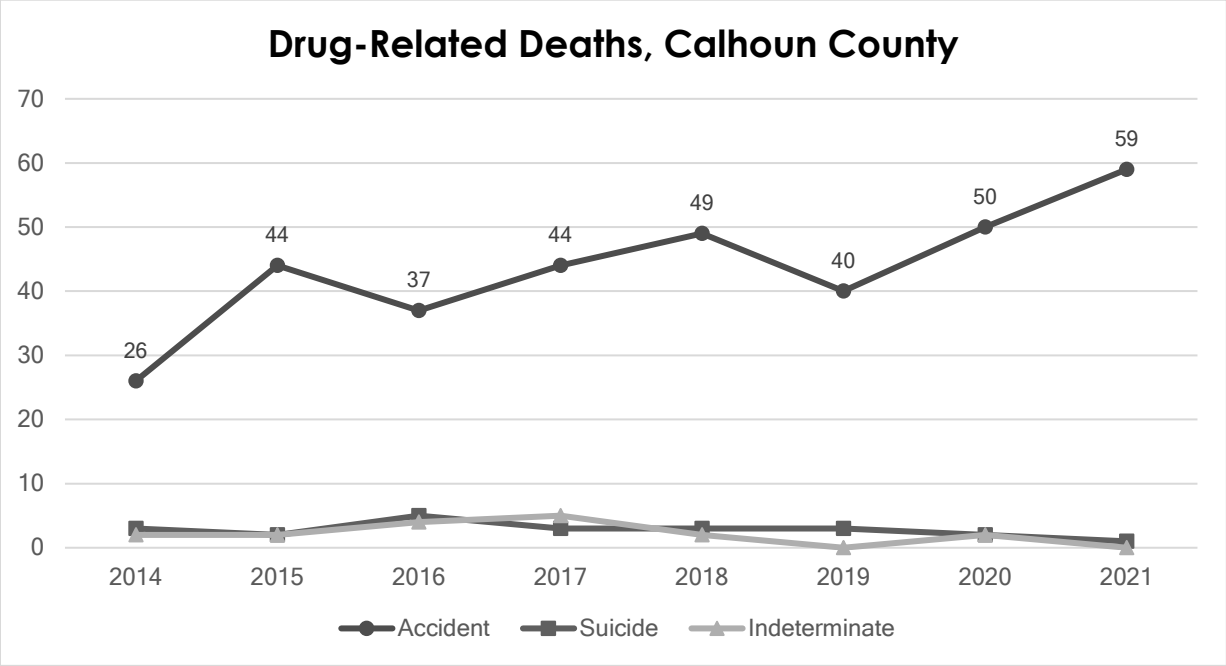
Accidental Deaths by Mechanism, Calhoun County

	2014	2015	2016	2017	2018	2019	2020	2021
Vehicle	11	21	20	14	15	15	20	17[1]
Drug-Related	26	44	38	44	49	40	50	59[2]
Drowning	0	2	2	3	1	4	2	1
Fall	15	11	14	19	19	20	19	28
Fire	2	0	1	0	1	1	0	0
Environmental Exposure	2	0	0	0	0	3	5	2
Asphyxia	4	2[3]	2	5	3	2	4	1[4]
Other	1	1	2	1	1	3	1	4[5]
Total	**61[6]**	**81[7]**	**79**	**86**	**89**	**88**	**101**	**112**

[1] Includes (1) Multiple injuries, including traumatic asphyxia while entering moving vehicle
[2] Includes (1) Mixed drug intoxication associated with positional asphyxia
[3] After careful review, this number was corrected from 0 to 2
[4] (1) Choking associated with mixed drug intoxication
[5] (1) Carbon monoxide poisoning; (1) Complications of quadriplegia due to diving accident; (1) Caustic ingestion of cleaning solution; (1) Exsanguination due to spontaneous disruption of hemodialysis AV fistula
[6] After careful review, this number was corrected from 62 to 61 and some of the deaths have been re-categorized
[7] (1) Death categorized twice (drowning and drug)

Drug-Related Deaths by Manner, Calhoun County[1]

	2014	2015	2016	2017	2018	2019	2020	2021
Accident	26	44	37	44	49	40	50	59
Suicide	3	2	5	3	3	3	2	1
Indeterminate	2	2	4	5	2	0	2	0
Total	**31**	**48**	**46**	**52**	**54**	**43**	**54**	**60**
Total involving opioid(s)	N/A	42	40	48	48	36	46	49
% of Accidental and Indeterminate Deaths Involving Opioids	N/A	91%	88%	94%	92%	88%	87%	83%

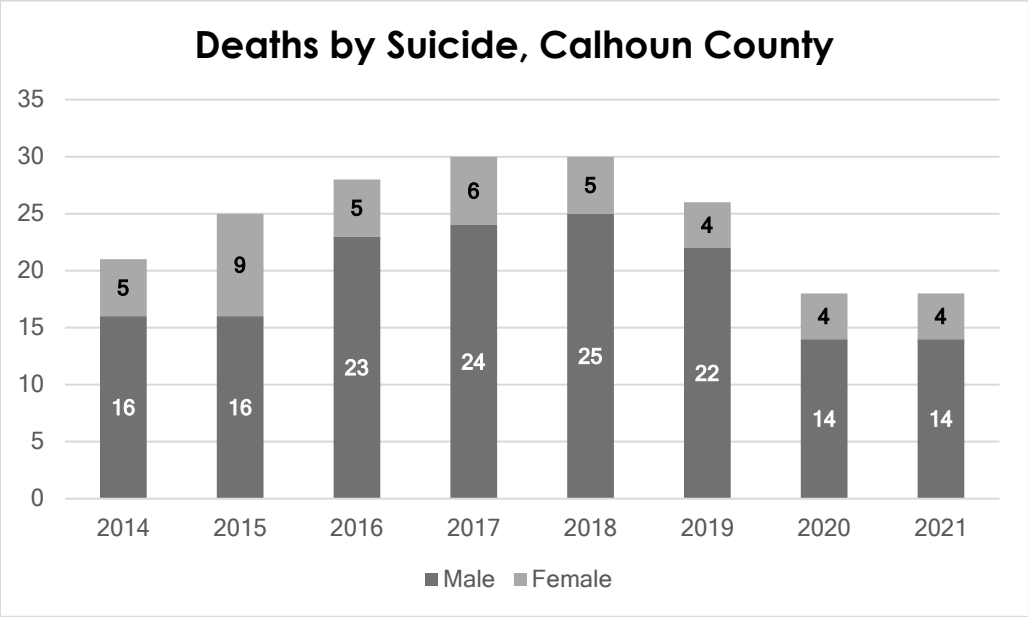


Suicides by Sex & Age, Calhoun County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2014	**21**	16	5	1	4	7	8	1
2015	**25**	16	9	2	2	7	7	7
2016	**28**	23	5	1	2	8	12	5
2017	**30**	24	6	0	4	12	7	7
2018	**30**	25	5	1	2	5	15	7

[1] Acute alcohol intoxications are defined as drug-related deaths and are included in this data

2019	**26**	22	4	0	4	9	9	4
2020	**18**	14	4	0	2	9	7	0
2021	**18**	14	4	0	1	6	5	6



Suicides by Mechanism, Calhoun County

	2014	2015	2016	2017	2018	2019	2020	2021
Firearm	11	14	14	12	17	16	11	11
Hanging	7	5	6	10	10	5	4	6
Carbon Monoxide	0	0	2	0	0	0	0	0
Drug Intoxication	3	2	5	3	3	3	2	1
Motor Vehicle	0	0	1	2	0	1	1	0
Sharp Force Trauma	0	0	0	1	0	0	0	0
Asphyxia/Suffocation	0	2	0	1	0	0	0	0
Other	0	2	0	1	0	1	0	0
Total	**21**	**25**	**28**	**30**	**30**	**26**	**18**	**18**

CASS COUNTY

Summary of All Cass County Cases[1]

	2021
Total Deaths in the County	419[2]
Deaths Reported to the ME	147
Deaths Investigated	143
MEI Scene Investigations	140
Death Certificates by ME	66
Bodies Transported to WMed	46
Complete Autopsy	28
Limited Autopsy	1
External Examination	13
Storage Only at WMed	4
Total Cases with Toxicology	42
Unidentified Remains After Exam	0
Referrals to Gift of Life	56
Tissue Donations	4
Cornea Donations	2
Unclaimed Investigations	4
Exhumations	0

Cremation Permit Authorizations, Cass County[3]

	2021
Cremation Permits	262
% of Total Deaths with Cremation	63%

[1] Data provided includes January 1 to December 31, 2021, but WMed served as ME for only February 1 to December 31, 2021
[2] Provisional total number of deaths occurring in the county
[3] Data provided includes February 1 to December 31, 2021

Manners of Death Reported, Cass County[1]

	2021
Natural	105
Accident	30
Suicide	7
Homicide	3
Indeterminate	1[2]
Total	**146[3]**

Deaths Reported by Age (in years), Cass County[4]

	< 1	1 - 5	6 - 10	11 - 17	18 – 25	26 - 44	45 - 64	65 +
2021	0	1	0	1	8	20	43	73

Pediatric Deaths, Cass County

The two deaths of individuals under 18 years of age include:

1. 1-5 years old
   a. (1) Multiple injuries, passenger in motor vehicle collision; accident
2. 11-17 years old
   a. (1) Gunshot wound of head; homicide

Drug-Related Deaths by Manner, Cass County[5]

	2021
Accident	7
Suicide	1
Indeterminate	1
Total	**9**
Total involving opioid(s)	8
% of Accidental and Indeterminate Deaths Involving Opioids	88%

[1] Data provided includes January 1 to December 31, 2021, but WMed served as ME for only February 1 to December 31, 2021
[2] (1) Mixed drug intoxication
[3] Does not include (1) stillbirth investigation
[4] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year
[5] Acute alcohol intoxications are defined as drug-related deaths and are included in this data

Accidental Deaths by Mechanism, Cass County

	2021
Vehicle	17
Drug-Related	7
Drowning	0
Fall	1
Fire	3
Environmental Exposure	1[1]
Asphyxia	0
Other	1[2]
Total	**30**

Suicides by Sex & Age, Cass County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2021	**7**	5	2	0	0	3	2	2

Suicides by Mechanism, Cass County

	2021
Firearm	4[3]
Hanging	1
Carbon Monoxide	0
Drug Intoxication	1
Motor Vehicle	0
Sharp Force Trauma	1
Asphyxia/Suffocation	0
Other	0
Total	**7**

[1] (1) Hypothermia associated with COVID-19 infection and illicit drug use
[2] (1) Carbon monoxide intoxication
[3] Includes (1) Gunshot wound of head associated with smoke and soot inhalation (intentionally set residential fire)

GRAND TRAVERSE COUNTY

Summary of All Grand Traverse County Cases

	2017	2018	2019	2020	2021
Total Deaths in the County	1,306	1,413	1,345	1,572[1]	1,780[2]
Deaths Reported to the ME	380	350	384	495	579
Deaths Investigated	249	252	278	375	396
MEI Scene Investigations	122	206	212	211	246
Death Certificates by ME	153	126	131	158	159
Bodies Transported to WMed	77	58	65	69	80
Complete Autopsy	56	45	52	53	60
Limited Autopsy	2	0	2	3	2
External Examination	19	13	12	13	17
Storage Only at WMed	0	0	0	0	1
Total Cases with Toxicology	73	53	61	64	75
Unidentified Remains After Exam	1	2	0	1	0
Referrals to Gift of Life	44	37	43	49	75
Tissue Donations	4	3	1	7	4
Cornea Donations	4	2	0	2	0
Unclaimed Investigations	5	7	10	12	13
Exhumations	0	0	0	0	0

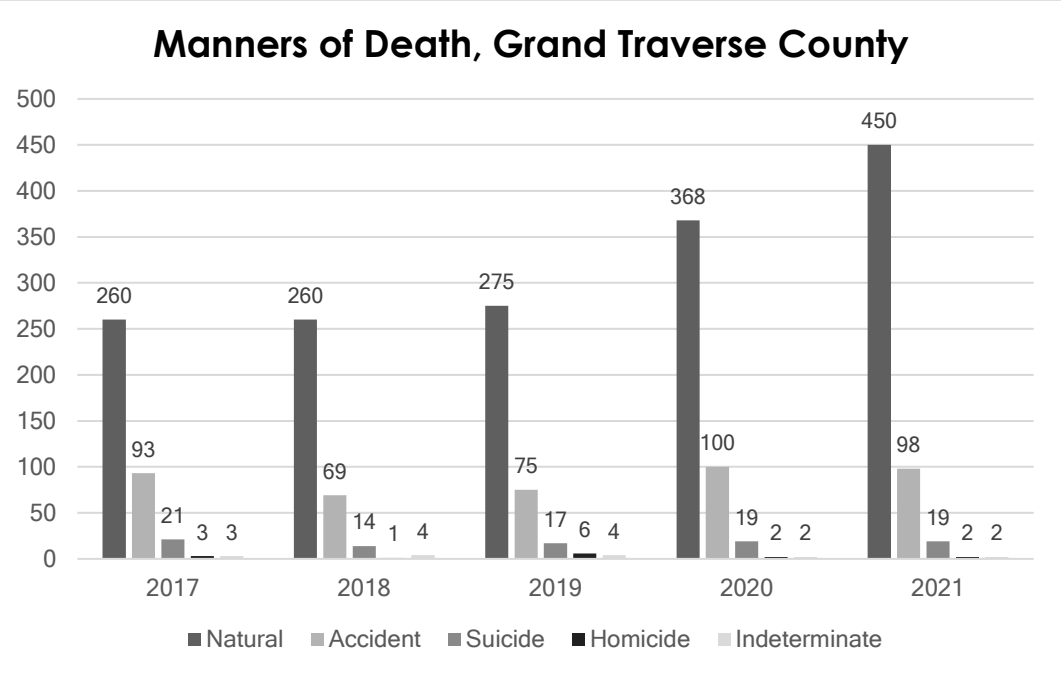
Cremation Permit Authorizations, Grand Traverse County

	2017	2018	2019	2020	2021
Cremation Permits	1,005	1,108	1,077	1,283	1,426
% of Total Deaths with Cremation	76%	78%	80%	82%	80%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county

Manners of Death Reported, Grand Traverse County

	2017	2018	2019	2020	2021
Natural	260	260	275	368	450
Accident	93	69	75	100	98
Suicide	21	14	17	19	19
Homicide	3	1	6	2	2
Indeterminate	3	4	4	2	2[1]
Total	**380**	**348**	**377**	**491**	**571[2]**



Deaths Reported by Age (in years), Grand Traverse County[3]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2017	0	0	0	0	7	32	94	229
2018	5	0	0	2	7	22	85	216
2019	4	0	0	4	3	34	94	238
2020	7	0	0	1	10	37	122	314
2021	0	2	0	3	6	45	115	400

[1] (1) Drowning, unwitnessed; (1) Complications of placental abruption
[2] Does not include (8) Stillbirth investigations
[3] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Pediatric Deaths, Grand Traverse County

The five deaths of individuals under 18 years of age include:

1. 1-5 years old
   a. (1) Gunshot wound of head; homicide
   b. (1) Multiple injuries, pedestrian vs motor vehicle; accident
2. 11-17 years old
   a. (2) Hanging; suicide
   b. (1) Multiple blunt force injuries, bicyclist vs motor vehicle; accident

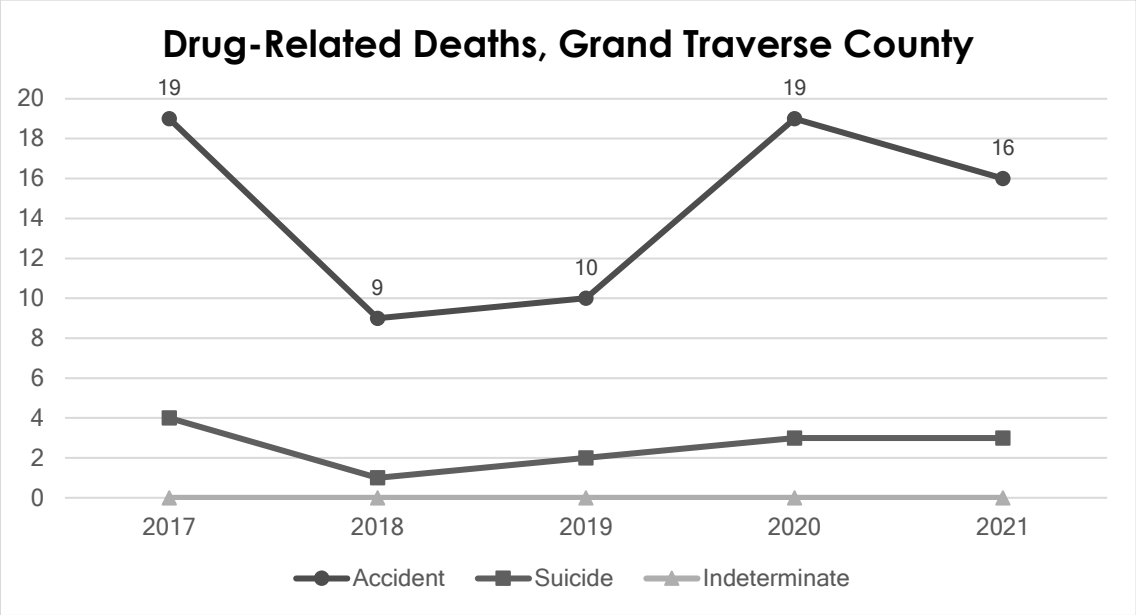
Accidental Deaths by Mechanism, Grand Traverse County

	2017	2018	2019	2020	2021
Vehicle	23	15	22	18	23
Drug-Related	19	9	10	19	16
Drowning	2	2	2	6	3
Fall	44	35	34	47	46
Fire	2	1	1	1	1
Environmental Exposure	0	1	0	4	2
Asphyxia	1	3	4	3	3[1]
Other	2	3	2	2	4[2]
Total	**93**	**69**	**75**	**100**	**98**

Drug-Related Deaths by Manner, Grand Traverse County[3]

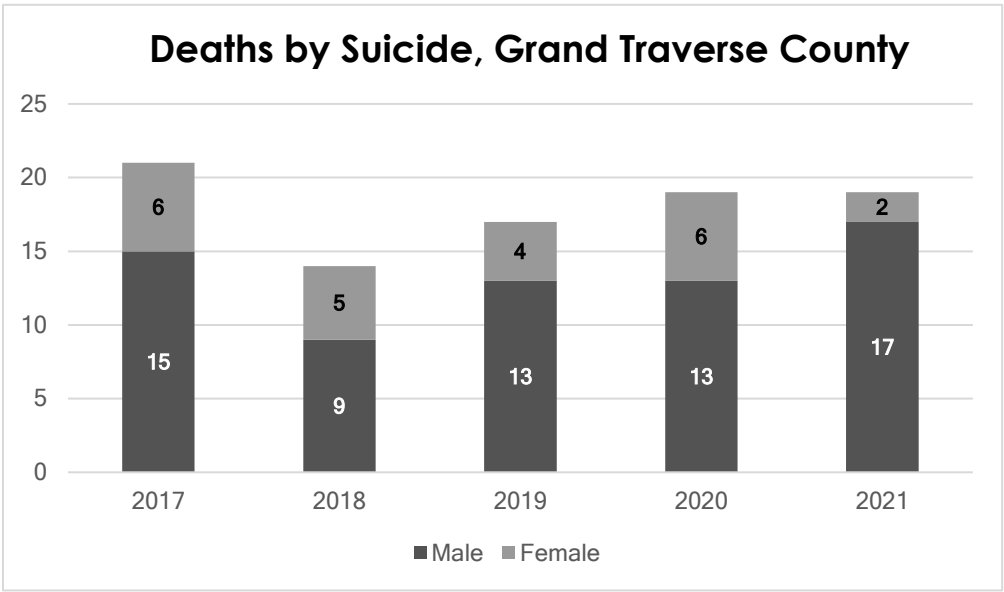
	2017	2018	2019	2020	2021
Accident	19	9	10	19	16
Suicide	4	1	2	3	3[4]
Indeterminate	0	0	0	0	0
Total	**23**	**10**	**12**	**22**	**19**
Total involving opioid(s)	18	8	8	15	16
% of Accidental and Indeterminate Deaths Involving Opioids	84%	89%	70%	68%	100%

[1] (1) Hanging; (1) Asphyxia due to choking; (1) Traumatic asphyxia due to chest compression
[2] (1) Carbon monoxide poisoning associated with acute drug intoxication; (1) Complications of quadriplegia due to diving accident; (1) Multiple blunt force injuries, collision with fixed object while skiing; (1) Complications of lower extremity fractures while undergoing transfer from table to chair
[3] Acute alcohol intoxications are defined as drug-related deaths and are included in this data
[4] Includes (1) Mixed drug intoxication associated with hyperthermia



Suicides by Sex & Age, Grand Traverse County

Year	Total	Male	Female	0 - 17	18 - 25	26 – 44	45 - 64	65 +
2017	**21**	15	6	0	3	3	9	6
2018	**14**	9	5	2	1	6	5	0
2019	**17**	13	4	3	0	9	3	2
2020	**19**	13	6	0	3	8	7	1
2021	**19**	17	2	2	1	5	4	7



Suicides by Mechanism, Grand Traverse County

	2017	2018	2019	2020	2021
Firearm	11	5	9	7	7[1]
Hanging	4	5	4	5	6
Carbon Monoxide	0	0	1	0	2[2]
Drug Intoxication	4	1	2	3	3[3]
Motor Vehicle	1	1	0	1	0
Sharp Force Trauma	1	1	0	3	0
Asphyxia/Suffocation	0	0	0	0	0
Other	0	1	1	0	1[4]
Total	**21**	**14**	**17**	**19**	**19**

[1] Includes (1) Gunshot wound of head associated with smoke and soot inhalation due to motor vehicle crash
[2] (1) Carbon monoxide poisoning associated with acute drug intoxication; (1) Carbon monoxide poisoning associated with probable other substances (could not be confirmed due to extended hospital stay)
[3] Includes (1) Mixed drug intoxication associated with hyperthermia
[4] (1) Drowning associated with mixed drug intoxication

KALAMAZOO COUNTY

Summary of All Kalamazoo County Cases

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Deaths in the County	2,540	2,668	2,684	2,733	2,879	2,840	2,977	2,921	3,446[1]	3,580[2]
Deaths Reported to the ME	778	777	750	810	975	991	1,068	1,060	1,242	1,283
Deaths Investigated	556	580	560	646	745	733	782	781	931	1,002
MEI Scene Investigations	503	549	411	434	560	627	677	650	746	821
Death Certificates by ME	362	358	355	306	390	406	405	401	449	496
Bodies Transported to WMed	233	241	253	247	318	307	330	290	302	366[3]
Complete Autopsy	187	193	174	142	192	189	187	180	188	222
Limited Autopsy	4	4	6	7	7	4	9	7	6	5
External Examination	34	37	37	52	60	64	68	62	60	82
Storage Only at WMed	8	7	36	46	59	50	62	41	44	55
Total Cases with Toxicology	212	222	198	174	222	238	238	224	236	292
Unidentified Remains After Exam	0	0	0	0	0	0	1	0	1	0
Referrals to Gift of Life	46	65	95	113	161	156	129	136	161	226
Tissue Donations	4	4	6	9	22	16	16	17	17	19
Cornea Donations	4	9	9	9	20	10	7	7	10	12
Unclaimed Investigations	9	7	10	10	10	13	41	40	48	51
Exhumations	0	0	0	0	1	0	0	0	0	0

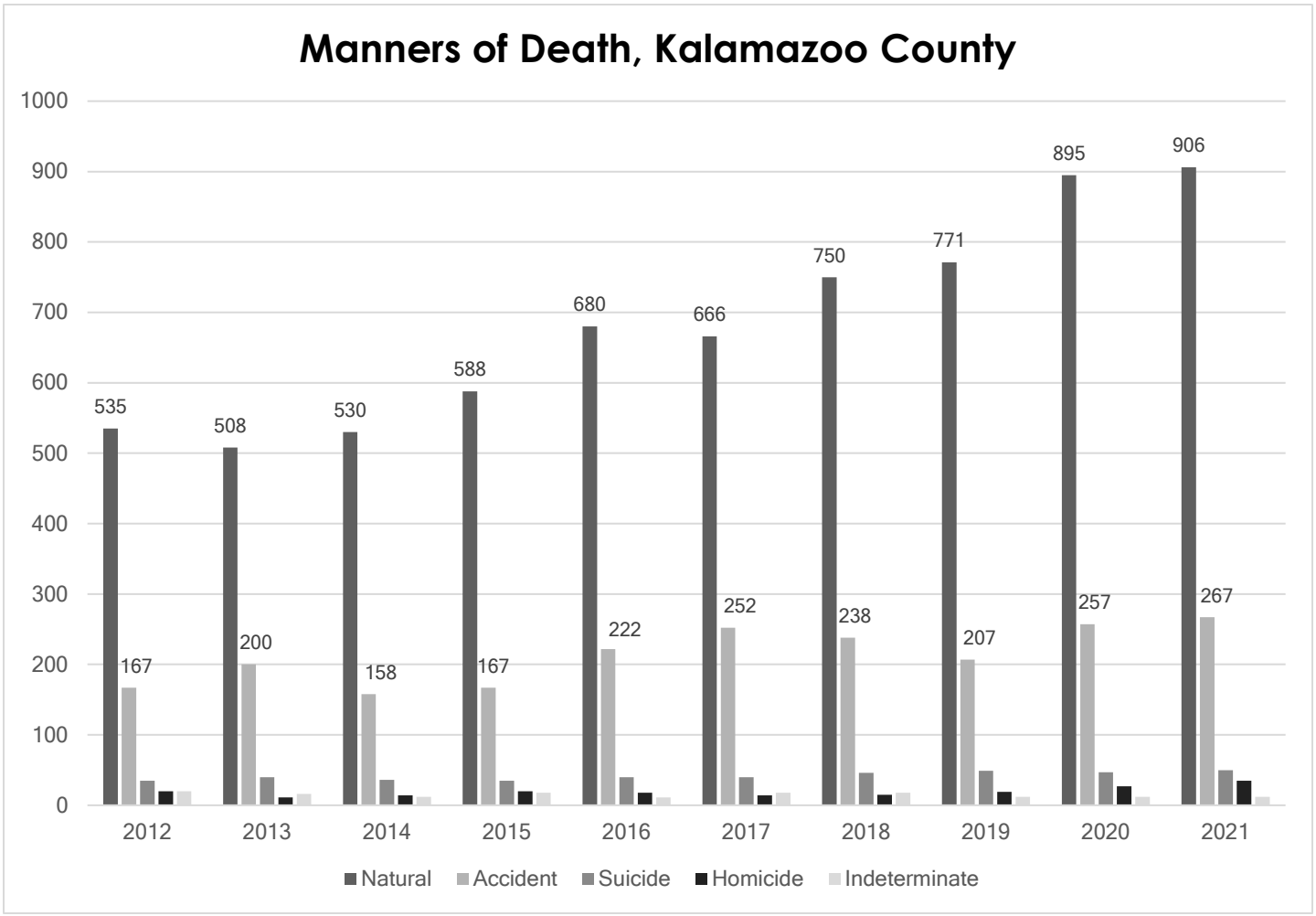
Cremation Permit Authorizations, Kalamazoo County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cremation Permits	1,467	1,740	1,782	1,672	1,856	1,920	2,101	2,028	2,492	2,594
% of Total Deaths with Cremation	58%	65%	66%	61%	64%	68%	71%	70%	72%	72%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county
[3] Includes (2) Toxicology only examinations

Manners of Death Reported, Kalamazoo County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Natural	535	508	530	588	680[1]	666	750	771	895	906
Accident	167	200	158	151	222	252	238	207	257	267
Suicide	35	40	36	38	40	40	46	49	47	50
Homicide	20	11	14	14	18	14	15	19	27	35
Indeterminate	20	16	12	19	11	18	17	12	12	12[2]
Total	**777**	**775**	**750**	**810**	**971**	**990**	**1066**	**1058**	**1238**	**1270[3]**



[1] After careful review, this number was corrected from 681 to 680

[2] (1) Found dead in bed, family declined autopsy, cause and manner of death could not be determined; (1) Found in water, cause and manner of death could not be determined; (1) Gunshot wound of head, intention of discharge is unknown; (1) Gunshot wound of neck, found adjacent to motor vehicle accident; (1) Mixed drug intoxication; (1) Acute drug intoxication with prolonged hospitalization; (1) Sudden unexplained infant death associated with unsafe sleep and seizure disorder; (1) Sudden unexplained infant death associated with unsafe sleep and small for gestational age; (1) Sudden unexplained infant death associated with unsafe sleep and bronchiolitis of unknown etiology/significance; (1) Complications of head trauma of unknown etiology; (1) Complications of head trauma of unknown etiology associated with substance use; (1) Head trauma of unknown etiology associated with illicit drug use

[3] Does not include (2) Pending cause and manner of death at the time of this report; (11) Stillbirth investigations

Deaths Reported by Age (in years), Kalamazoo County[1]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2012	12	4	3	7	34	79	235	403
2013	14	8	0	11	29	76	209	429
2014	7	3	5	5	29	61	239	399
2015	14	5	3	7	21	82	220	441
2016	5	5	3	12	37	95	269	494
2017	15	6	3	10	35	103	259	513
2018	13	5	1	9	23	97	297	571
2019	6	6	3	5	37	98	293	610
2020	11	4	4	9	28	130	343	709
2021	5	5	1	5	36	153	371	696

Pediatric Deaths, Kalamazoo County

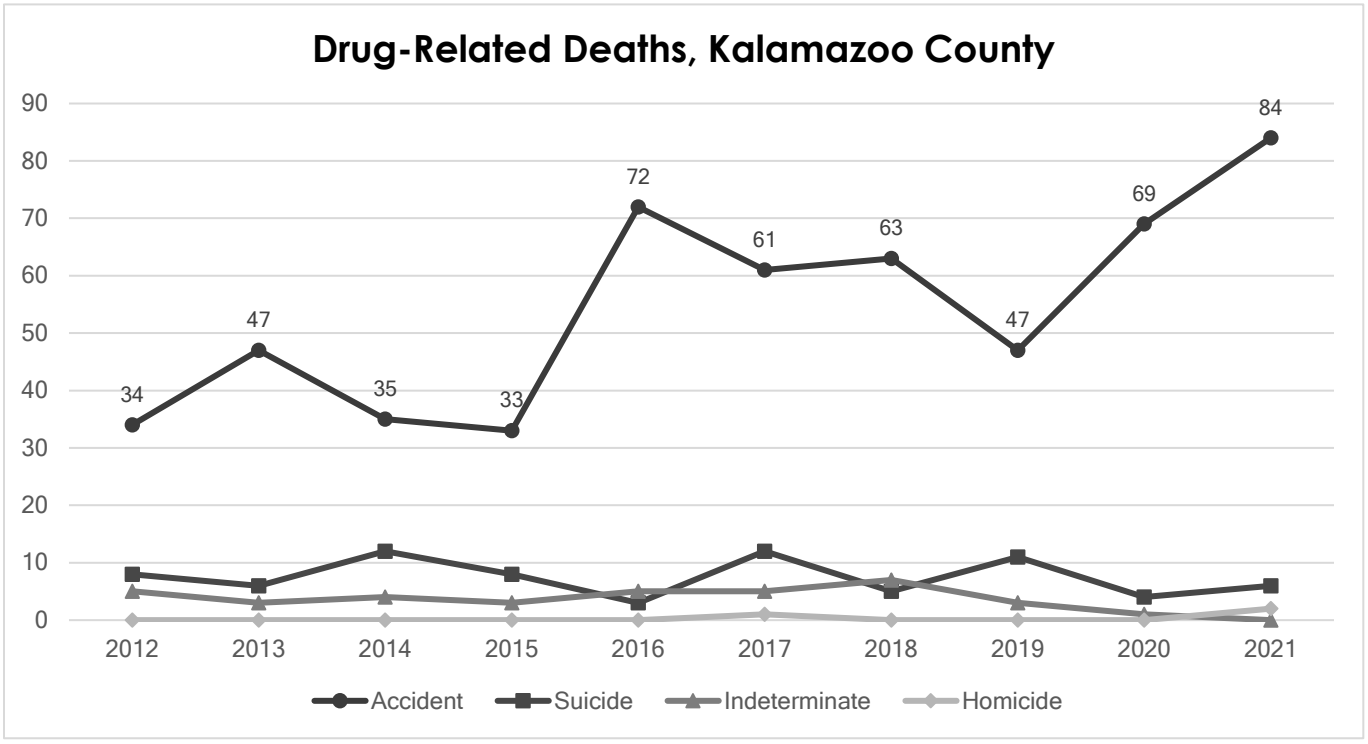
The 16 deaths of individuals under 18 years of age include:

1. <1 year old
    a. (1) Sudden unexplained infant death associated with unsafe sleep and seizure disorder; indeterminate
    b. (1) Sudden unexplained infant death associated with unsafe sleep and small for gestational age; indeterminate
    c. (1) Sudden unexplained infant death associated with unsafe sleep and bronchiolitis of unknown etiology/significance; indeterminate
    d. (1) Asphyxia due to overlay/wedging; accident
    e. (1) Extreme prematurity and chromosomal abnormality; natural
2. 1-5 years old
    a. (1) Blunt force injuries; homicide
    b. (1) Complications of blunt force injuries; homicide
    c. (1) Blunt force injuries, restrained passenger in rollover motor vehicle collision; accident
    d. (1) Complications of asphyxiation due to upper airway obstruction by foreign object; accident
    e. (1) Complications of tetralogy of Fallot; natural
3. 6-10 years old
    a. (1) Gunshot wound of head; homicide
4. 11-17 years old
    a. (1) Multiple injuries, intentionally drove motor vehicle into fixed object; suicide
    b. (1) Craniocerebral trauma, bicyclist struck by motor vehicle; accident
    c. (1) Gunshot wound of head; homicide
    d. (1) Complications of cerebral palsy and extreme prematurity; natural
    e. (1) Gunshot wound of chest; homicide

[1] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Accidental Deaths by Mechanism, Kalamazoo County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Vehicle	48	60	35	46	58	72	51	45	40	74
Drug-Related	34	47	35	33	72	61	63	47	69	84
Drowning	2	2	3	1	4	7	9	5	5	0
Fall	67	76	77	57	80	92	100	85	123	86[1]
Fire	2	8	3	3	4	5	4	5	6	4
Environmental Exposure	4	1	1	1	1	2	3	5	5	2
Asphyxia	3	4	2	7	3	6	6	12	6	7[2]
Other	7	3	4	3	1	7	3	3	3	10[3]
Total	**167**	**200**	**160**	**151**	**223**	**252**	**238[4]**	**207**	**257**	**267**



[1] Includes (2) Blunt force injuries due to falling off of bicycle

[2] (1) Asphyxia due to overlay/wedging; (3) Asphyxia due to choking; (1) Positional asphyxia associated with seizure disorder; (1) Autoerotic asphyxia; (1) Traumatic asphyxia, pinned between cars

[3] Includes (1) Blast injures due to explosion (propane leak); (1) Inhalation of products of combustion associated with illicit drug use; (1) Multiple injuries due to vehicle rolling onto individual while working underneath; (1) Complications of blunt force head and neck injuries due to skiing accident; (1) Complications of adverse drug reaction; (1) Sepsis due to sharp force trauma inflicted unintentionally; (1) Complications of blunt force head trauma due to being struck by falling objects; (1) Multiple blunt force injuries, pinned beneath tractor; (1) Complications of colon perforation during colonoscopy; (1) Gunshot wound of chest

[4] (1) death is categorized twice (drowning and vehicle-related; vehicle left roadway and entered water)

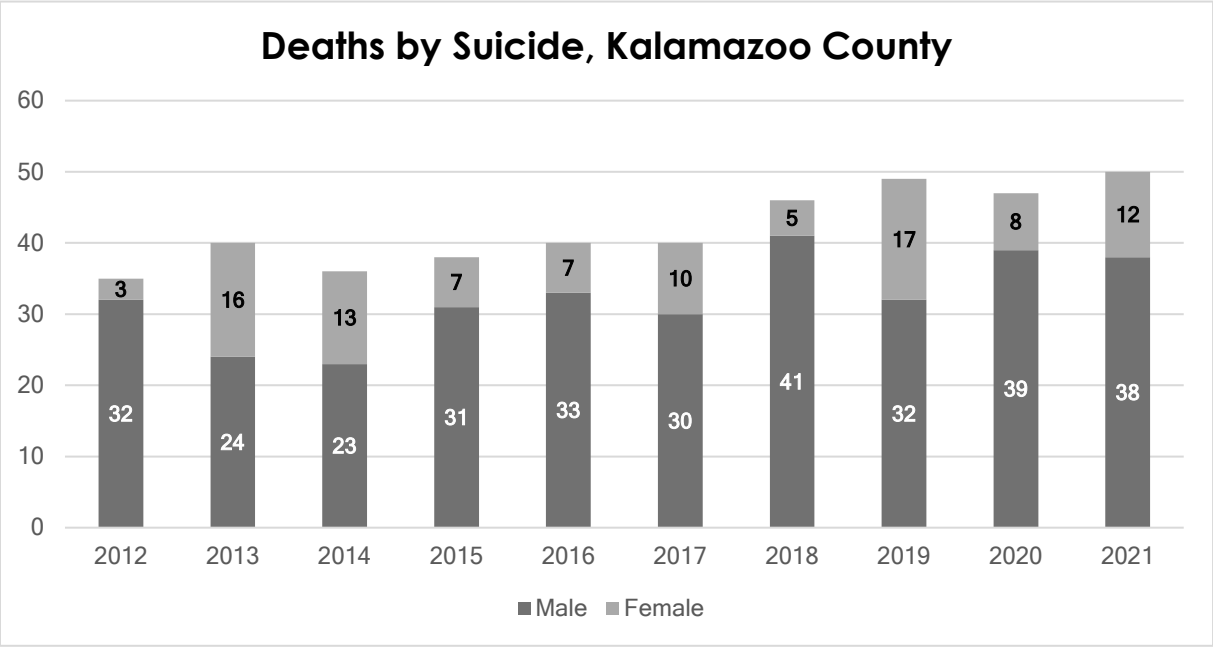
Drug-Related Deaths by Manner, Kalamazoo County[1]

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Accident	34	47	35	33	72	61	63	47	69	84
Suicide	8	6	12	8	3	12	5	11	4	6
Homicide	0	0	0	0	0	1	0	0	0	0
Indeterminate	5	3	4	3	5	5	7	3	1	2
Total	**47**	**56**	**51**	**44**	**80**	**79**	**75**	**61**	**74**	**92**
Total involving opioid(s)	N/A	N/A	N/A	30	64	59	51	32	56	63
% of Accidents and Indeterminate Deaths Involving Opioids	N/A	N/A	N/A	83%	82%	74%	73%	60%	80%	69%

Suicides by Sex & Age, Kalamazoo County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2012	**35**	32	3	1	3	11	12	8
2013	**40**	24	16	5	12	4	12	7
2014	**36**	23	13	0	7	12	10	7
2015	**38**	31	7	3	6	8	14	7
2016	**40**	33	7	3	7	13	12	5
2017	**40**	30	10	1	3	14	14	8
2018	**46**	41	5	2	9	11	11	13
2019	**49**	32	17	3	13	14	13	6
2020	**47**	39	8	3	5	15	19	5
2021	**50**	38	12	1	8	20	17	4

[1] Acute alcohol intoxications are defined as drug-related deaths and are included in this data



Suicides by Mechanism, Kalamazoo County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Firearm	15	15	14	19	19	14	26	22	21	22
Hanging	8	13	7	9	13	12	13	12	21	17
Carbon Monoxide	1	0	0	1	2	0	0	0	1	0
Drug Intoxication	8	6	12	8	3	12	5	11	4	6
Motor Vehicle	0	1	1	1	0	0	0	2	0	2
Sharp Force Trauma	1	2	0	0	2	2	0	0	0	1
Asphyxia/Suffocation	1	3	1	0	0	0	1	1	0	0
Other	1	0	1	0	1	0	1	1	0	2[1]
Total	**35**	**40**	**36**	**38**	**40**	**40**	**46**	**49**	**47**	**50**

[1] (2) Fire-related injuries due to self-immolation

LEELANAU COUNTY

Summary of All Leelanau County Cases

	2017	2018	2019	2020	2021
Total Deaths in the County	148	175	145	187[1]	213[2]
Deaths Reported to the ME	39	46	33	45	61
Deaths Investigated	36	45	33	44	60
MEI Scene Investigations	24	41	28	31	43
Death Certificates by ME	21	15	13	11	24
Bodies Transported to WMed	10	9	8	7	12
Complete Autopsy	9	7	6	1	9
Limited Autopsy	1	0	0	0	0
External Examination	0	2	2	6	3
Storage Only	0	0	0	0	0
Total Cases with Toxicology	10	8	8	6	11
Unidentified Remains After Exam	0	0	0	0	0
Referrals to Gift of Life	6	8	6	7	14
Tissue Donations	0	1	1	1	1
Cornea Donations	0	0	0	0	0
Unclaimed Investigations	0	0	0	0	0
Exhumations	0	0	0	0	0

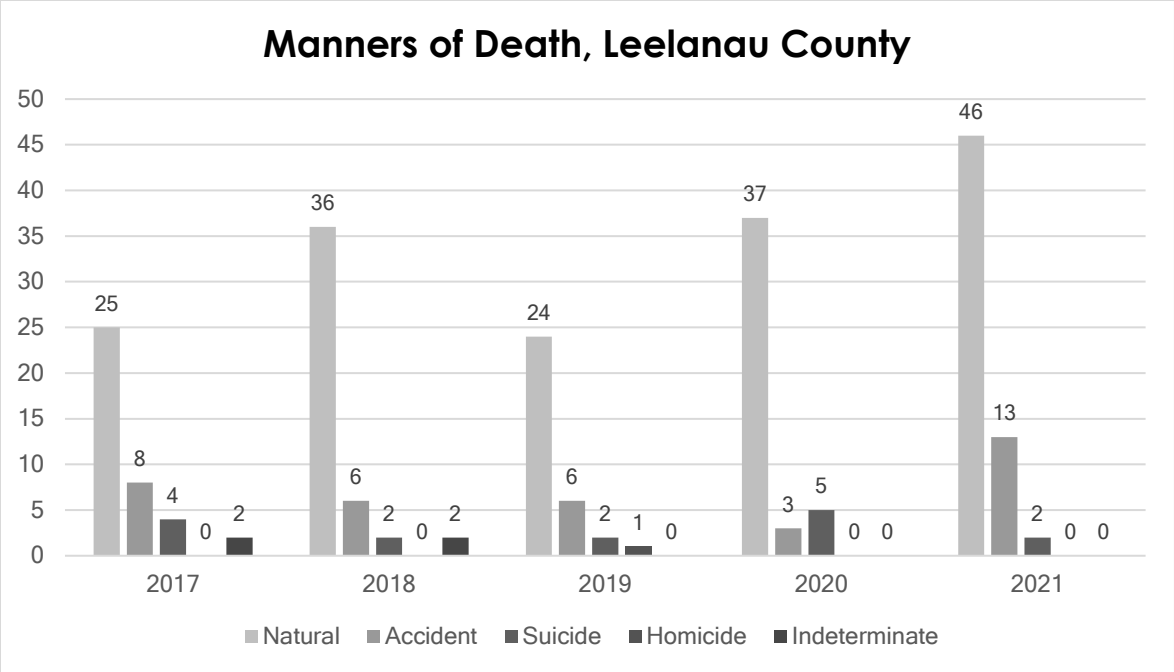
Cremation Permit Authorizations, Leelanau County

	2017	2018	2019	2020	2021
Cremation Permits	105	130	102	132	164
% of Total Deaths with Cremation	71%	74%	70%	71%	77%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county

Manners of Death Reported, Leelanau County

	2017	2018	2019	2020	2021
Natural	25	36	24	37	46
Accident	8	6	6	3	13
Suicide	4	2	2	5	2
Homicide	0	0	1	0	0
Indeterminate	2	2	0	0	0
Total	**39**	**46**	**33**	**45**	**61**



Deaths Reported by Age (in years), Leelanau County[1]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2017	0	0	0	1	3	3	7	25
2018	0	0	1	0	1	3	7	34
2019	0	0	0	0	1	2	5	25
2020	0	0	0	0	0	2	10	33
2021	0	1	0	1	1	7	11	40

[1] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Pediatric Deaths, Leelanau County

The two deaths of individuals under 18 years of age include:

1. 1-5 years old
   a. (1) Hyperthermia; accident
2. 11-17 years old
   a. (1) Hanging; suicide

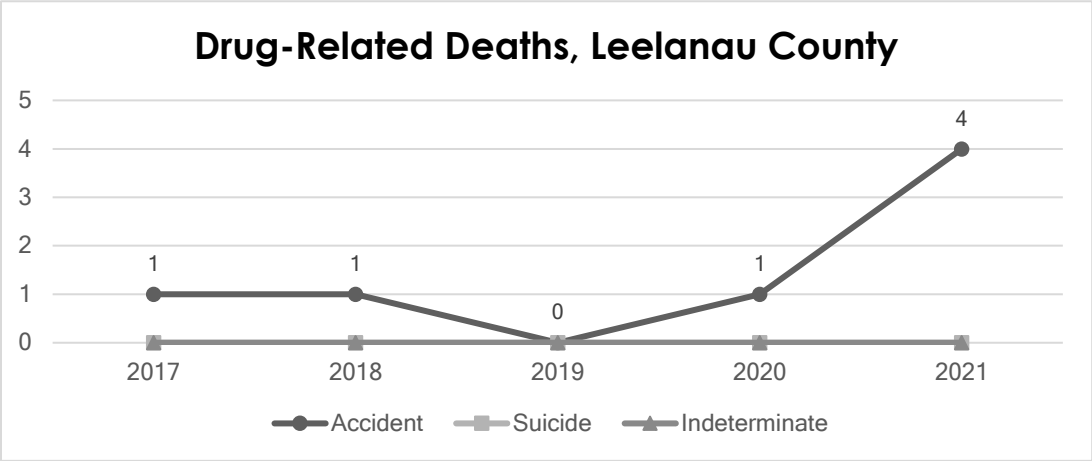
Accidental Deaths by Mechanism, Leelanau County

	2017	2018	2019	2020	2021
Vehicle	2	1	3	1	1
Drug-Related	1	1	0	1	4
Drowning	0	2	2	0	1
Fall	0	1	1	0	5
Fire	0	0	0	0	0
Environmental Exposure	0	0	0	0	1
Asphyxia	0	1	0	1	0
Other	1	0	0	0	1[1]
Total	**4**	**6**	**6**	**3**	**13**

Drug-Related Deaths by Manner, Leelanau County[2]

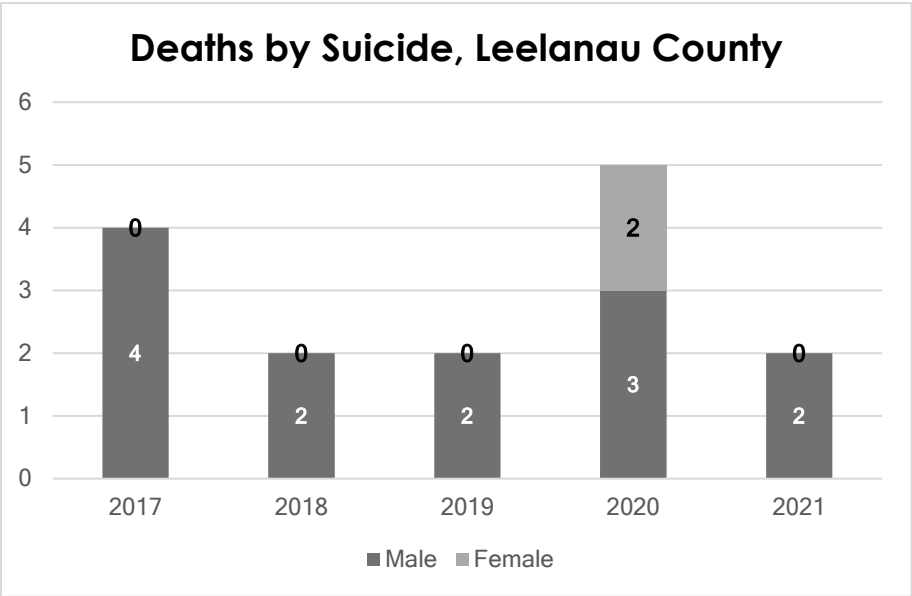
	2017	2018	2019	2020	2021
Accident	1	1	0	1	4
Suicide	0	0	0	0	0
Indeterminate	0	0	0	0	0
Total	**1**	**1**	**0**	**1**	**4**
Total involving opioid(s)	1	0	0	1	3
% of Accidents and Indeterminate Manners Involving Opioids	100%	0%	0%	100%	75%

[1] (1) Electrocution
[2] Acute alcohol intoxications are defined as drug-related deaths and are included in this data



Suicides by Sex & Age, Leelanau County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2017	**4**	4	0	1	0	0	1	2
2018	**2**	2	0	0	0	0	0	2
2019	**2**	2	0	0	0	1	1	0
2020	**5**	3	2	0	0	1	1	3
2021	**2**	2	0	1	0	1	0	0



Suicides by Mechanism, Leelanau County

	2017	2018	2019	2020	2021
Firearm	2	2	2	3	0
Hanging	1	0	0	2	2
Carbon Monoxide	0	0	0	0	0
Drug Intoxication	0	0	0	0	0
Motor Vehicle	0	0	0	0	0
Sharp Force Trauma	0	0	0	0	0
Asphyxia/Suffocation	0	0	0	0	0
Other	1	0	0	0	0
Total	**4**	**2**	**2**	**5**	**2**

MASON COUNTY

Summary of All Mason County Cases

	2018	2019	2020	2021
Total Deaths in the County	311	287	344[1]	373[2]
Deaths Reported to the ME	107	110	111	139
Deaths Investigated	92	93	97	124
MEI Scene Investigations	88	84	83	111
Death Certificates by ME	53	52	34	44
Bodies Transported to WMed	37	34	22	32
Complete Autopsy	29	25	12	20
Limited Autopsy	0	0	3	1
External Examination	6	7	7	7
Storage Only	2	2	0	4
Total cases with Toxicology	32	31	21	28
Unidentified Remains After Exam	0	0	1	0
Referrals to Gift of Life	16	10	19	26
Tissue Donations	3	2	0	2
Cornea Donations	0	1	0	1
Unclaimed Investigations	1	0	0	6
Exhumations	0	0	0	0

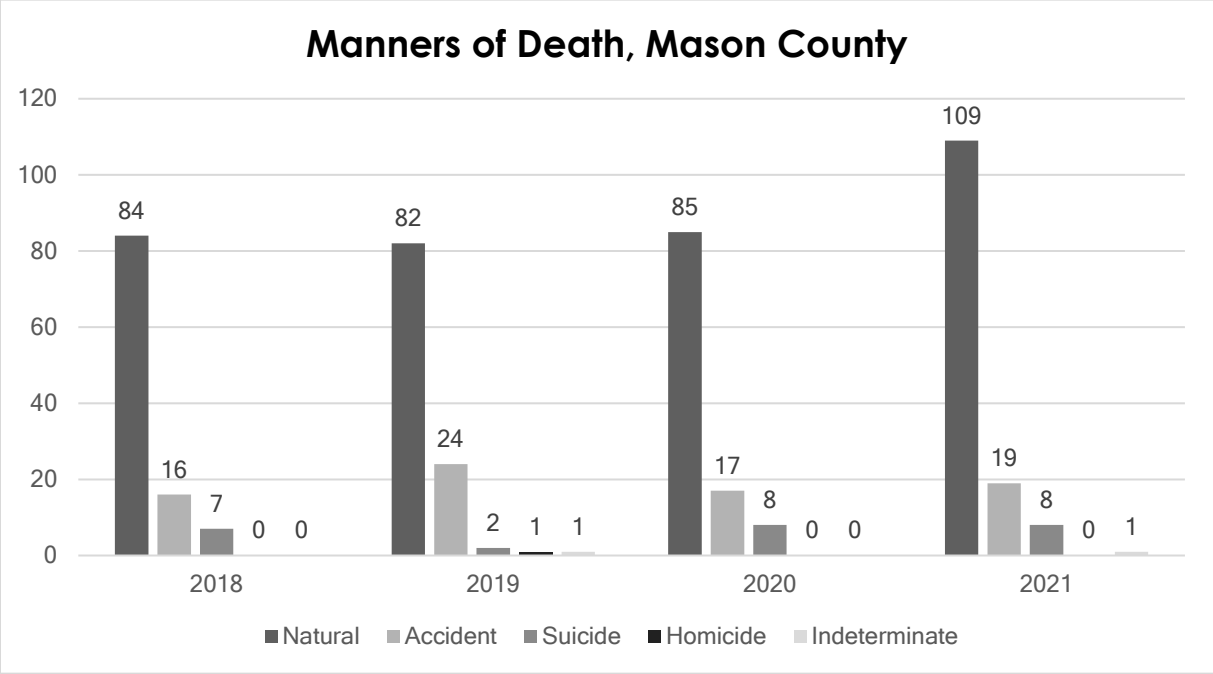
Cremation Permit Authorizations, Mason County

	2018	2019	2020	2021
Cremation Permits	231	224	288	300
% of Total Deaths with Cremation	74%	78%	84%	80%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county

Manners of Death Reported, Mason County

	2018	2019	2020	2021
Natural	84	82	85	109
Accident	16	24	17	19
Suicide	7	2	8	8
Homicide	0	1	0	0
Indeterminate	0	1	0	1[1]
Total	**107**	**110**	**110**	**137[2]**



Deaths Reported by Age (in years), Mason County[3]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	0	0	0	3	2	13	25	63
2019	0	0	0	1	5	7	30	67
2020	0	0	0	0	1	10	28	71
2021	0	0	0	1	2	15	31	88

[1] (1) Inhalation of products of combustion, residential fire of unknown etiology
[2] Does not include (2) stillbirth investigations
[3] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Pediatric Deaths, Mason County

The one death of individuals under 18 years of age include:

1. 11-17 years old
    a. (1) Ligature injuries sustained in hanging attempt; suicide

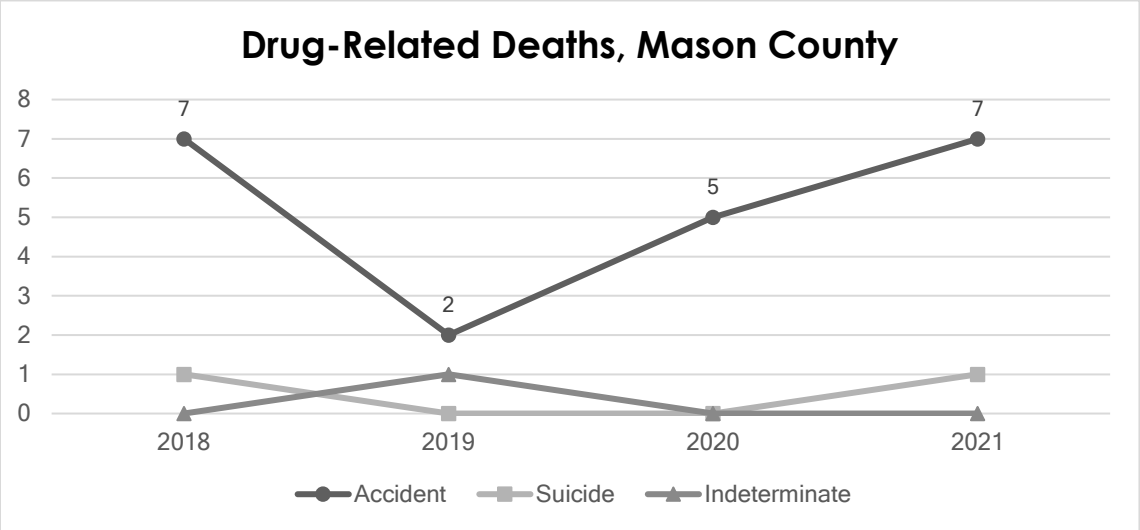
Accidental Deaths by Mechanism, Mason County

	2018	2019	2020	2021
Vehicle	5	6	4	5
Drug-Related	7	2	5	7
Drowning	1	7	2	2
Fall	3	6	4	4
Fire	0	0	0	0
Environmental Exposure	0	3	0	0
Asphyxia	0	0	1	1
Other	0	0	1	0
Total	**16[1]**	**24**	**17**	**19**

Drug-Related Deaths by Manner, Mason County[2]

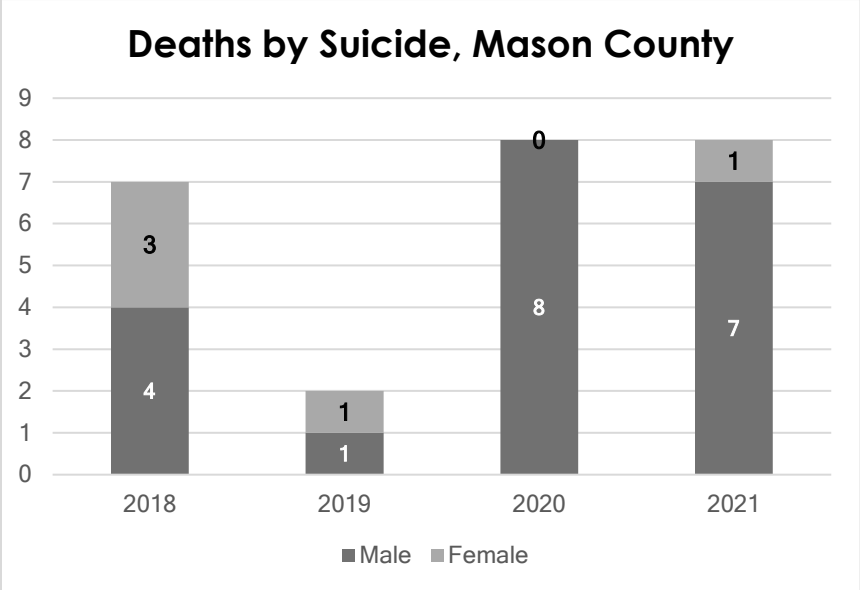
	2018	2019	2020	2021
Accident	7	2	5	7
Suicide	1	0	0	1
Indeterminate	0	1	0	0
Total	**8**	**3**	**5**	**8**
Total involving opioid(s)	4	1	5	7
% of Accidents and Indeterminate Deaths Involving Opioids	57%	33%	100%	100%

[1] (1) death is categorized twice (drug-related and environmental exposure)
[2] Acute alcohol intoxications are defined as drug-related deaths and are included in this data



Suicides by Sex & Age, Mason County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	7	4	3	1	0	3	3	0
2019	2	1	1	0	1	1	0	0
2020	8	8	0	0	0	2	4	2
2021	8	7	1	1	0	3	4	0



Suicides by Mechanism, Mason County

	2018	2019	2020	2021
Firearm	2	2	6	4
Hanging	4	0	2	2
Carbon Monoxide	0	0	0	0
Drug Intoxication	1	0	0	1
Motor Vehicle	0	0	0	0
Sharp Force Trauma	0	0	0	1
Asphyxia/Suffocation	0	0	0	0
Other	0	0	0	0
Total	**7**	**2**	**8**	**8**

MUSKEGON COUNTY

Summary of All Muskegon County Cases

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Deaths in the County	1,600	1,730	1,707	1,784	1,759	1,784	1,841	1,846	2,222[1]	2,171[2]
Deaths Reported to the ME	481	527	524	605	585	629	662	670	804	842
Deaths Investigated	412	424	453	530	504	468	504	523	628	642
MEI Scene Investigations	384	420	444	501	469	425	463	467	538	537
Death Certificates by ME	203	216	228	251	231	234	235	248	255	292
Bodies Transported to WMed	132	148	178	159	167	159	161	177	167	191
Complete Autopsy	106	120	144	120	114	108	117	134	125	137
Limited Autopsy	2	6	2	4	2	4	4	5	4	4
External Examination	22	18	18	35	41	43	35	30	34	39
Storage Only	2	4	4	0	10	4	4	8	4	11
Total Cases with Toxicology	119	142	152	160	136	140	147	160	158	179
Unidentified Remains After Exam	0	0	0	0	0	0	0	0	0	1[3]
Referrals to Gift of Life	81	93	156	139	109	122	128	104	137	155
Tissue Donations	8	9	14	17	12	9	15	12	9	12
Cornea Donations	11	12	16	20	11	7	8	6	4	8
Unclaimed Investigations	4	3	6	5	7	12	15	14	19	20
Exhumations	0	0	0	0	0	0	0	0	0	2[4]

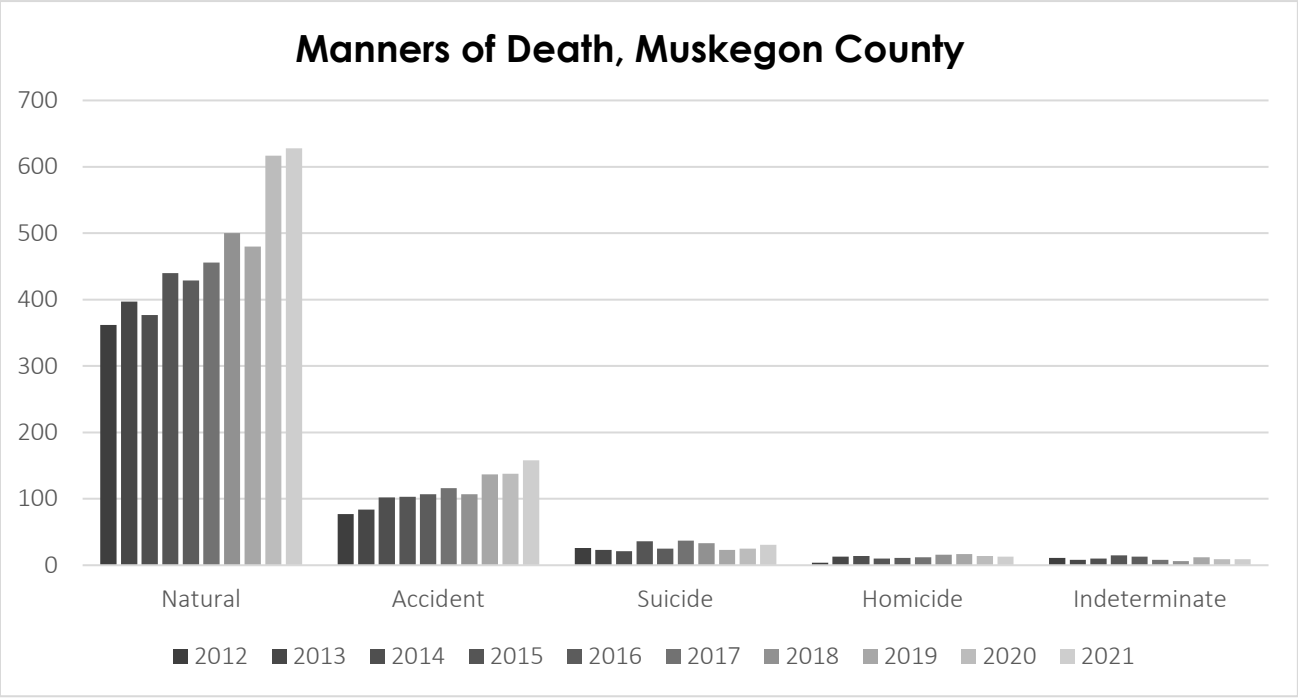
[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county
[3] (1) Unidentified human remains (exhumation for DNA analysis)
[4] Includes (1) Family requested exhumation for reburial of remains elsewhere

Cremation Permit Authorizations, Muskegon County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cremation Permits	952	986	1,007	1,116	1,138	1,188	1,264	1,383	1,600	1,637
% of Total Deaths with Cremation	60%	57%	59%	63%	65%	67%	68%	75%	72%	75%

Manners of Death Reported, Muskegon County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Natural	362	397	377[1]	440	429	456	500	480	617	628
Accident	77	84	102	103	107	116	107	137	138	158
Suicide	26	23	21	36	25	37	33	23	25	31
Homicide	4	13	14	10	11	12	16	17	14	13
Indeterminate	11	8	10[2]	15	13	8	6	12	9	9[3]
Total	**480**	**525**	**524**	**604**	**585**	**629**	**662**	**669**	**803**	**839[4]**



[1] After careful review, this number was corrected from 375 to 377
[2] After careful review, this number was corrected from 9 to 10
[3] (1) Epilepsy due to blunt head injury of uncertain etiology; (1) Acute and chronic head injury of uncertain etiology; (1) Inhalation of products of combustion, residential fire; (1) Inhalation of products of combustion and thermal injuries, residential fire; (3) Sudden unexplained infant death associated with unsafe sleep; (2) Sudden unexplained infant death associated with viral infection and unsafe sleep
[4] Does not include (1) Unidentified human remains (exhumation for DNA analysis); (2) Stillbirth investigations

Deaths Reported by Age (in years), Muskegon County[1]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2012	4	3	1	3	14	44	144	267
2013	5	0	0	4	13	48	170	286
2014	4	0	0	8	15	66	155	273
2015	9	1	2	2	24	61	199	304
2016	4	2	1	5	18	55	184	303
2017	3	1	0	8	14	81	168	344
2018	1	2	3	1	16	88	190	344
2019	2	0	0	1	22	74	177	393
2020	6	0	1	6	16	87	199	488
2021[2]	5	0	0	1	20	92	236	485

Pediatric Deaths, Muskegon County

The six deaths of individuals under 18 years of age include:

1. <1 year old
   a. (3) Sudden unexplained infant death associated with unsafe sleep; indeterminate
   b. (2) Sudden unexplained infant death associated with viral infection and unsafe sleep; indeterminate
2. 11-17 years old
   a. (1) Complications of microcephaly; natural

[1] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

[2] Does not include (1) Unidentified human remains (exhumation for DNA analysis)

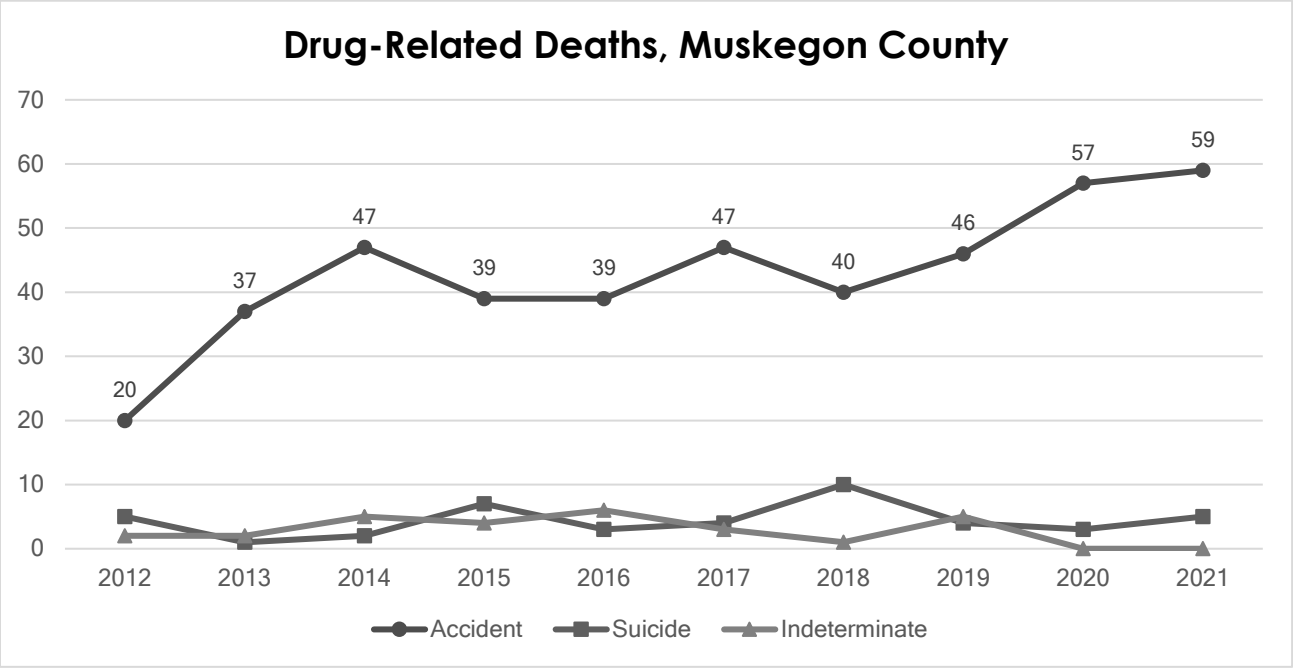
Accidental Deaths by Mechanism, Muskegon County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Vehicle	18	13	18	22	22	22	21	33	27	28
Drug-Related	20	37	47	39	40	47	40	46	57	59
Drowning	4	4	4	4	2	4	2	5	4	6[1]
Fall	27	26	29	29	32	38	37	43	38	51
Fire	0	0	1	3	1	0	0	1	3	1
Environmental Exposure	0	0	1	1	4	0	1	2	4	7[2]
Asphyxia	4	2	2	3	4	2	5	4	4	3[3]
Other	3	0	1	2	2	3	2	3	1	3[4]
Total	**76**	**82**	**103**	**103**	**107**	**116**	**107[5]**	**137**	**138**	**158**

Drug-Related Deaths by Manner, Muskegon County[6]

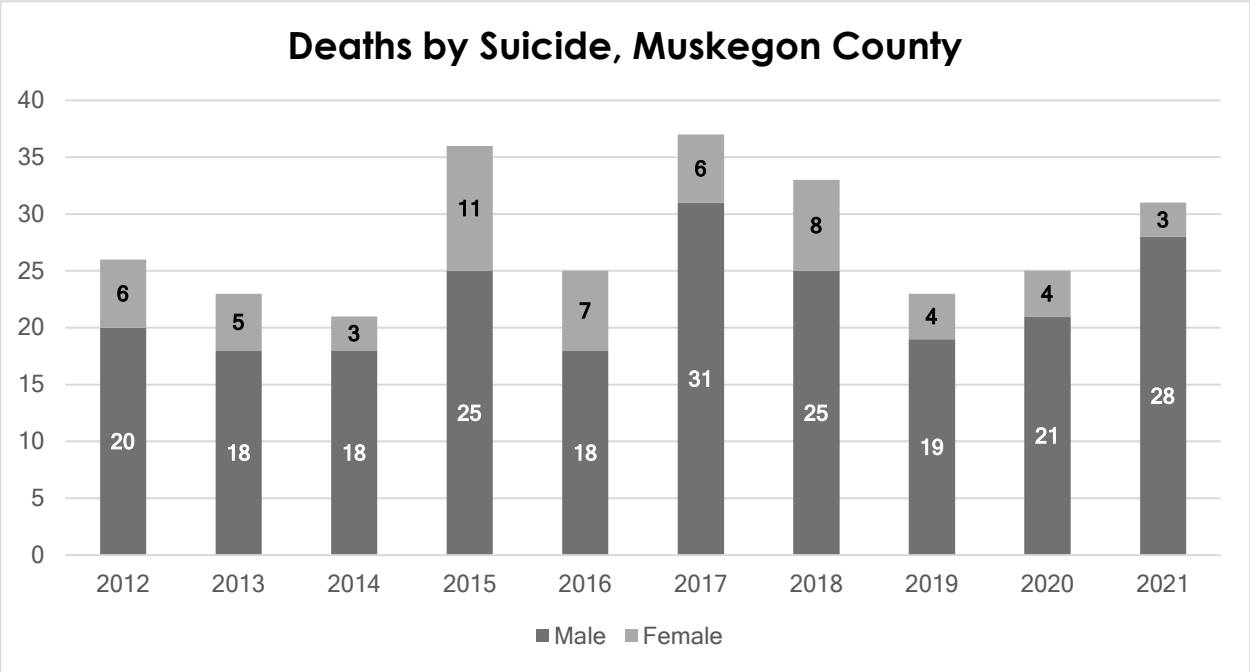
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Accident	20	37	47	39	39	47	40	46	57	59
Suicide	5	1	2	7	3	4	10	4	3	5
Indeterminate	2	2	5	4	6	3	1	5	0	0
Total	**27**	**40**	**54**	**50**	**48**	**54**	**51**	**55**	**60**	**64**
Total involving opioid(s)	N/A	N/A	N/A	43	41	43	39	43	50	54
% of Accidents and Indeterminate Deaths Involving Opioids	N/A	N/A	N/A	95%	87%	84%	85%	84%	88%	88%

[1] Includes (1) Drowning associated with mixed drug intoxication
[2] Includes (2) Natural disease associated with probable hypothermia; (1) Hypothermia associated with acute drug intoxication and natural disease; (1) Hypothermia associated with acute and chronic alcohol use and natural disease
[3] (3) Asphyxia due to choking
[4] (2) Carbon monoxide poisoning; (1) Natural disease associated with multiple blunt and sharp force injuries (dog bites)
[5] (1) Death is categorized twice (drug-related and drowning)
[6] Acute alcohol intoxications are defined as drug-related deaths and are included in this data



Suicides by Sex & Age, Muskegon County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2012	**26**	20	6	1	2	9	8	6
2013	**23**	18	5	0	2	10	7	4
2014	**21**	18	3	3	4	3	9	2
2015	**36**	25	11	0	7	10	8	11
2016	**25**	18	7	0	2	6	11	6
2017	**37**	31	6	3	4	10	15	5
2018	**33**	25	8	0	6	12	9	6
2019	**23**	19	4	0	3	8	8	4
2020	**25**	21	4	0	3	9	6	7
2021	**31**	28	3	0	3	12	10	6



Suicides by Mechanism, Muskegon County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Firearm	13	9	10	11	15	19	14	13	8	10
Hanging	7	7	7	15	5	10	9	5	9	9
Carbon Monoxide	0	1	0	1	1	1	0	0	1	2
Drug Intoxication	5	1	3	7	2	4	7	4	3	5
Motor Vehicle	0	2	1	0[1]	0	0	0	0	0	0
Sharp Force Trauma	0	3	0	2	1	0	0	1	0	1
Asphyxia/Suffocation	1	0	0	0	1	1	0	0	2	1[2]
Other	0	0	0	0	0	2	3	0	2	3[3]
Total	**26**	**23**	**21**	**36**	**25**	**37**	**33**	**23**	**25**	**31**

[1] After careful review, this number was corrected from 2 to 0
[2] (1) Self-inflicted strangulation with cord
[3] (1) Drowning; (1) Drowning associated with mixed drug intoxication; (1) Intentionally induced diabetic ketoacidosis

OSCEOLA COUNTY

Summary of Osceola County Cases

	2018[1]	2019	2020	2021
Total Deaths in the County	187	175	211[2]	153[3]
Deaths Reported to the ME	62	72	78	60
Deaths Investigated	58	63	72	54
MEI Scene Investigations	55	62	66	47
Death Certificates by ME	31	29	32	14
Bodies Transported to WMed	17	23	22	12
Complete Autopsy	12	12	13	10
Limited Autopsy	0	2	1	0
External Examination	4	7	8	2
Storage Only	1	2	0	0
Total Cases with Toxicology	16	20	21	12
Unidentified Remains After Exam	1	1	0	0
Referrals to Gift of Life	10	16	16	14
Tissue Donations	1	1	1	0
Cornea Donations	1	1	1	1
Unclaimed Investigations	0	1	2	0
Exhumations	0	0	0	0

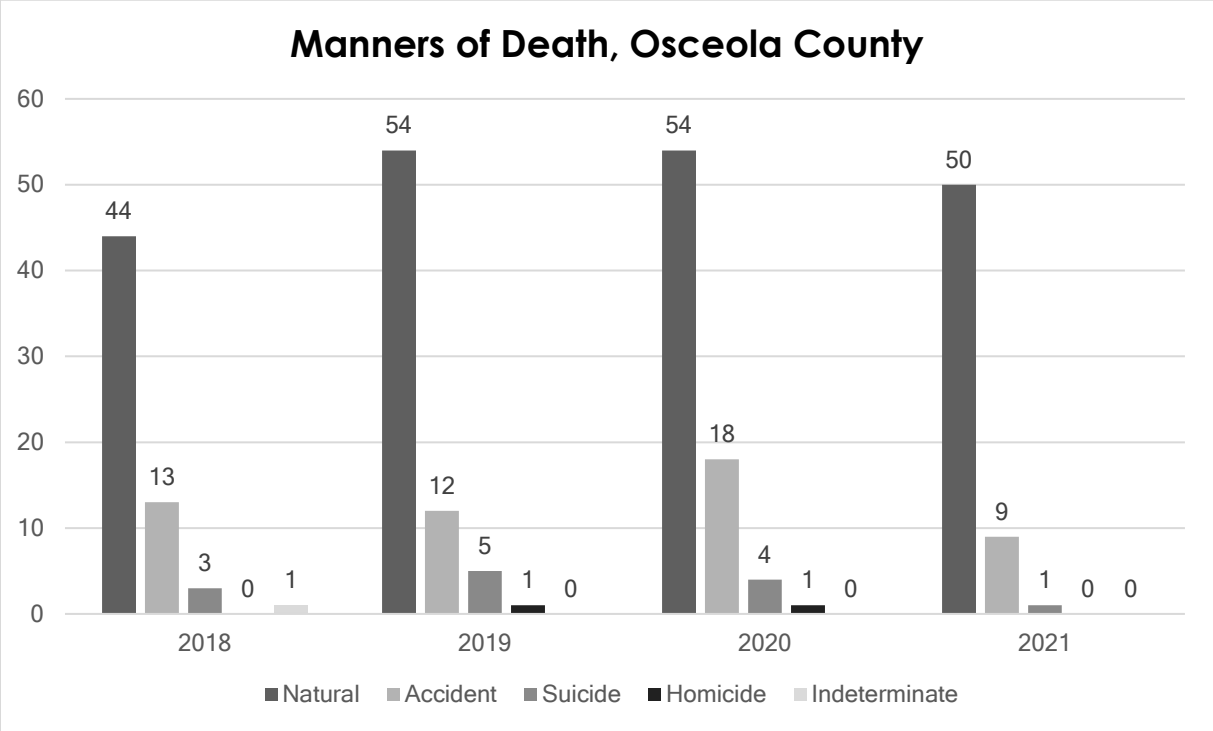
Cremation Permit Authorizations, Osceola County

	2018[4]	2019	2020	2021
Cremation Permits	86	128	151	113
% of Total Deaths with Cremation	46%	73%	72%	74%

[1] Data provided in this report includes January 1 to December 31, 2018, but WMed served as ME for only April 1 to December 31, 2018
[2] Updated total number of deaths occurring in the county
[3] Provisional total number of deaths occurring in the county
[4] Data includes only those cremation permits reviewed and approved at WMed

Manners of Death Reported, Osceola County

	2018	2019	2020	2021
Natural	44	54	54	50
Accident	13	12	18	9
Suicide	3	5	4	1
Homicide	0	1	1	0
Indeterminate	1	0	0	0
Total	**61**	**72**	**77**	**60**



Deaths Reported by Age (in years), Osceola County[1]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	1	1	0	1	0	4	13	41
2019	0	1	1	3	0	5	20	42
2020	0	0	0	0	4	11	21	41
2021	0	0	0	0	0	5	20	35

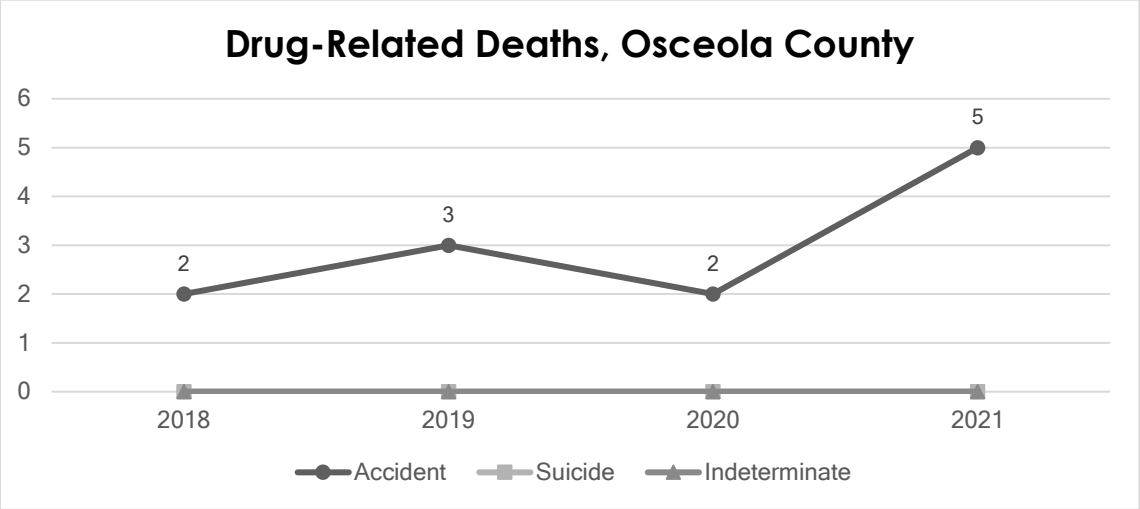
[1] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Accidental Deaths by Mechanism, Osceola County

	2018	2019	2020	2021
Vehicle	4	6	11	1
Drug-Related	2	3	2	5
Drowning	0	2	0	1
Fall	3	0	4	0
Fire	0	0	0	0
Environmental Exposure	0	0	1	2[1]
Asphyxia	2	1	0	0
Other	2	0	0	0
Total	**13**	**12**	**18**	**9**

Drug-Related Deaths by Manner, Osceola County[2]

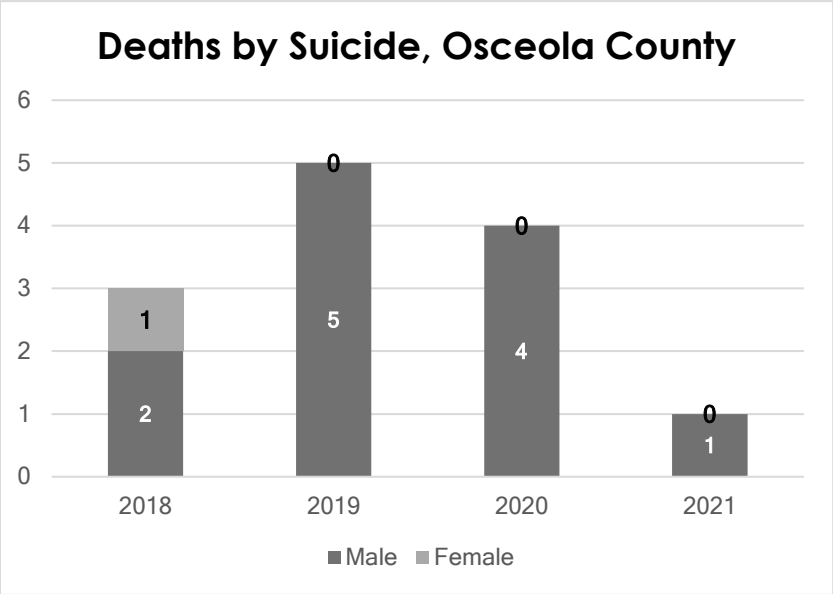
	2018	2019	2020	2021
Accident	2	3	2	5
Suicide	0	0	0	0
Indeterminate	0	0	0	0
Total	**2**	**3**	**2**	**5**
Total involving opioid(s)	1	2	0	4
% of Accidents and Indeterminate Deaths Involving Opioids	50%	66%	0%	80%



[1] Includes (1) Probable hypothermia
[2] Acute alcohol intoxications are defined as drug-related deaths and are included in this data

Suicides by Sex & Age, Osceola County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	**3**	2	1	1	0	1	1	0
2019	**5**	5	0	0	0	1	3	1
2020	**4**	4	0	0	1	0	2	1
2021	**1**	1	0	0	0	1	0	0



Suicides by Mechanism, Osceola County

	2018	2019	2020	2021
Firearm	2	4	3	1
Hanging	1	1	1	0
Carbon Monoxide	0	0	0	0
Drug Intoxication	0	0	0	0
Motor Vehicle	0	0	0	0
Sharp Force Trauma	0	0	0	0
Asphyxia/Suffocation	0	0	0	0
Other	0	0	0	0
Total	**3**	**5**	**4**	**1**

ST. JOSEPH COUNTY

Summary of St. Joseph County Cases

	2017	2018	2019	2020	2021
Total Deaths in the County	508	530	507	541[1]	601[2]
Deaths Reported to the ME	164	157	150	200	220
Deaths Investigated	155	150	145	196	191
MEI Scene Investigations	147	141	134	172	173
Death Certificates by ME	66	69	70	74	73
Bodies Transported to WMed	56	67	61	64	54
Complete Autopsy	34	39	34	42	30
Limited Autopsy	1	2	3	4	1
External Examination	14	20	17	11	16
Storage Only	7	5	7	7	7
Total Cases with Toxicology	43	55	51	54	45
Unidentified Remains After Exam	2	0	1	0	0
Referrals to Gift of Life	53	45	41	71	70
Tissue Donations	7	6	6	4	7
Cornea Donations	2	3	4	1	5
Unclaimed Investigations	1	4	8	6	4
Exhumations	0	0	0	0	0

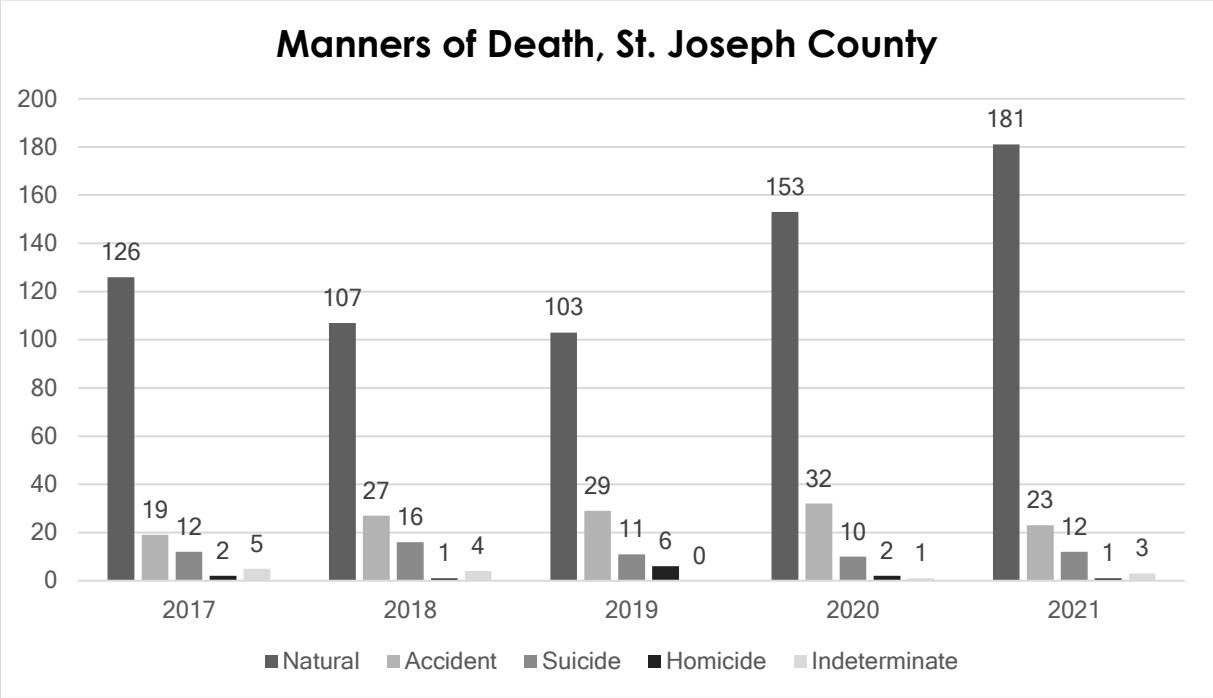
Cremation Permit Authorizations, St. Joseph County

	2017	2018	2019	2020	2021
Cremation Permits	309	306	327	386	424
% of Total Deaths with Cremation	61%	58%	65%	71%	71%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county

Manners of Death Reported, St. Joseph County

	2017	2018	2019	2020	2021
Natural	126	107	103	153	181
Accident	19	27	29	32	23
Suicide	12	16	11	10	12
Homicide	2	1	6	2	1
Indeterminate	5	4	0	1	3[1]
Total	**164**	**155**	**149**	**198**	**220**



Deaths Reported by Age (in years), St. Joseph County[2]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2017	1	0	0	1	2	19	60	78
2018	3	2	1	3	9	17	46	70
2019	0	1	0	2	3	23	49	71
2020	2	1	0	1	6	38	66	94
2021	1	0	0	1	3	18	71	126

[1] (1) Mixed drug intoxication associated with hypothermia; (1) Sudden unexplained infant death associated with unsafe sleep and interstitial pneumonitis; (1) Sepsis of unknown etiology associated with illicit drug use

[2] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

Pediatric Deaths, St. Joseph County

The two deaths of individuals under 18 years of age include:

1. <1 year old
   a. (1) Sudden unexplained infant death associated with unsafe sleep and interstitial pneumonitis; indeterminate
2. 11-17 years old
   a. (1) Asphyxia due to suffocation; suicide

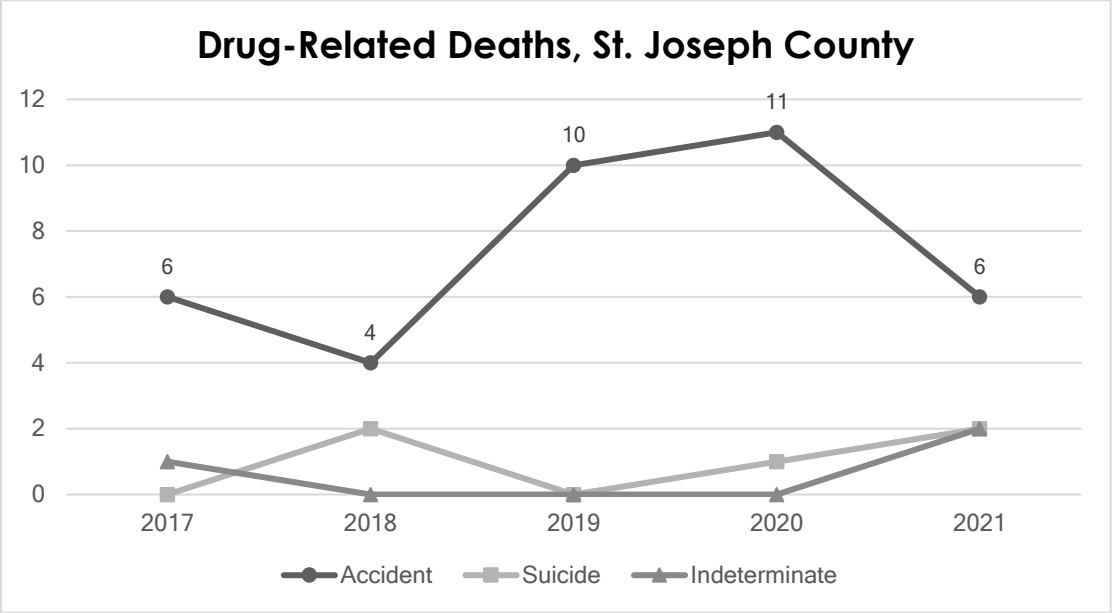
Accidental Deaths by Mechanism, St. Joseph County

	2017	2018	2019	2020	2021
Vehicle	8	15	11	13	6
Drug-Related	6	4	10	11	6
Drowning	2	1	3	2	3
Fall	1	3	4	3	5[1]
Fire	1	4	0	2	0
Environmental Exposure	0	0	1	0	0
Asphyxia	1	1	0	1	1[2]
Other	0	0	0	0	2[3]
Total	**19**	**27[4]**	**29**	**32**	**23**

Drug-Related Deaths by Manner, St. Joseph County[5]

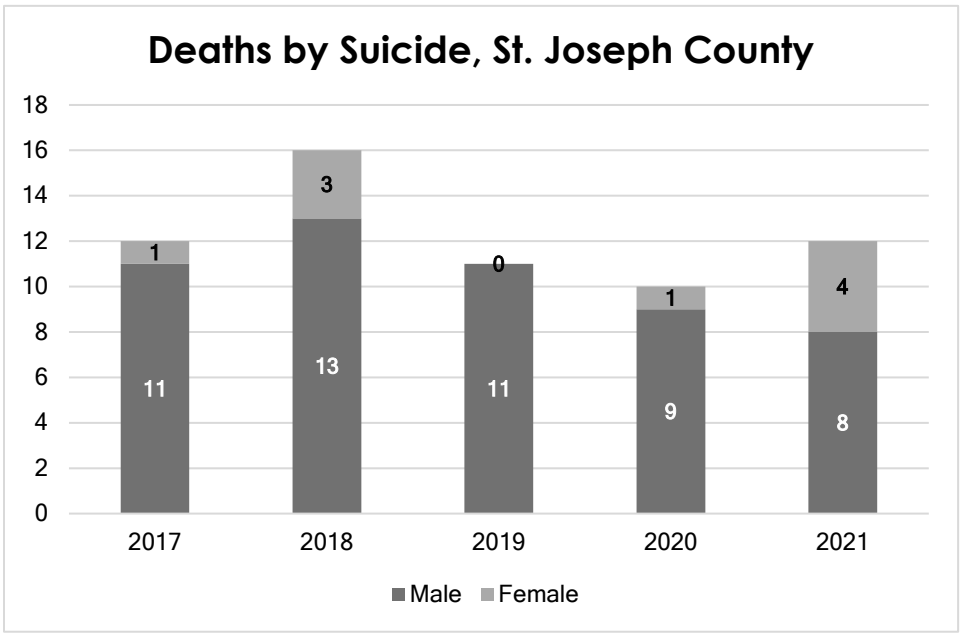
	2017	2018	2019	2020	2021
Accident	6	4	10	11	6
Suicide	0	2	1	1	2[6]
Indeterminate	1	0	0	0	2[7]
Total	**7**	**6**	**11**	**12**	**10**
Total involving opioid(s)	6	4	4	11	7
% of Accidents and Indeterminate Deaths Involving Opioids	86%	75%	40%	91%	88%

[1] Includes (1) Multiple blunt force injuries due to tree branch falling on decedent in elevated bucket and subsequent fall from height
[2] (1) Positional asphyxia (compression between two semi-truck trailers)
[3] (2) Carbon monoxide intoxication
[4] (1) Death is categorized twice (drowning and vehicle-related)
[5] Acute alcohol intoxications are defined as drug-related deaths and are included in this data
[6] Includes (1) Intentional ingestion of toxic chemical (antifreeze)
[7] (1) Mixed drug intoxication associated with hypothermia; (1) Sepsis of unknown etiology associated with illicit drug use



Suicides by Sex & Age, St. Joseph County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2017	12	11	1	0	1	6	3	2
2018	16	13	3	3	3	4	4	2
2019	11	11	0	1	1	5	2	2
2020	10	9	1	0	1	3	3	3
2021	12	8	4	1	1	4	5	1



Suicides by Mechanism, St. Joseph County

	2017	2018	2019	2020	2021
Firearm	4	7	8	7	2
Hanging	5	6	1	0	6
Carbon Monoxide	3	0	1	0	0
Drug Intoxication	0	2	1	1	2[1]
Motor Vehicle	0	0	0	0	0
Sharp Force Trauma	0	0	0	1	1
Asphyxia/Suffocation	0	1	0	1	1[2]
Other	0	0	0	0	0
Total	**12**	**16**	**11**	**10**	**12**

[1] Includes (1) Intentional ingestion of toxic chemical (antifreeze)
[2] (1) Suffocation via plastic bag

VAN BUREN COUNTY

Summary of Van Buren County Cases

	2018	2019	2020	2021
Total Deaths in the County	514	496	605[1]	609[2]
Deaths Reported to the ME	162	180	220	241
Deaths Investigated	146	164	203	229
MEI Scene Investigations	142	158	188	217
Death Certificates by ME	61	74	89	96
Bodies Transported to WMed	56	62	62	86
Complete Autopsy	31	40	37	54
Limited Autopsy	2	2	1	0
External Examination	20	15	17	18
Storage Only	3	5	6	14[3]
Total Cases with Toxicology	44	53	52	69
Unidentified Remains After Exam	0	0	0	1[4]
Referrals to Gift of Life	55	45	39	95
Tissue Donations	8	1	2	7
Cornea Donations	3	1	2	1
Unclaimed Investigations	2	3	4	9
Exhumations	1	0	0	0

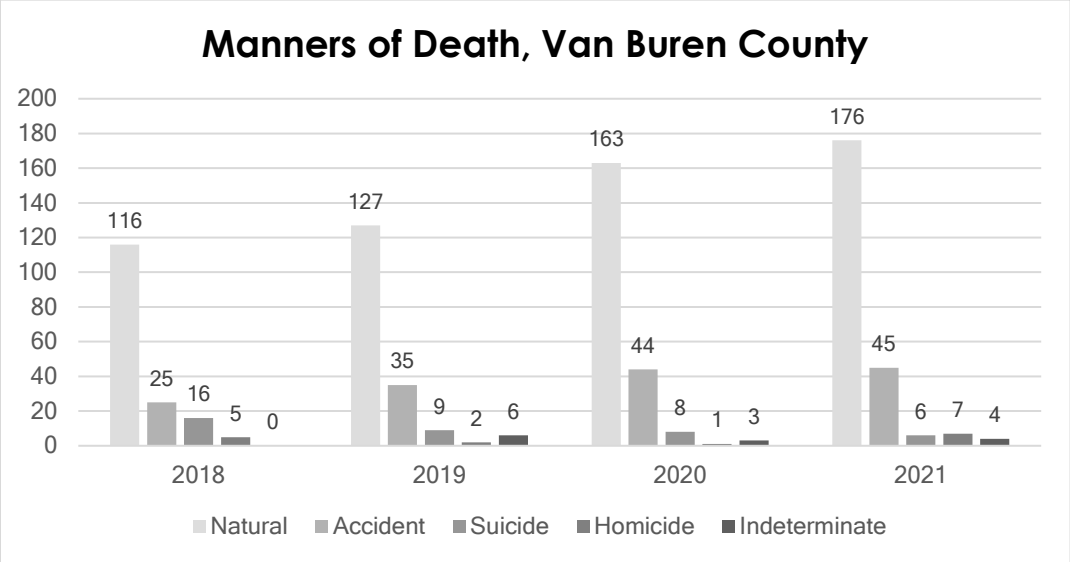
Cremation Permit Authorizations, Van Buren County

	2018	2019	2020	2021
Cremation Permits	322	327	420	439
% of Total Deaths with Cremation	63%	67%	70%	72%

[1] Updated total number of deaths occurring in the county
[2] Provisional total number of deaths occurring in the county
[3] Includes (1) Human remains (associated with a multi-vehicle accident involving multiple decedents and subsequently re-associated with appropriate individual)
[4] (1) Skeletonized human remains (historical) located at excavation site, repatriated

Manners of Death Reported, Van Buren County

	2018	2019	2020	2021
Natural	116	127	163	176
Accident	25	35	44	45
Suicide	16	9	8	6
Homicide	5	2	1	7
Indeterminate	0	6	3	4[1]
Total	**162**	**179**	**219**	**238[2]**



Deaths Reported by Age (in years), Van Buren County[3]

	< 1	1 - 5	6 - 10	11 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	0	2	1	0	4	13	47	95
2019	0	1	0	1	6	20	52	99
2020	0	0	1	1	7	28	55	127
2021	0	0	0	0	3	30	83	122

[1] (1) Gunshot wound of chest; (1) Mixed drug intoxication; (1) Thermal and inhalation injuries, residential fire; (1) Partially skeletonized remains, cause and manner of death cannot be determined

[2] Does not include (1) Non-human remains; (1) Unidentified skeletal remains (historical); (1) Human remains (associated with a multi-vehicle accident involving multiple decedents and subsequently re-associated with appropriate individual)

[3] All stillbirths and spontaneous abortions (miscarriages) investigated but not requiring an examination have been removed from this table for a more accurate representation of deaths reported under the age of one year

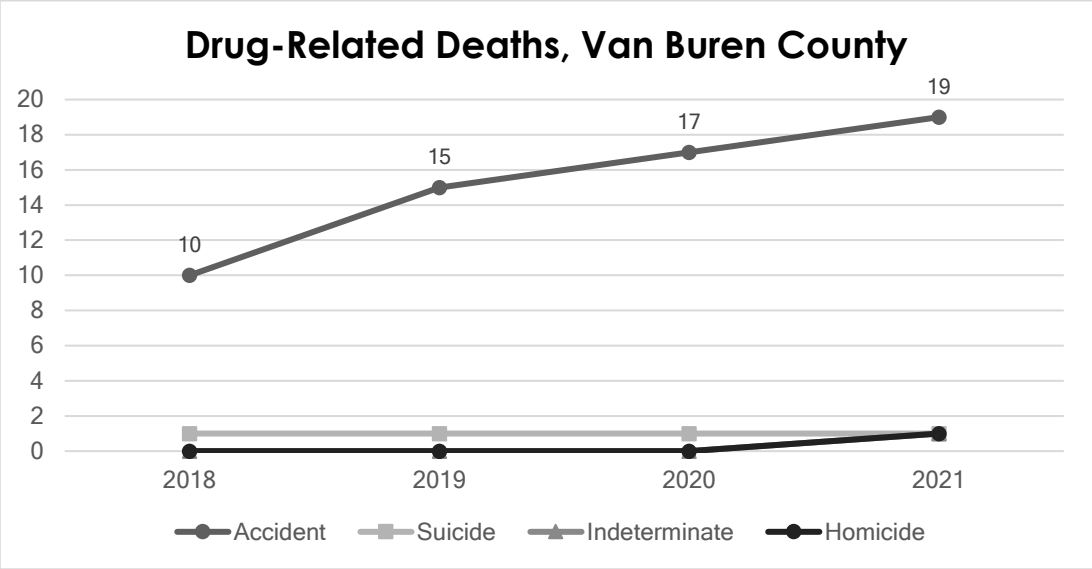
Accidental Deaths by Mechanism, Van Buren County

	2018	2019	2020	2021
Vehicle	8	9	11	14
Drug-Related	10	15	17	19[1]
Drowning	1	2	4	2
Fall	4	5	11	7
Fire	0	0	0	1
Environmental Exposure	1	2	0	1
Asphyxia	1	1	1	1[2]
Other	0	1	0	0
Total	**25**	**35**	**44**	**45**

Drug-Related Deaths by Manner, Van Buren County[3]

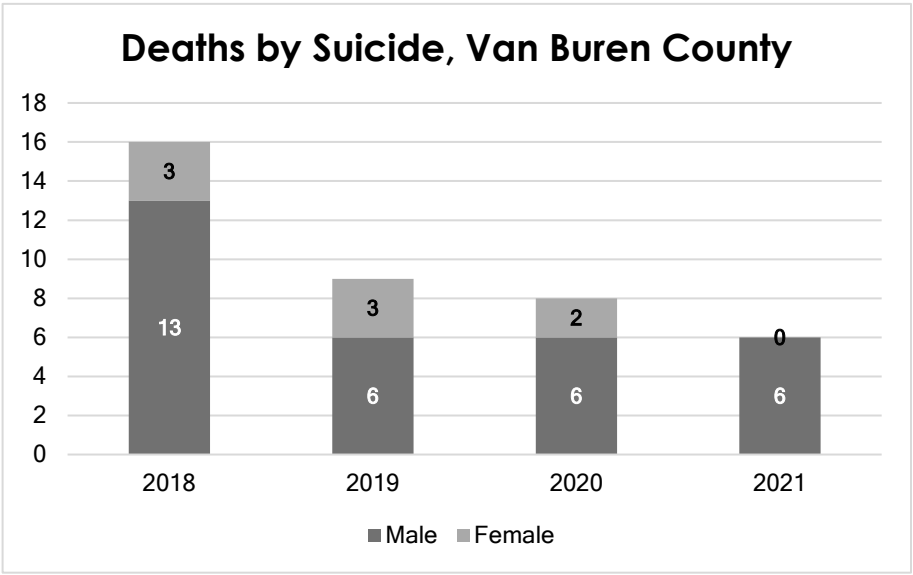
	2018	2019	2020	2021
Accident	10	15	17	19
Suicide	1	1	1	1[4]
Indeterminate	0	0	0	1
Homicide	0	0	0	1[5]
Total	**11**	**16**	**18**	**22**
Total involving opioid(s)	9	12	11	14
% of Accidents and Indeterminate Deaths Involving Opioids	90%	80%	59%	70%

[1] Includes (1) Mixed drug intoxication associated with possible hypothermia
[2] (1) Asphyxia due to choking
[3] Acute alcohol intoxications are defined as drug-related deaths and are included in this data
[4] (1) Mixed drug intoxication, including toxic chemical ingestion (sodium nitrate)
[5] (1) Intentional excess administration of medication by another



Suicides by Sex & Age, Van Buren County

Year	Total	Male	Female	0 - 17	18 - 25	26 - 44	45 - 64	65 +
2018	16	13	3	0	1	2	7	6
2019	9	6	3	0	0	4	1	4
2020	8	6	2	0	1	2	1	4
2021	6	6	0	0	1	1	4	0



Suicides by Mechanism, Van Buren County

	2018	2019	2020	2021
Firearm	11	5	4	2
Hanging	3	2	2	3
Carbon Monoxide	0	0	1	0
Drug Intoxication	1	1	1	1[1]
Motor Vehicle	0	0	0	0
Sharp Force Trauma	0	1	0	0
Asphyxia/Suffocation	1	0	0	0
Other	0	0	0	0
Total	**16**	**9**	**8**	**6**

[1] (1) Mixed drug intoxication, including toxic chemical ingestion (sodium nitrate)

ADDITIONAL SERVICES & STATS

Division of Neuropathology

The Division of Neuropathology, led by Division Chief, Dr. Amanda Fisher-Hubbard, performs a wide range of examinations, including those of forensic cases from WMed and outside institutions/medical examiner offices, private examinations for concerned families, hospital consultations, and is involved in several research projects. Since 2016, the Division of Neuropathology at WMed has partnered with the Lieber Institute for Brain Development in Baltimore, Maryland.

	WMed Forensic Cases	Consulting Forensic Cases	Hospital Specimens	Research Specimens	Private Neuropathological Examinations	Total
2016	43	84	11	276	4	418
2017	79	83	3	404	9	578
2018	63	99	2	492	3	659
2019	41	59	2	530	2	634
2020	53	73	2	380	3	511
2021	57	99	1	460	2	619

Forensic Anthropology

Forensic Anthropology services are provided to all WMed Medical Examiner counties led by forensic anthropologists, Drs. Jered Cornelison and Christine Pink. These services include: human versus non-human bone identification; search and recovery of remains; comparative medical and dental radiography for the positive identification of remains; complete skeletal analyses, including trauma reconstruction and analysis and determination of biological sex, age, ancestry, stature; and input and case management of unidentified individuals in the National Missing and Unidentified Persons System (NamUs). The team of forensic anthropologists at WMed also assist in the coordination of all scientific identifications performed via fingerprint or DNA analysis. As necessary, they also contribute to the determination of identification via multiple corresponding factors.

	Comparative Medical Radiography	Comparative Dental Radiography	Fingerprint Analysis	Multiple Corresponding Factors	DNA Analysis	Recoveries	Non-human	Skeletal Analysis
2016	38	12	24	2	0	2	6	14
2017	65	16	29	2	4	11	8	11
2018	55	27	48	5	4	9	17	18
2019	60	18	49	3	4	8	20	14
2020	83	10	52	5	4	7	17	15
2021	116	9	42	4	5	13	7	22

Hospital/Private/Consultant Postmortem Examinations

Our office provides autopsy services to Bronson Healthcare Group and Spectrum Health Lakeland, private examinations to families searching for answers, and forensic autopsies to various counties in Michigan, including the Upper Peninsula, and northern Indiana.

	Hospital	Private	Consultant (Forensic)	**Total**
2016	10	4	257	**271**
2017	7	16	201	**224**
2018	8	9	161	**178**
2019	10	3	104	**117**
2020	9	15	198	**222**
2021	11	12[1]	310	**333**

Referrals to organ procurement organization (Gift of Life Michigan), 2021

	Referrals to Gift of Life	Tissue Donations	Cornea Donations
Allegan	103	8	2
Barry	54	6	4
Berrien	156	7	4
Calhoun	135	9	10
Cass	56	4	2
Grand Traverse	75	4	0
Kalamazoo	226	19	12
Leelanau	14	1	0
Mason	26	2	1
Muskegon	155	12	8
Osceola	14	0	1
St. Joseph	70	7	5
Van Buren	95	7	1
Total	**1179**	**86**	**50**

[1] Includes (2) neuropathology only examinations

Comparison of All Medical Examiner Counties, 2021

	Total Population[1]	Total Sq. Miles	Deaths in the County[2]	Deaths Reported	Deaths Investigated	MEI Scene Investigations	DCs by ME	Cremation Permits	% Cremated	Unclaimed Investigations
Allegan	120,502	1,833	958	279	264	228	108	644	67%	10
Barry	62,423	577	529	155	143	135	53	354	67%	2
Berrien	154,316	1,581	1,913	604	548	484	215	1,219	64%	17
Calhoun	134,310	718	1,796	582	534	444	244	1,224	68%	32
Cass[3]	51,589	508	419	147	143	140	66	262	63%	4
Grand Traverse	95,238	601	1,780	579	396	246	159	1,426	80%	13
Kalamazoo	261,670	580	3,580	1,283	1,002	821	496	1,594	72%	51
Leelanau	22,301	2,532	213	61	60	43	24	164	77%	0
Mason	29,052	1,242	373	139	124	111	44	300	80%	6
Muskegon	175,824	1,459	2,171	842	642	537	292	1,637	75%	20
Osceola	22,891	573	153	60	54	47	14	113	74%	0
St. Joseph	60,939	521	601	220	191	173	73	424	71%	4
Van Buren	75,587	1,090	609	241	229	217	96	439	72%	9
2021 Total	**1,266,642**	**13,815**	**15,095**	**5,192**	**4,330**	**3,626**	**1,884**	**9,800**	**65%**	**168**
2020 Total[4]	1,209,917	13,307	14,197	4,848	4,029	3,328	1,675	10,099	71%[5]	163

For all counties, about 34% of deaths are reported; jurisdiction is accepted, and deaths are investigated in about 29% of the deaths in the counties. Complete autopsies are conducted in nearly 6% of all deaths within the county and in about 17% of deaths reported. A formal external or limited examination occurs in another 2% of deaths in the county. In total, a postmortem examination occurs in about 23% of deaths reported.

[1] Total county populations based on 2020 estimates by the US Census Bureau
[2] Provisional number of deaths occurring in each county
[3] Data provided includes February 1 to December 31, 2021
[4] Note: 2020 data does not include Cass County, as we took over as the MEO in February 2021
[5] Average percentage cremated

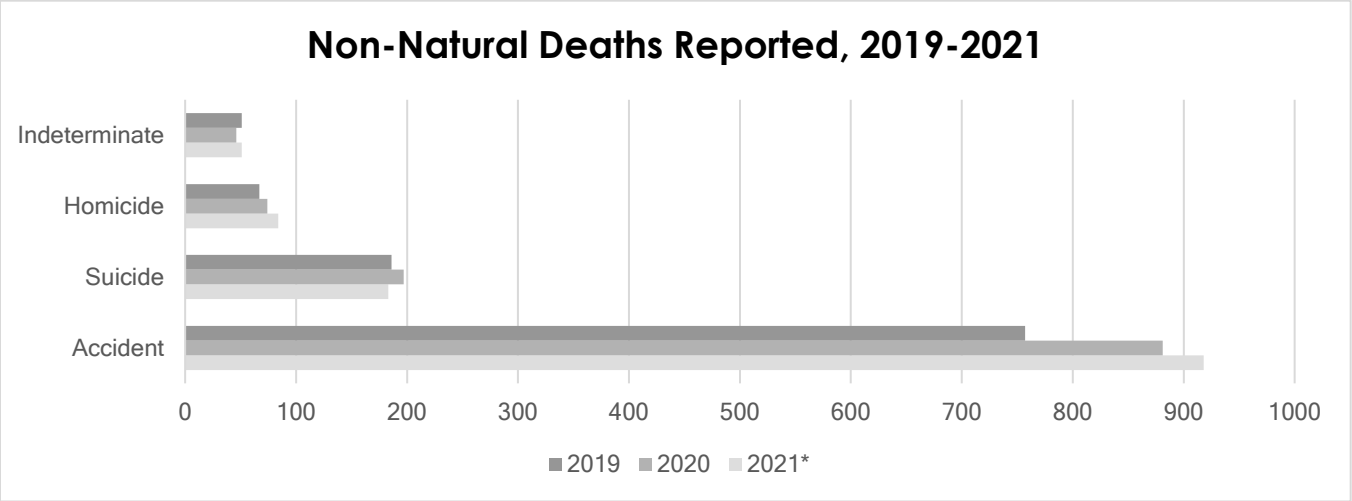
Forensic Postmortem Examinations, 2021

	Complete Autopsies	% Complete Autopsies[1]	Limited Exams	External Exams	**Total Postmortem Exams**	% Postmortem Exams[2]	Cardiovascular Consults
Allegan	51	5.3%	3	19	**73**	7.6%	0
Barry	23	4.3%	1	13	**37**	7.0%	0
Berrien	116	6.1%	3	26	**145**	7.6%	2
Calhoun	112	6.2%	3	45	**160**	8.9%	0
Cass	28	6.7%	1	13	**42**	10.0%	0
Grand Traverse	60	3.4%	2	17	**79**	4.4%	0
Kalamazoo	222	6.2%	5	82	**309**	8.6%	1
Leelanau	9	4.2%	0	3	**12**	5.6%	0
Mason	20	5.4%	1	7	**28**	7.5%	0
Muskegon	137	6.3%	4	39	**180**	8.3%	1
Osceola	10	6.5%	0	2	**12**	7.8%	0
St. Joseph	30	5.0%	1	16	**47**	7.8%	0
Van Buren	54	8.9%	0	18	**72**	11.8%	1
Consultant Counties	310	---	0	0	**310**	---	2
2021 Total	**1,182**	**5.8%[3]**	**24**	**300**	**1,506**	**7.9%[4]**	**7**
2020 Total[5]	959	5.4%[3]	40	239	1,238	7.3%[4]	3

[1] Percent of all deaths in county with complete autopsies
[2] Percent of all deaths in county with a postmortem examination
[3] Average percentage of all deaths in county with complete autopsies
[4] Average percentage of all deaths in county with a postmortem examination
[5] Note: 2020 data does not include Cass County, as we took over as the MEO in February 2021

Manners of Death, All Medical Examiner Counties, 2021

	Natural	Accident	Suicide	Homicide	Indeterminate	2021 Total
Allegan	207	51	16	2	3	**279**
Barry	120	18	10	4	2	**154**
Berrien	458	105	10	13	12	**598**[1]
Calhoun	442	112	18	7	3	**582**
Cass	105	30	7	3	1	**146**
Grand Traverse	450	98	19	2	2	**571**
Kalamazoo	906	267	50	35	12	**1,270**[2]
Leelanau	46	13	2	0	0	**61**
Mason	109	19	8	0	1	**137**
Muskegon	628	158	31	13	9	**839**
Osceola	50	9	1	0	0	**60**
St. Joseph	181	23	12	1	3	**220**
Van Buren	176	45	6	7	4	**238**
2021 Total	**3,878**	**948**	**190**	**87**	**52**	**5,155**
% of 2021 Total[3]	74.7%	18.3%	3.7%	1.7%	1.0%	---
2020 Total[4]	3,606	881	197	74	46	4,804



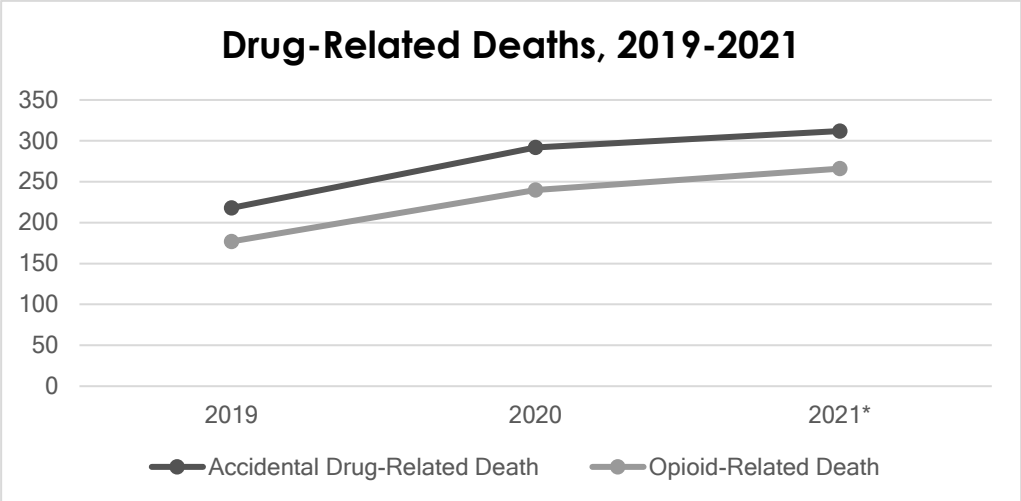
*2021 data does not include Cass County for a more accurate comparison

[1] Does not include (2) Pending cause and manner at the time of this report
[2] Does not include (2) Pending cause and manner at the time of this report
[3] Percent of all deaths reported to our office; this will not add up to exactly 100% due to deaths reported to our office that do not require a manner of death (e.g., stillbirth investigations)
[4] Note: 2020 data does not include Cass County, as we took over as the MEO in February 2021

Significant Death Statistics, 2021

	Accidental Drug-Related Deaths	Indeterminate Drug-Related Deaths	Opioid-Related Deaths	Accidental Traffic-Related Deaths	Accidental Fall-Related Deaths
Allegan	13	0	9	8	21
Barry	4	0	4	4	7
Berrien	36	1	28	24	34
Calhoun	59	0	49	17	28
Cass	7	1	8	17	1
Grand Traverse	16	0	16	23	46
Kalamazoo	84	2	63	74	86
Leelanau	4	0	3	1	5
Mason	7	0	7	5	4
Muskegon	59	0	54	28	51
Osceola	5	0	4	1	0
St. Joseph	6	2	7	6	5
Van Buren	19	1	14	14	7
2021 Total	**319**	**7**	**266**	**222**	**295**
2020 Total[1]	292	5	240	185	289

Although the Office of the Medical Examiner at WMed did not provide services to Cass County before February of 2021, each of these categories still increased from 2020 to 2021. As the number of accidental drug-related deaths has increased, the number of opioid-related deaths (of all manners) has also increased.



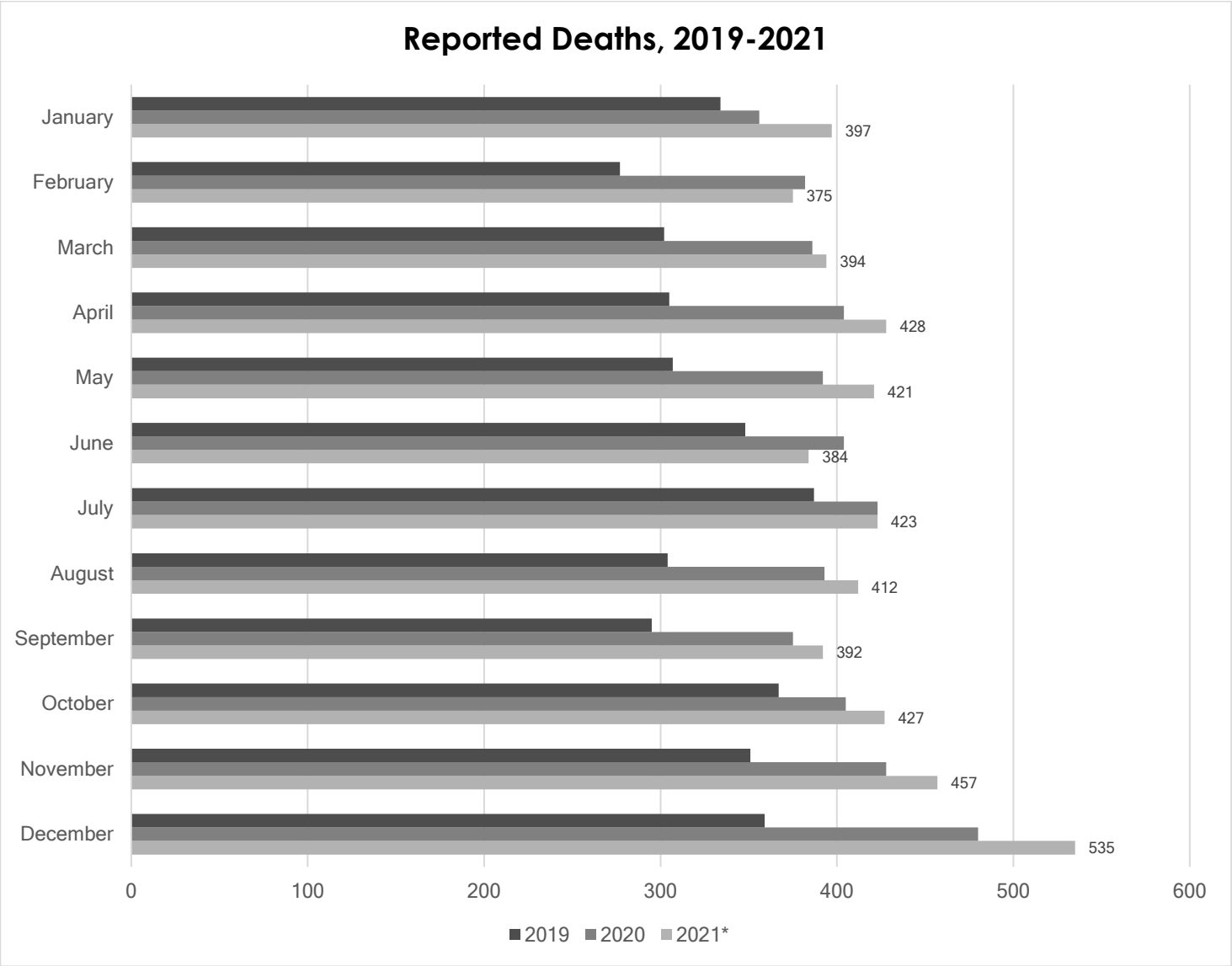
*2021 data does not include Cass County for a more accurate comparison

[1] Note: 2020 data does not include Cass County, as we took over as the MEO in February 2021

Significant Statistics Related to COVID-19 Pandemic

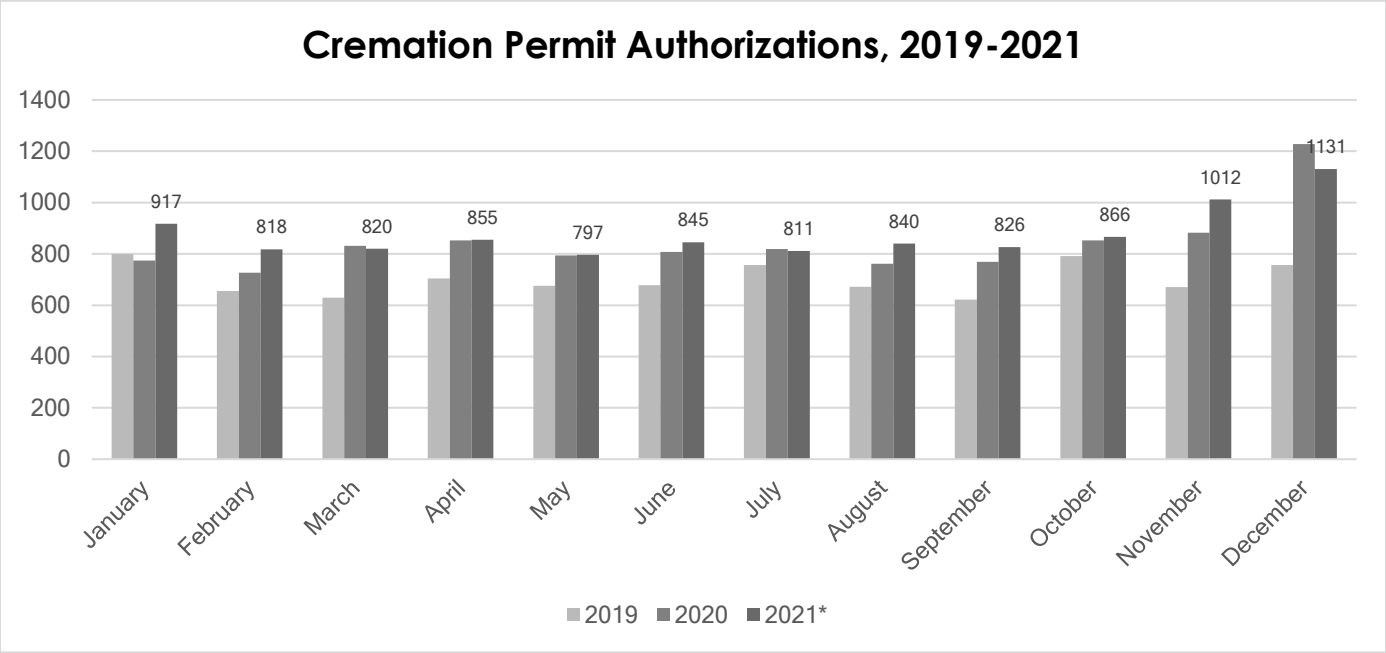
Shortly after the start of the pandemic, our team recognized an increase in reported deaths with a specific increase in deaths occurring outside of a healthcare setting, thus requiring notification to our office. The number of deaths released directly from the scene to the funeral home increased from 1,727 in 2019 to an extraordinary 2,265 in 2020 (31.2% increase from 2019 to 2020). In 2021, the number of deaths released directly from the scene decreased to 2,237 (1.2% decrease from 2020 to 2021).

The graph below shows the number of reported deaths to our office broken down by month and includes 11 counties we serve as the Medical Examiner. As we began serving Cass County in February 2021, the graph below does not include this county for a more accurate comparison to previous years. The total number of reported deaths increased by 28% from 2019 to 2021. In the month of December alone, the number of reported deaths for these 11 counties increased by 49% from 2019 to 2021.



*2021 data does not include Cass County for a more accurate comparison

In addition to the increase in reported deaths requiring investigation, our office processed a much larger number of cremation permits than ever before. In December of 2020 and again in December of 2021, nearly 25% of all cremation permits authorized by our office were for decedents whose deaths were due to COVID-19 or COVID-19 was deemed a contributory factor.



*2021 data does not include Cass County for a more accurate comparison

Deaths related to opioids and other drugs

Annual Report 2021

Allegan and Barry County

This report is in memory of those who lost their life or a loved one to substance use. These losses must motivate us all to prevent future deaths.

Purpose: This data was collected by the Office of the Medical Examiner (MEO) in the Department of Pathology at Western Michigan University Homer Stryker M.D. School of Medicine (WMed). Unless otherwise noted, data is from 2021 and includes deaths where drugs were the immediate cause of death. This report is meant to provide up to date statistics to those involved in efforts to reduce the number of drug-related deaths.

Sections with the following headings are approximations and frequencies may be higher than what is reported: Health Factors, Mental Health Factors, Social Factors, Children and Substance Use History.

Sources: All data was extracted from a Medical Examiner database, law enforcement (LE) reports, EMS runsheets, death certificates, obituaries, medical records, toxicology reports, and autopsy reports.

Note: Allegan and Barry counties are combined to protect decedents' identities due to low count numbers (n<10) in Barry. The two counties are combined due to geographic proximity. B=Black/African-American; H=Hispanic; W=White; F=Female; M=Male

Please email questions to pathology@med.wmich.edu

Office of the Medical Examiner
Department of Pathology
Homer Stryker M.D. School of Medicine

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

All drug-related deaths: Allegan

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
19	B	M	fentanyl	49010
27	W	M	fentanyl, ethanol	49010
28	W	M	fentanyl, ethanol, cocaine	49078
36	W	F	fentanyl, methamphetamine, xylazine, alprazolam, hydroxyzine	49080
41	H	M	fentanyl	49423
45	W	M	fentanyl, methamphetamine	49348
45	W	M	methamphetamine	49408
50	W	M	fentanyl, cocaine	unknown
54	W	F	alprazolam, oxycodone, duloxetine, gabapentin, trazodone, diphenhydramine	49078
58	W	M	methamphetamine	unknown
60	H	M	methamphetamine, ethanol	49423
61	W	M	tramadol, gabapentin, trazodone, duloxetine	49078
66	W	M	chloroethane	49080

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

All drug-related deaths: Barry

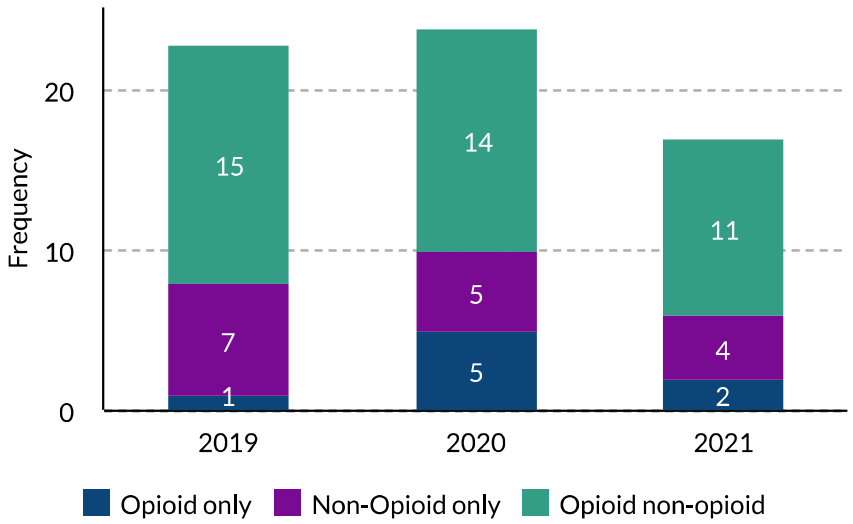
Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
30	W	F	fentanyl, methamphetamine	49058
35	W	F	alprazolam, fentanyl	49046
39	W	M	diphenhydramine, etizolam, fentanyl, heroin	49348
46	W	F	gabapentin, oxycodone, zolpidem	49058

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Total Drug-Related Deaths

DRUG-RELATED DEATHS BY DRUG TYPE

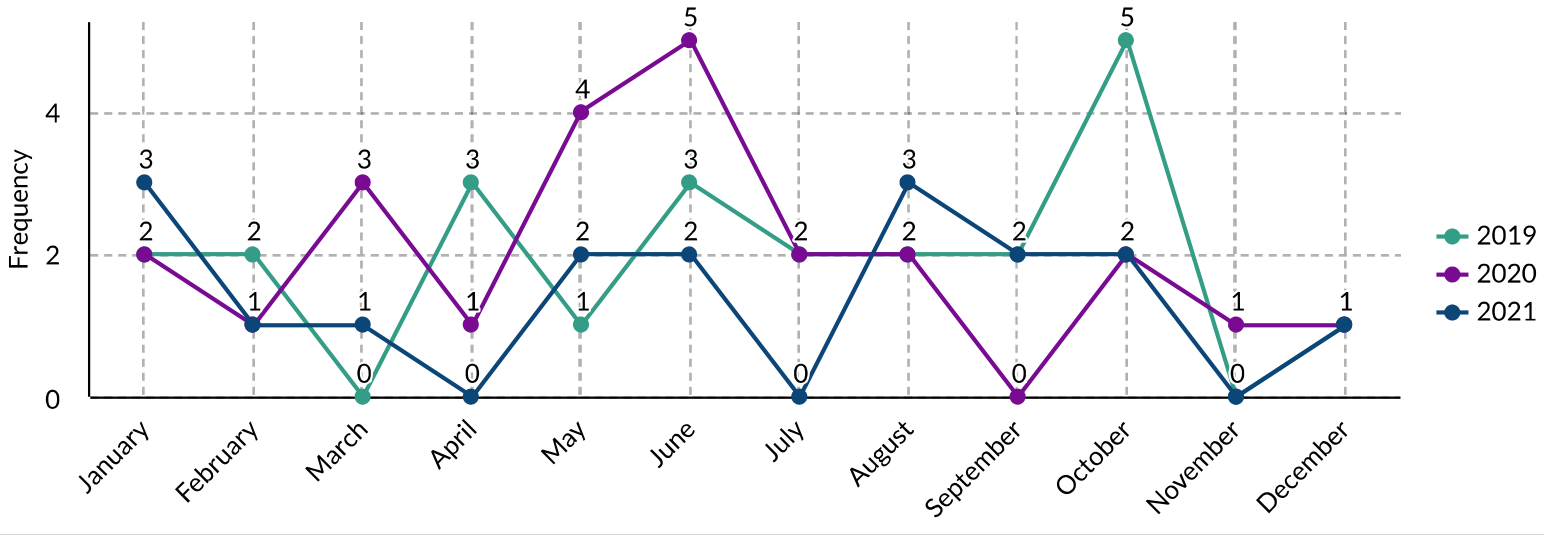


Year	Total deaths	Deaths per 10,000
2019	23	1.3
2020	24	1.4
2021	17	0.9

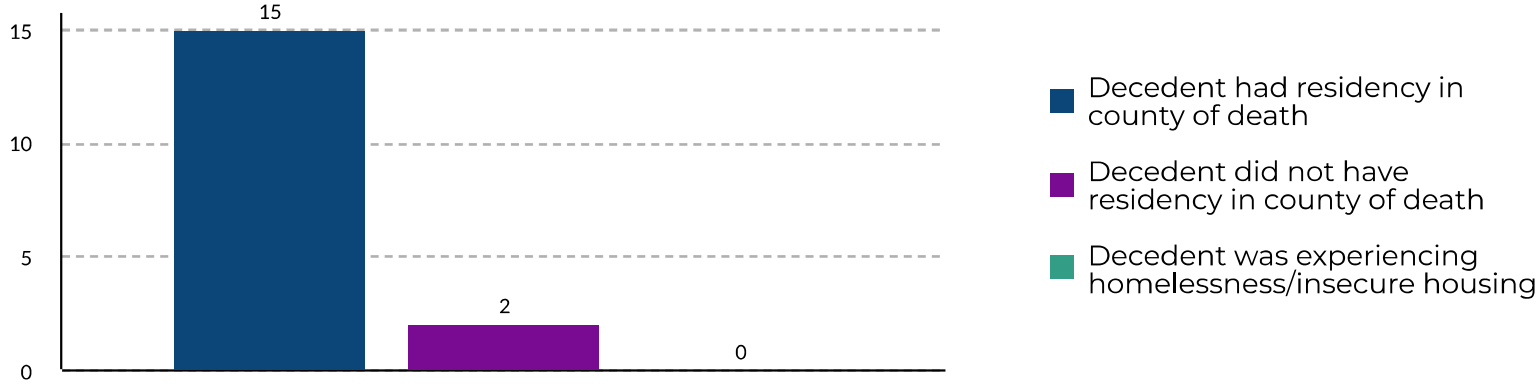
Percent change

▼ 29% from 2020 to 2021

DRUG-RELATED DEATHS BY MONTH AND YEAR



COUNTY OF RESIDENCE BY COUNTY OF DEATH

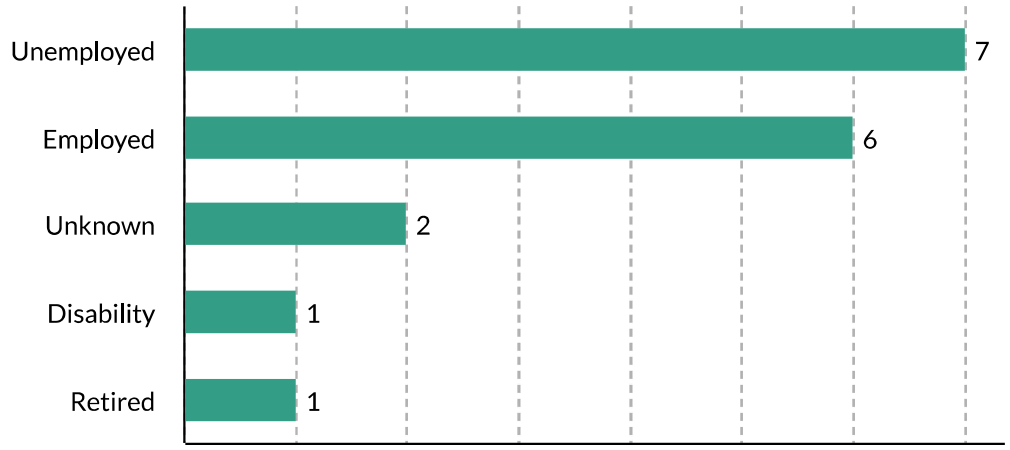


Deaths Related to Opioids and Other Drugs

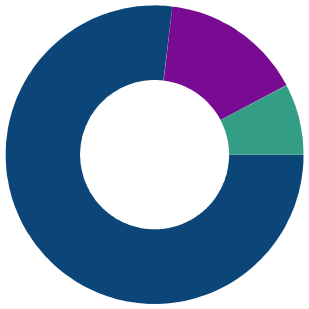
Allegan and Barry County

Demographics

DECEDENT'S EMPLOYMENT STATUS



RACE



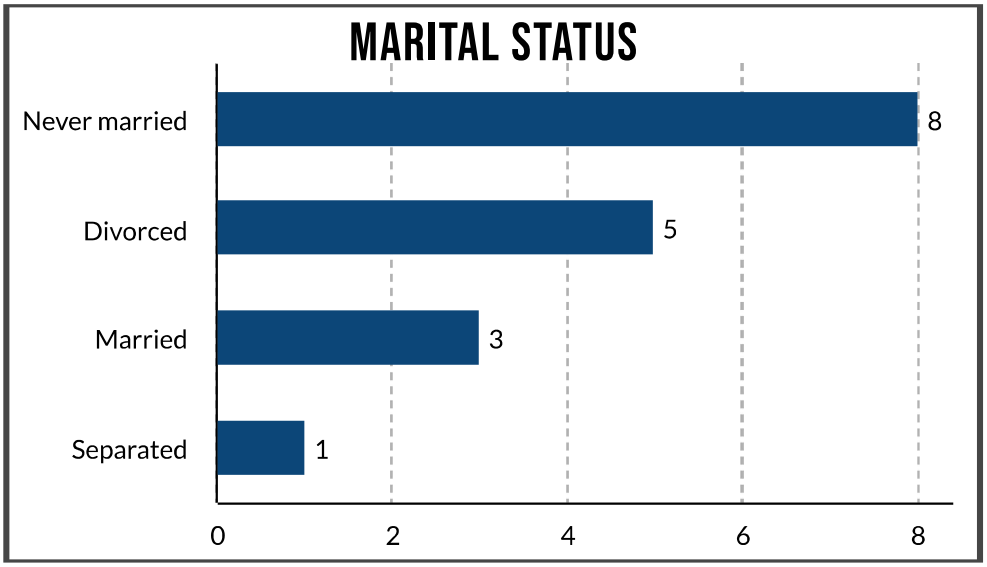
White (82%)
Hispanic (12%)
African American/Black (6%)

SEX

29%

71%

MARITAL STATUS



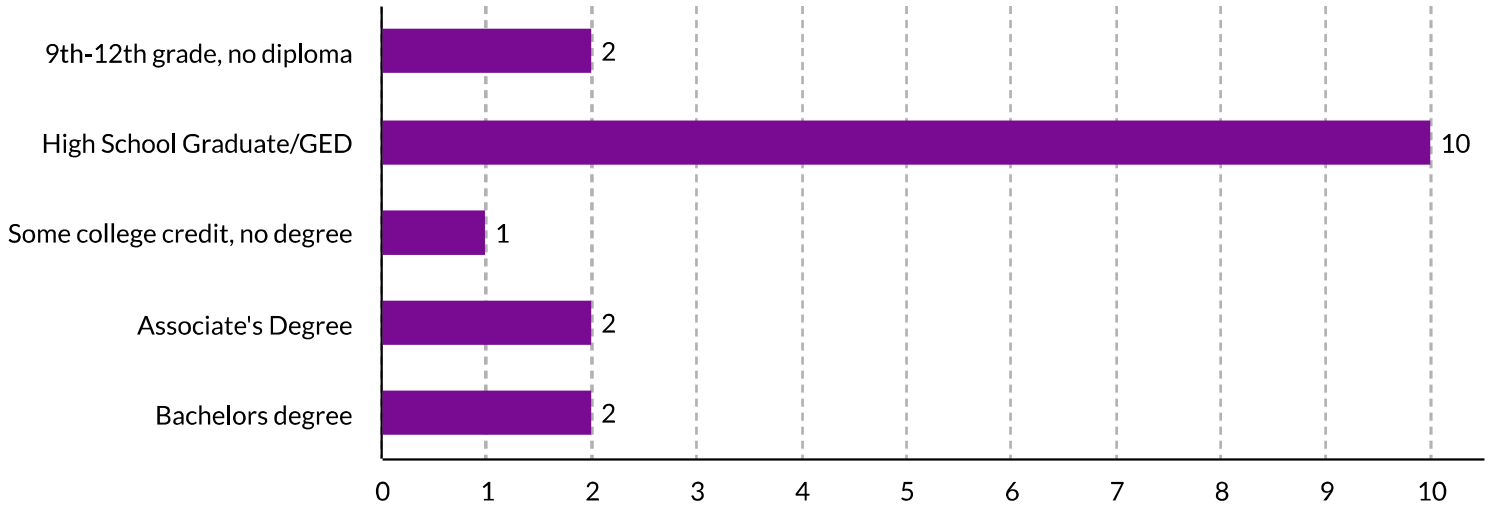
AGE

Minimum Age
19 years

Maximum Age
66 years

Average Age
44 years

DECEDENT'S HIGHEST LEVEL OF EDUCATION

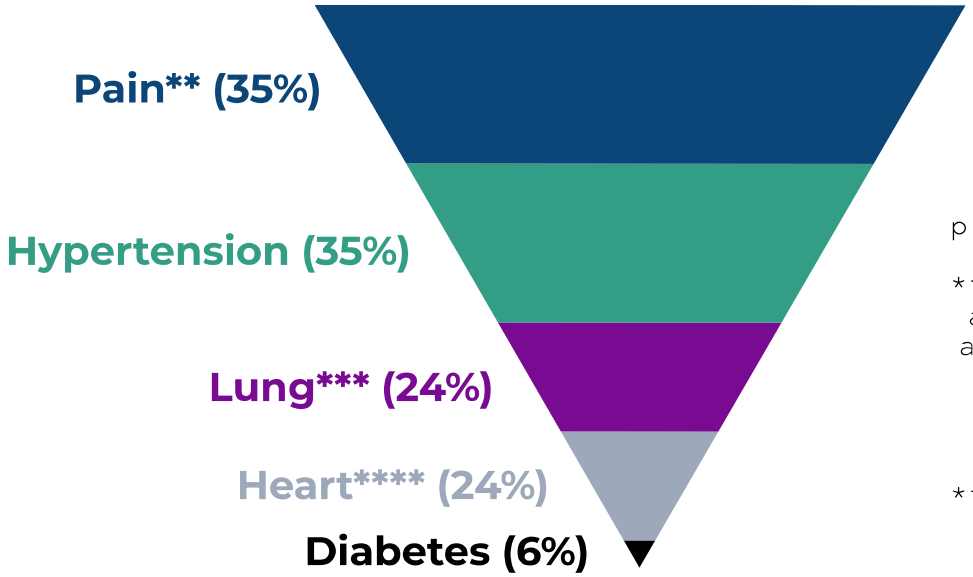


Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Health Factors

MOST COMMON AILMENTS*

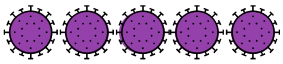


*Decedents may be represented in more than one category. Only illnesses with diagnosis by a medical professional are included.

**Pain includes back pain, arthritis, nerve damage, and peripheral neuropathy

***Lung includes asthma and COPD

****Heart includes CAD and CHF
(see end of page)



1 decedent was known to be **Hepatitis C** positive

This decedent was known to use **substances intravenously**

Decedent used tobacco **82%**

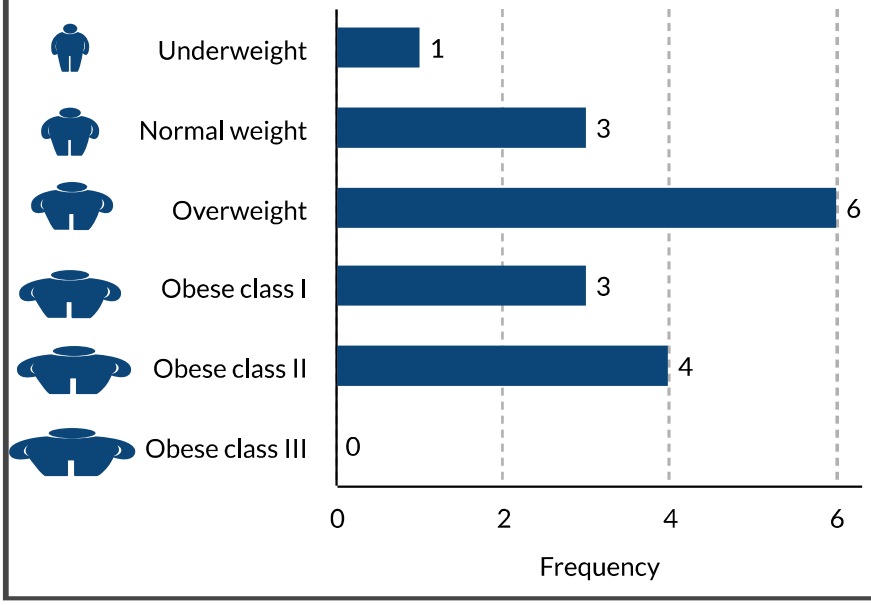
Decedent drank alcohol* **35%**

*Moderate to heavy use

Decedent had a PCP* **35%**

*Primary care physician

BODY MASS INDEX (BMI)



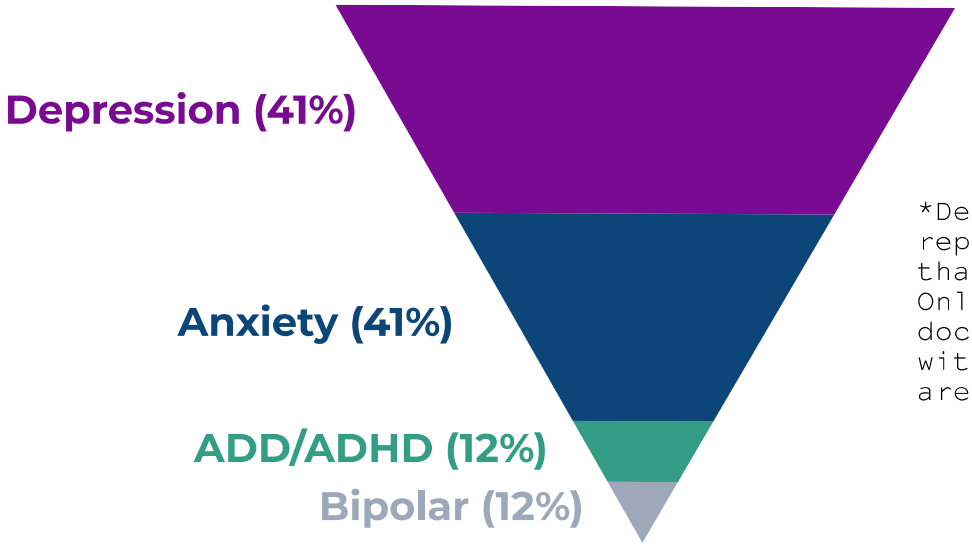
COPD=Chronic obstructive pulmonary disease; CAD=Coronary artery disease; CHF=Congestive heart failure

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Mental Health Factors

MOST COMMON MENTAL ILLNESSES



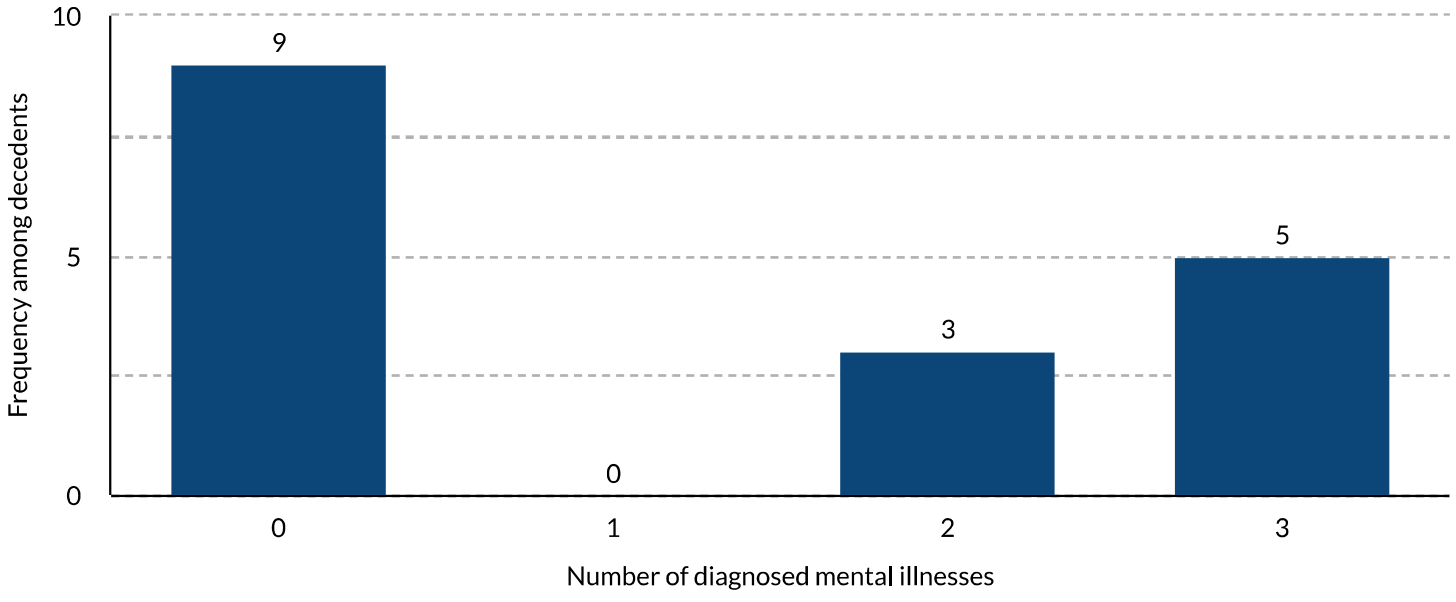
*Decedents may be represented in more than one category. Only mental documented illnesses with official diagnosis are included.

PERCENTAGE OF DECEDENTS

24% ...who have ever had **suicidal ideation**

18% ...with **previous suicide attempts**

NUMBER OF DIAGNOSED MENTAL ILLNESSES AMONG DECEDENTS



Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Social Factors

0% Decedent was a **veteran**

6% Decedent was **experiencing homelessness or insecure housing** at time of death

53% Decedent has ever been **incarcerated**

11% Decedents **ever incarcerated** were released in past 60 days

Children

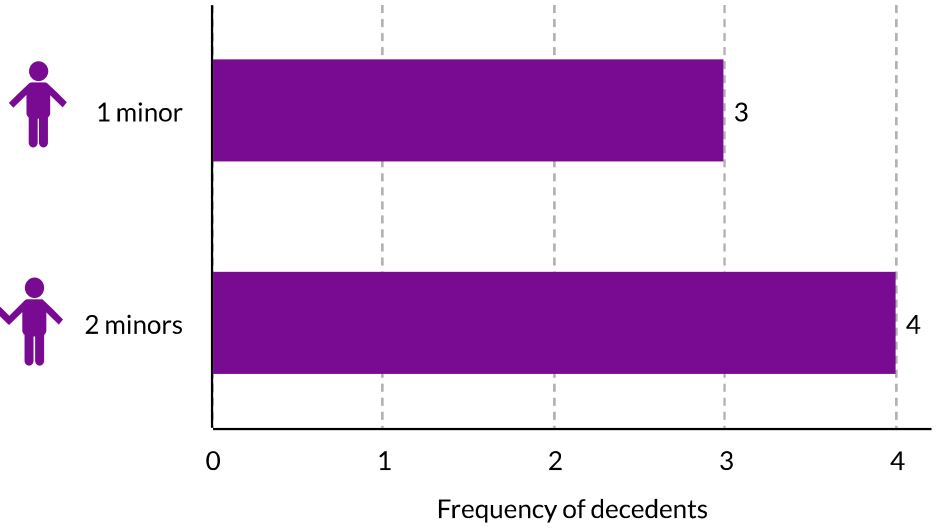
DECEDENT HAD....

47% Adult children only

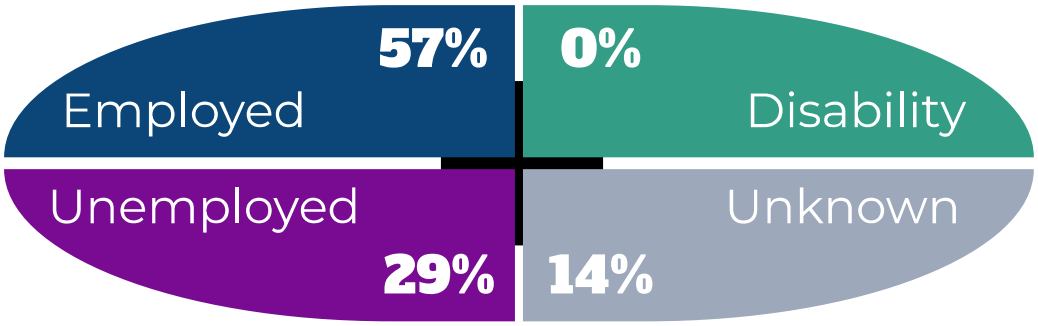
41% At least one minor child

12% No children

NUMBER OF MINOR BIOLOGICAL CHILDREN



EMPLOYMENT STATUS OF THOSE WITH MINOR CHILDREN



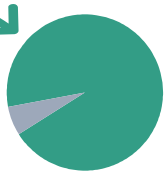
4 decedents lived with their minor child(ren) at time of death

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

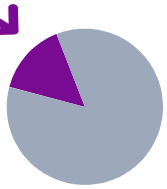
Substance Use History

94% of decedents were known to use or abuse substances



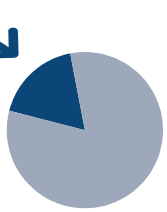
At least 18% of those decedents used substances intravenously

At least 24% of decedents have had at least one prior overdose

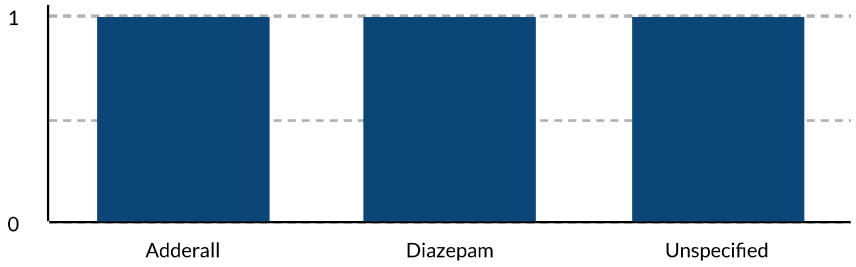


At least 25% of those decedents have had two or more prior overdoses

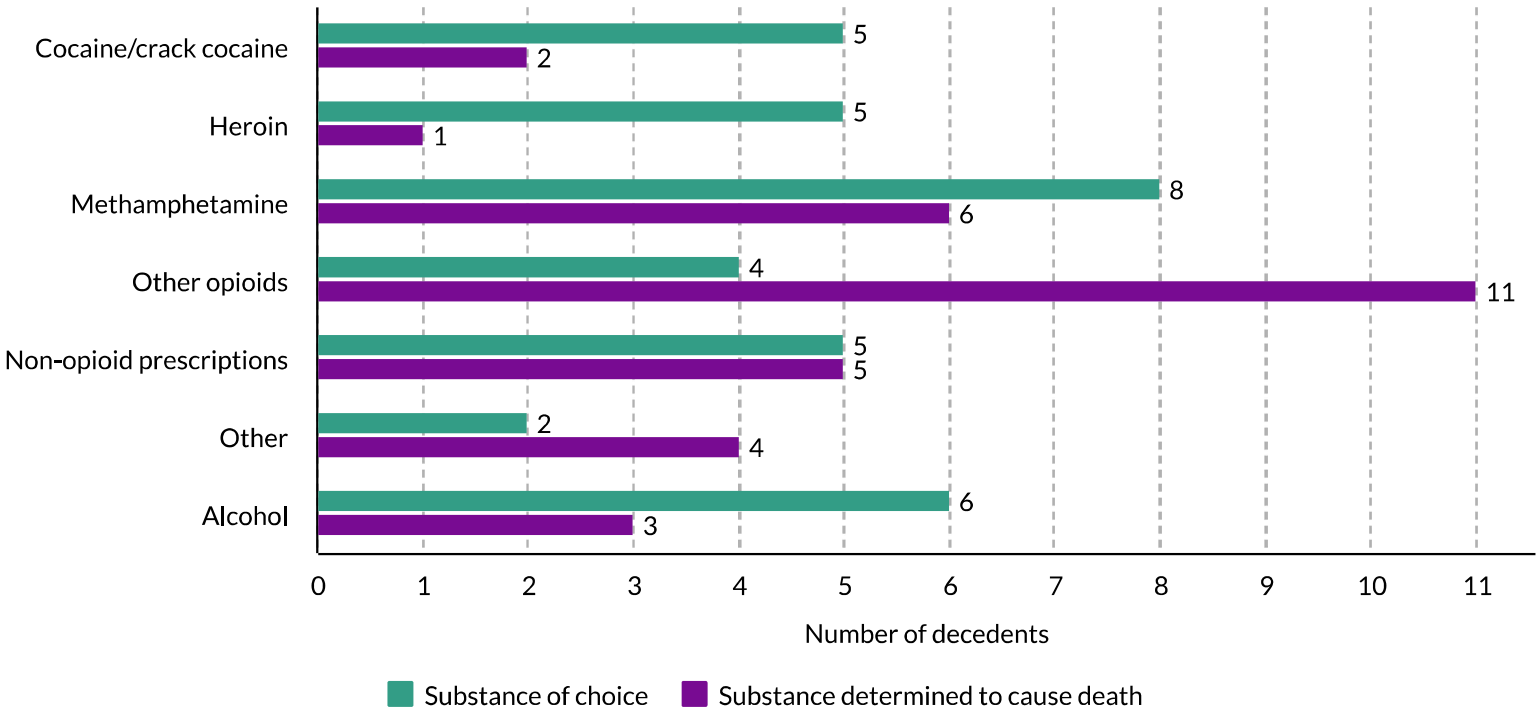
At least 18% of decedent's substance use started from a prescription



TYPE OF PRESCRIPTION



DECEDENT'S SUBSTANCE(S) OF CHOICE VS. SUBSTANCE(S) THAT CAUSED DEATH*



*Decedent may have had more than one substance of choice and in their toxicology. Other substance of choice includes huffing agents and mushrooms; Other substance causing death includes chloroethane, diphenhydramine, etizolam, hydroxyzine, LSD, and xylazine

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Substance Use History, cont.

PREFERRED METHOD OF ADMINISTRATION*

Method	Male (=12)	Female (n=4)	White (n=13)	Hispanic (n=2)	Total (n=15)**
Intravenous	1	2	3	0	3
Snort	4	1	5	0	5
Smoke	3	0	3	0	3
Transdermal	0	0	0	0	0
Huff	1	0	1	0	1
Oral	2	1	3	0	3
Unknown	3	0	1	2	3

*Decedent may have had more than one preferred method of administration. Only includes decedents with a substance use history.
**Decedent of African American descent is excluded (n=1).

RECOVERY HISTORY (N=16)*

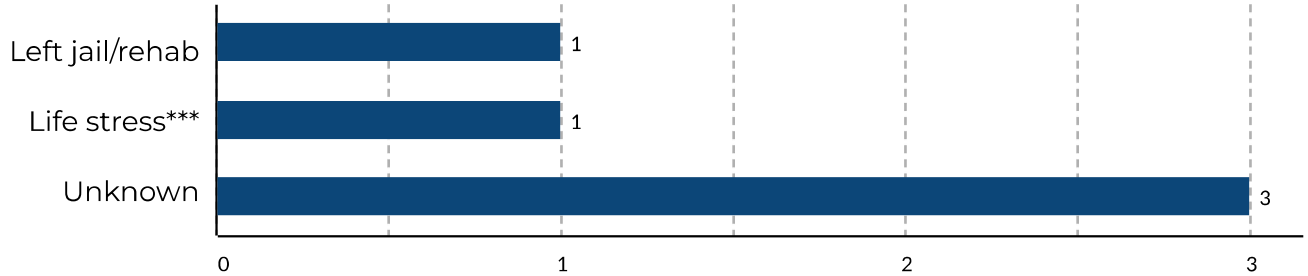
18%
Decedent has been to a **treatment clinic or detox center** at least one time

Decedent was recently **substance free** in the past three weeks

31%

6%
Decedent was currently receiving or has received **medication for opioid use disorder** in the past two years

SUSPECTED REASON FOR RELAPSE**



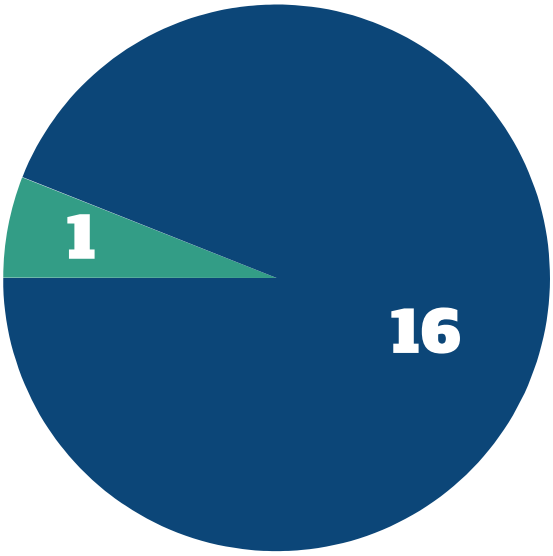
*ONLY Decedents known to use substances are included.
**These factors were mentioned by those close to the decedent for why they may have begun to use substances again after being substances free for at least three weeks.
***Life stress includes recent job loss.

Deaths Related to Opioids and Other Drugs

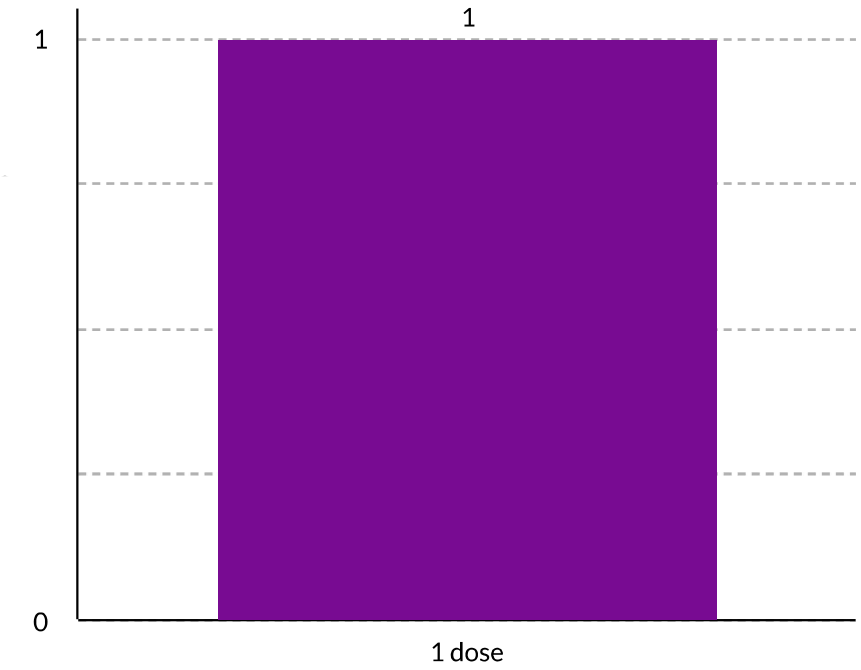
Allegan and Barry County

Naloxone Administration

NALOXONE ADMINISTRATION STATUS

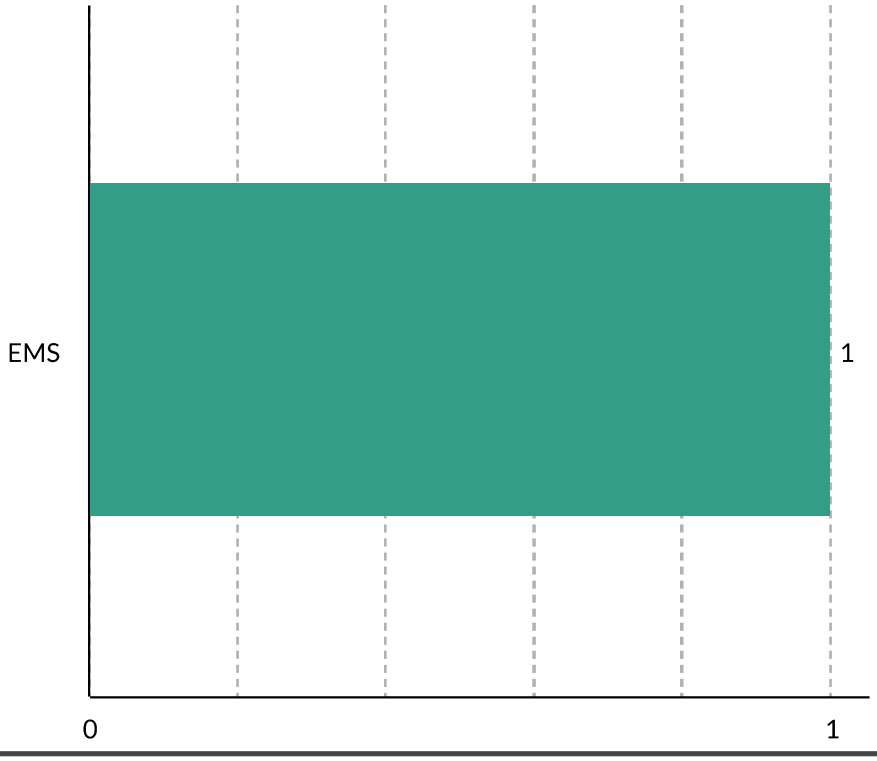


NUMBER OF DOSES (2 MG) ADMINISTERED

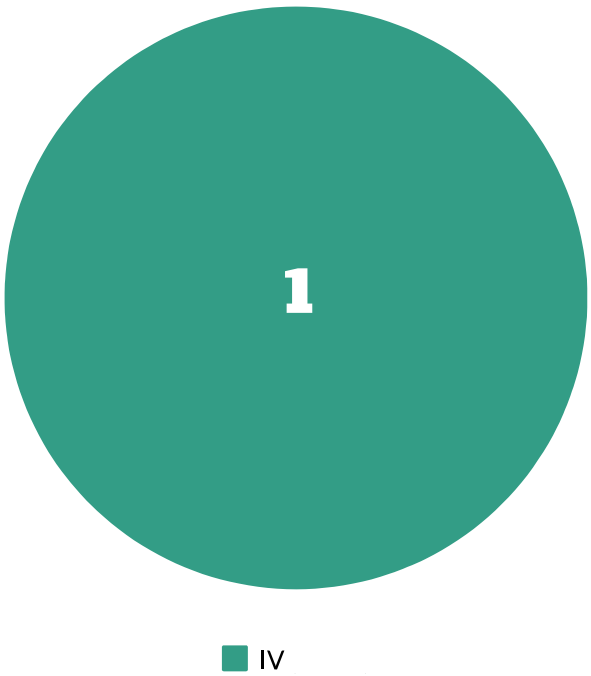


*2 mg conversion

WHO ADMINISTERED NALOXONE?



NALOXONE METHOD OF ADMINISTRATION



Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Death Scene Findings

53% Were found by **family**

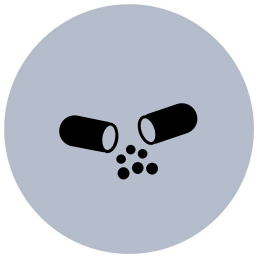
0% Were found by a **minor**

0% Were found on welfare check

76% died at their residence

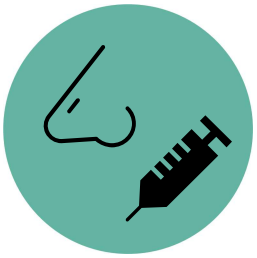
0% Died at the **hospital**

18% Died at another residence



35% **Medication** was found on scene

12% **Syringes** were found on scene

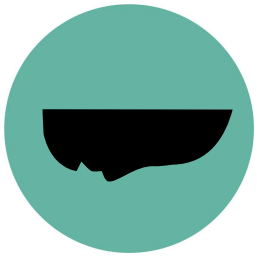


6% Had **Narcan** on scene

88% **Suspected overdose** before autopsy

41% **Suspected illicit substance(s)** were found on scene

0% **Pipes** were found on scene



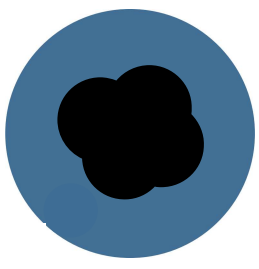
18% Decedent was found **face down**

71% Were dead upon **EMS** arrival

94% Used the fatal substance(s) **alone**

12% Decedent was **snoring**

6% Decedent was making **gurgling sounds**



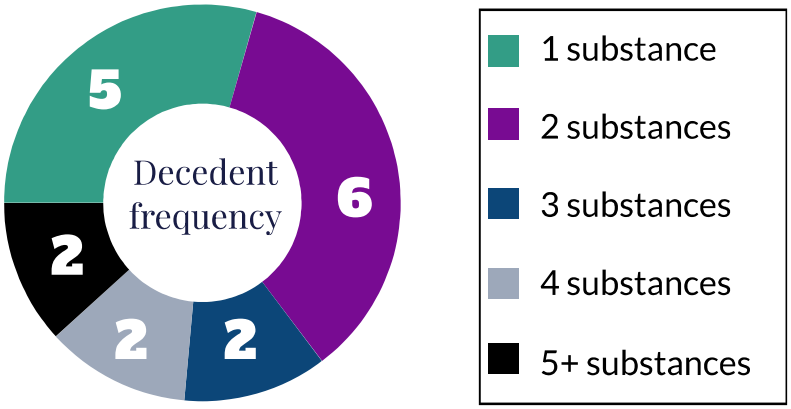
12% Decedent had **foam cone**

Deaths Related to Opioids and Other Drugs

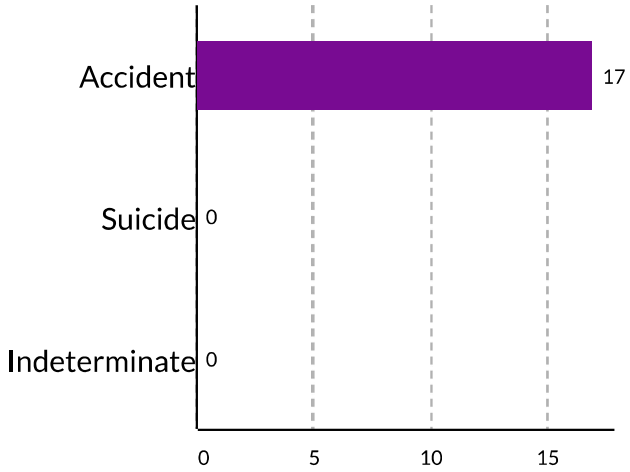
Allegan and Barry County

Autopsy and Toxicology Results

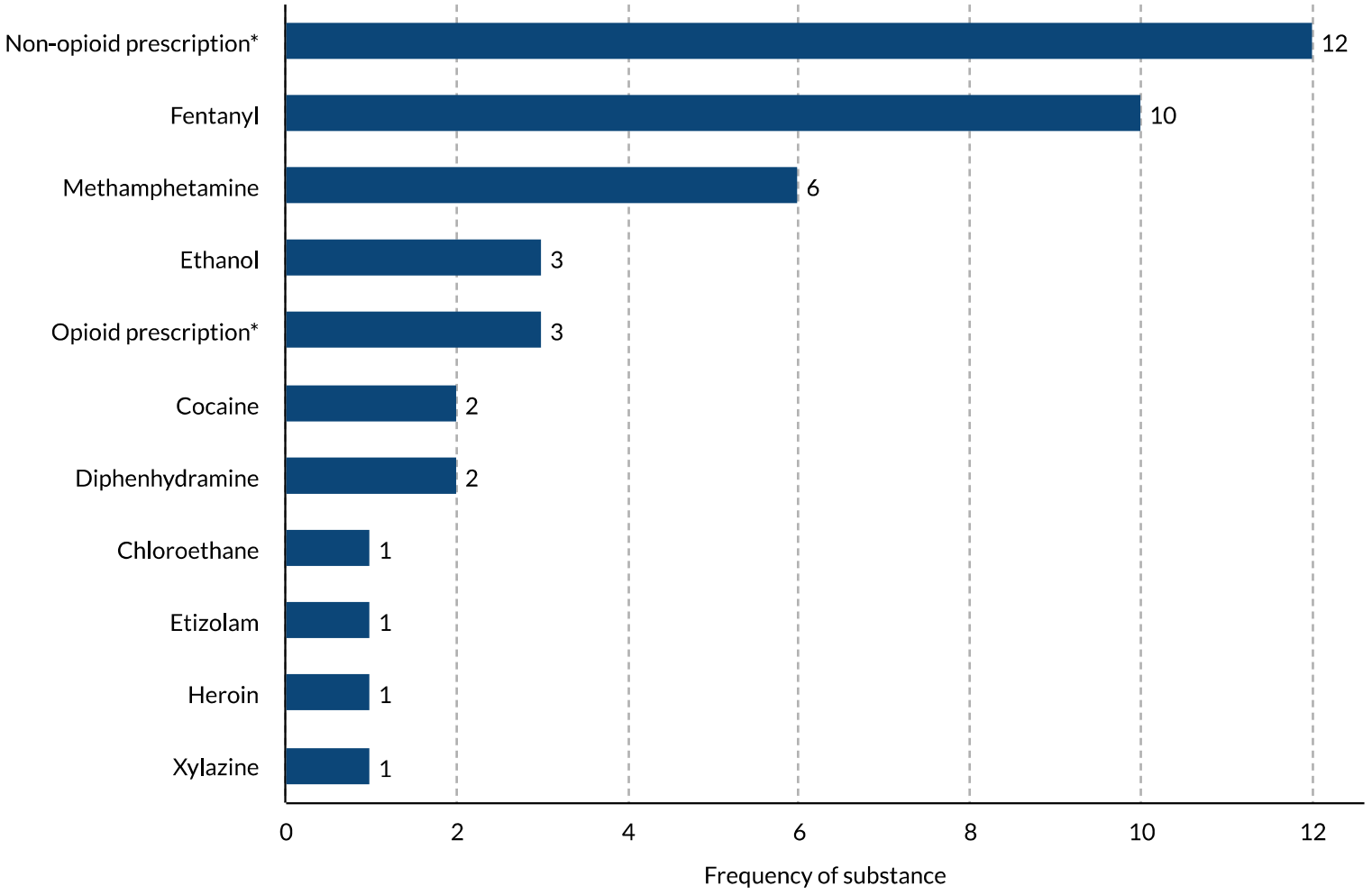
NUMBER OF SUBSTANCES CONTRIBUTING TO DEATH



MANNER OF DEATH



SUBSTANCES CONTRIBUTING TO DEATH

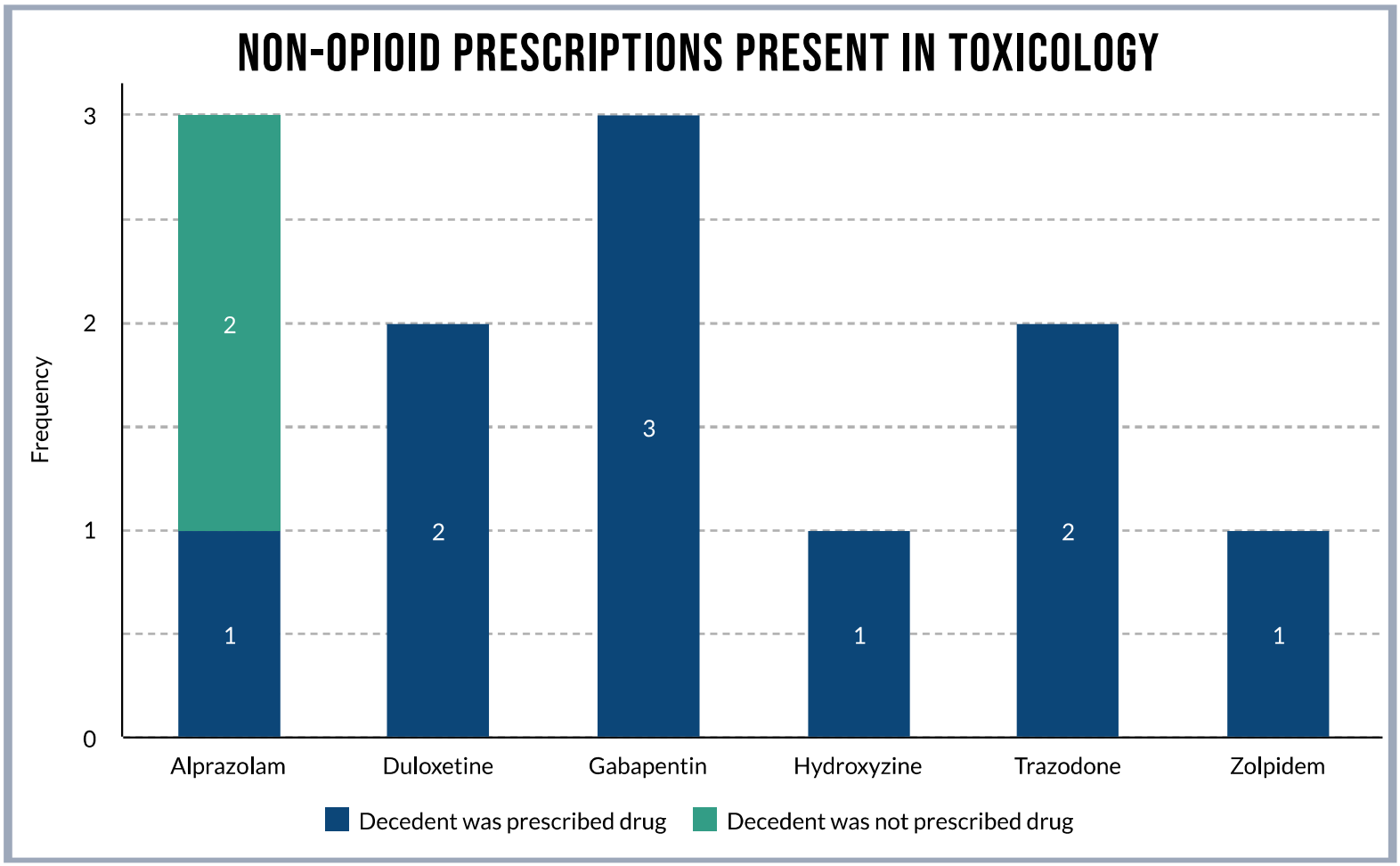


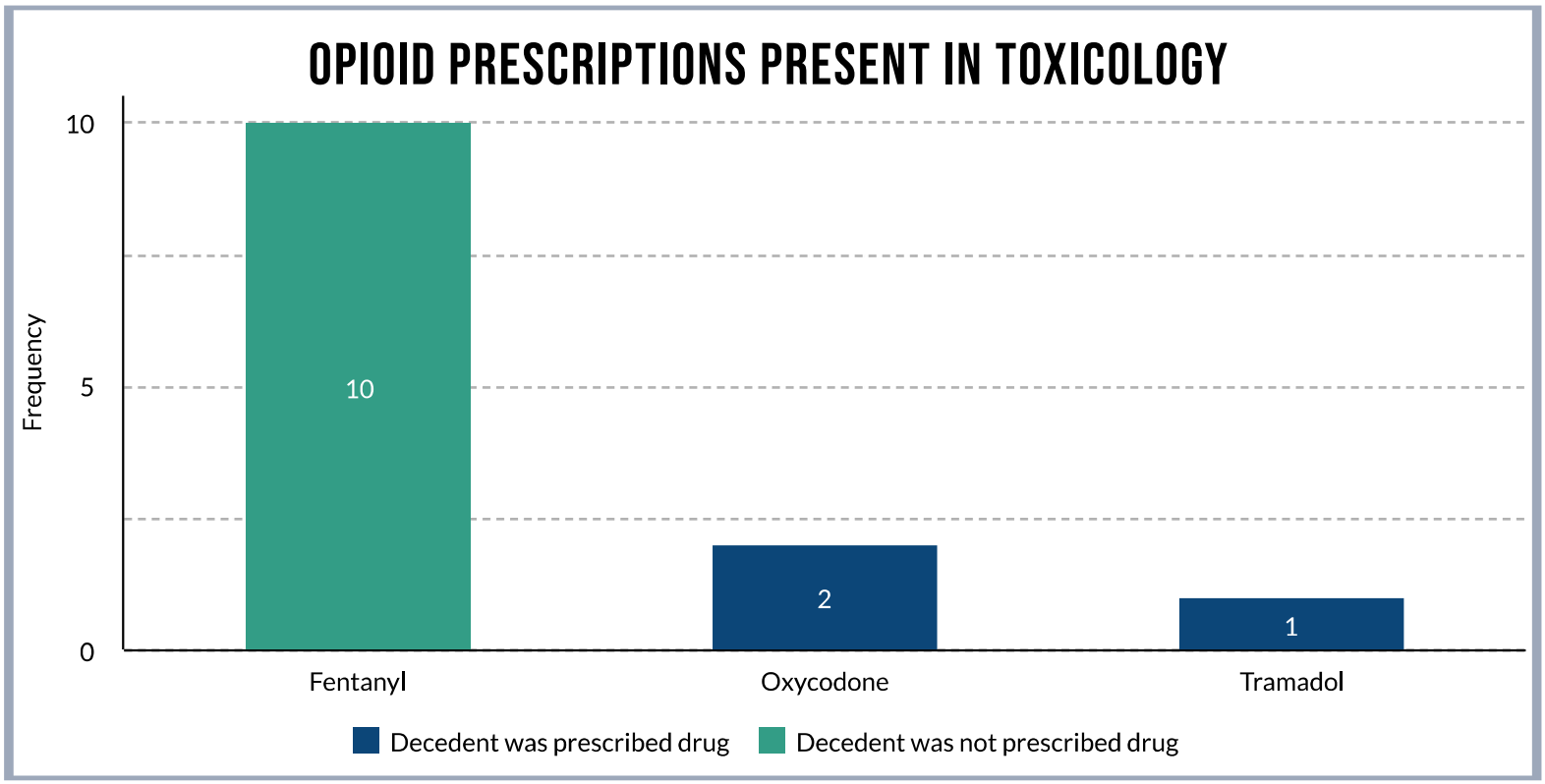
*Please see graphs on the next page for a list of opioid and non-opioid prescriptions.

Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Autopsy and Toxicology Results, cont.





Deaths Related to Opioids and Other Drugs

Allegan and Barry County

Highlights

OPIOIDS AND POSITIONAL ASPHYXIA

23% (3 of 13) of decedents who died due an opioid were originally found in a **potentially airway compromising position**

These positions include decedent found face down on the floor or on their bed

0% (0 of 47) of decedents who died due to only non-opioid substance(s) were originally found in a **potentially airway compromising position**

Opioids depress the respiratory system and when coupled with positional asphyxia, there may be an increase risk of death. This MEO suggests that those who use substances not use alone and to ensure they are not at risk for slumping forward onto their face.

NOVEL SUBSTANCES

Xylazine
1 death

- Only approved use is for veterinarian medicine in horses, cattle, etc.
- Used for sedation, anesthesia, muscle relaxation, and analgesia

Etizolam
1 death

- Benzodiazepine
- Legal in Japan, Italy, and India
- Used for short term treatment of obsessive compulsive disorder, anxiety, and insomnia

Chloroethane
1 death

- Largely used as a blowing agent in foamed plastics
- Huffing this may cause temporary feelings of drunkenness, lack of muscle coordination, unconsciousness, and death

SUBSTANCE COMBINATIONS

HEROIN & FENTANYL

1 decedent had heroin in their toxicology

This decedent also had fentanyl in their toxicology

XYLAZINE & FENTANYL

1 decedent had xylazine in their toxicology

This decedent also had fentanyl in their toxicology

BENZODIAZEPINES & OPIOIDS

4 decedents had a benzodiazepine and an opioid in their toxicology

0 decedents were prescribed the opioid and benzodiazepine

METHAMPHETAMINE & OPIOIDS

3 decedents had methamphetamine and opioid(s) in their toxicology

All decedents had methamphetamine and fentanyl in their toxicology

Deaths related to opioids and other drugs

Annual Report 2021

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, and Van Buren County

This report is in memory of those who lost their life or a loved one to substance use.
These losses must motivate us all to prevent future deaths.

Purpose: This data was collected by the Office of the Medical Examiner (MEO) in the Department of Pathology at Western Michigan University Homer Stryker M.D. School of Medicine (WMed). Unless otherwise noted, data is from 2021 and includes deaths where drugs were the immediate cause of death. This report is meant to provide up to date statistics to those involved in efforts to reduce the number of drug-related deaths.

Sections with the following headings are approximations and frequencies may be higher than what is reported: Health Factors, Mental Health Factors, Social Factors, Children and Substance Use History.

Sources: All data was extracted from a Medical Examiner database, law enforcement (LE) reports, EMS runsheets, death certificates, obituaries, medical records, toxicology reports, and autopsy reports.

Note: Cass county started working with this MEO in 2021. Comparison data for previous years is excluded where indicated (page 3).

AI/H: American Indian and Hispanic; A=Asian; B=Black/African-American; B/H=Black and Hispanic; H=Hispanic; ME=Middle Eastern; W=White; W/AI=White/American Indian;
F=Female; M=Male

Please email questions to pathology@med.wmich.edu
County reports are available here: https://mimedicalexaminer.com/node/27

Office of the Medical Examiner
Department of Pathology
Homer Stryker M.D. School of Medicine

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Allegan

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
19	B	M	fentanyl	49010
27	W	M	fentanyl, ethanol	49010
28	W	M	fentanyl, ethanol, cocaine	49078
36	W	F	fentanyl, methamphetamine, xylazine, alprazolam, hydroxyzine	49080
41	H	M	fentanyl	49423
45	W	M	fentanyl, methamphetamine	49348
45	W	M	methamphetamine	49408
50	W	M	fentanyl, cocaine	unknown
54	W	F	alprazolam, oxycodone, duloxetine, gabapentin, trazodone, diphenhydramine	49078
58	W	M	methamphetamine	unknown
60	H	M	methamphetamine, ethanol	49423
61	W	M	tramadol, gabapentin, trazodone, duloxetine	49078
66	W	M	chloroethane	49080

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Barry

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
30	W	F	methamphetamine, fentanyl	49058
35	W	F	fentanyl, alprazolam	49046
39	W	M	fentanyl, heroin, etizolam, diphenhydramine	49348
46	W	F	oxycodone, zolpidem, gabapentin	49058

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Berrien

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
22	W	M	cocaine metabolites, ethanol, fentanyl, promethazine	49106
27	W	M	fentanyl, para-fluorofentanyl, methamphetamine	49038
29	B	M	fentanyl	49022
30	W	M	fentanyl, methamphetamine	49085
32	W	F	acetyl-fentanyl, fentanyl, methamphetamine, para-fluorofentanyl	49117
32	ME	M	diazepam, fentanyl, heroin, methamphetamine	49120
32	W	M	fentanyl, heroin, methamphetamine	Unknown
33	W	F	fentanyl, methadone, methamphetamine, para-fluorofentanyl	49022
33	W	M	fentanyl, methamphetamine	49120
34	B	M	ethanol, fentanyl, para-fluorofentanyl	49022
34	W	M	fentanyl, para-fluorofentanyl	49085
34	W	M	Pt. I: cardiac tamponade due to hemopericardium; Pt. II: methamphetamine*	49107
35	W	M	ethanol, etizolam, methamphetamine	49107
37	W	M	fentanyl, heroin, methamphetamine	49120
38	B	F	acute ethanol intoxication*	Unknown
39	W	M	chlordiazepoxide, ethanol, fentanyl	49022
39	W	F	fentanyl, hydroxyzine, methamphetamine, oxycodone, para-flourofentanyl, tramadol	49022
40	W	M	ethanol, methadone	49120
41	W	F	ethanol, fentanyl, methamphetamine, para-flourofentanyl	49120

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Berrien

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
45	W	F	alprazolam, fentanyl, heroin	49107
45	W	M	cocaine-metabolite, fentanyl, para-fluorofentanyl	49127
48	W	F	methamphetamine	49002
48	W	F	cocaine, methamphetamine	49111
52	B	M	cocaine, fentanyl, tramadol	49022
53	B	M	fentanyl	49022
54	W	F	7-amino clonazepam, alprazolam, dicyclomine, methadone, olanzapine, paroxetine, venlafaxine	Unknown
54	H	M	fentanyl	49022
55	W	M	alprazolam, diphenhydramine, fentanyl, hydrocodone, tramadol	49128
57	W	M	fentanyl, mitragynine	49085
57	W	M	fentanyl, methamphetamine	49127
58	W	M	morphine, oxycodone	49038
58	W	M	methamphetamine	49022
62	B	F	acetaminophen	49022
67	B	F	cyclobenzaprine, diphenhydramine, hydrocodone, gabapentin	49022
71	W	M	7-amino clonazepam, methadone	49120
72	B	M	Pt. I: intracerebral hemorrhage; Pt. II: cocaine*	49022
73	W	M	amphetamine, methamphetamine	49128

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Cass

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
25	W	M	fentanyl, heroin, methamphetamine	49112
28	W	M	fentanyl, heroin	49120
29	W	M	fentanyl, heroin, para-fluorofentanyl, xylazine	49047
36	W	F	fentanyl, mitragynine	49047
41	W	M	diphenhydramine, fentanyl, heroin, methamphetamine	49120
42	W	F	amlodipine, citalopram/escitalopram	49031
44	W	F	fentanyl, para-fluorofentanyl	49047
53	W	M	fentanyl, methamphetamine	49061
60	W	F	fentanyl, gabapentin, methamphetamine	49120

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Calhoun

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
23	B	F	fentanyl, para-fluorofentanyl, xylazine	49015
23	W	M	fentanyl, methamphetamine, para-fluorofentanyl	unknown
27	W	M	fentanyl, methamphetamine, para-fluorofentanyl	49037
29	W	M	fentanyl, methamphetamine, para-fluorofentanyl, tramadol, xylazine	49068
31	W	M	fentanyl, gabapentin	49033
31	W	F	fentanyl, para-fluorofentanyl	49011
32	W	M	ethanol, fentanyl	49037
32	W	F	methamphetamine	unknown
32	B	M	methamphetamine	49017
33	W	M	fentanyl, para-fluorofentanyl	unknown
34	W	M	etizolam, fentanyl, morphine, para-fluorofentanyl, xylazine	49037
34	W	M	acetyl-fentanyl, fentanyl	49037
35	W	F	fentanyl, para-fluorofentanyl	49017
36	H	M	alprazolam, fentanyl, methamphetamine	49037
36	W	F	fentanyl	49037
37	W	M	fentanyl, heroin, methamphetamine, para-fluorofentanyl	49014
37	H	F	fentanyl, methamphetamine	49017
37	W	F	ethanol, fentanyl, gabapentin, hydrocodone, tramadol	49037
37	B	M	Pt. I: Brainstem intraparenchymal hemorrhage; Pt. II: MDMA*	49017
38	W	F	fentanyl, heroin, methadone, para-fluorofentanyl	49017

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Calhoun

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
39	W	F	methamphetamine	49017
39	W	M	fentanyl, methamphetamine, para-fluorofentanyl, tramadol, xylazine,	49015
39	W	M	alprazolam, fentanyl	49015
39	W	F	fentanyl, para-fluorofentanyl	49014
39	W	M	methamphetamine	unknown
40	W	M	fentanyl, xylazine	49037
40	W	M	fentanyl, morphine	49037
40	W	M	ethanol, cocaethylene, fentanyl, hydrocodone, para-fluorofentanyl	49037
41	B	F	fentanyl, heroin, methamphetamine, para-fluorofentanyl	49015
41	W	M	fentanyl, methamphetamine, para-fluorofentanyl	49017
41	H	M	fentanyl	49015
41	W	M	cocaine	49017
42	W	M	methamphetamine	49037
42	W	F	ethanol, fentanyl, methamphetamine	49037
45	W	M	fentanyl, methamphetamine	49037
48	B/H	M	fentanyl	49017
48	W	M	ethanol, fentanyl, para-fluorofentanyl	unknown
49	W	F	ethanol, hydroxyzine, mitragynine	49017
50	B	M	ethanol, fentanyl	49037
51	W	F	cocaine	49015

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Calhoun

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
52	W	F	tramadol	49015
53	W	M	methamphetamine	49068
53	W	M	clonazepam, clozapine	49014
54	W	F	fentanyl, hydroxyzine, methamphetamine, morphine, trazodone	49014
54	W	M	cocaethylene, cocaine, ethanol, fentanyl	49015
54	W	M	alprazolam, cyclobenzaprine, fentanyl, heroin, tramadol	49017
56	W	M	ethanol	49017
56	W	M	cocaine, fentanyl	49015
57	W	M	fentanyl, methamphetamine	49029
58	W	M	cyclobenzaprine, fentanyl, gabapentin, tramadol	49068
58	W	F	alprazolam, methadone	49037
59	W	F	duloxetine, gabapentin, hydrocodone, methadone	49014
59	B	M	ethanol, fentanyl, methamphetamine	49037
60	W	F	fentanyl, methadone	49015
60	B	M	cocaine, fentanyl	49014
62	W	M	fentanyl, methamphetamine	49015
66	B	M	fentanyl	49015
68	W	M	alprazolam, diazepam, fentanyl, heroin,	49015
72	B	M	cocaine, fentanyl, morphine, para-fluorofentanyl, xylazine	49037
81	B	M	fentanyl, tramadol, xyalzine	49037

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Grand Traverse

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
29	W	M	fentanyl, methamphetamine	49685
31	W	M	fentanyl, methamphetamine	49685
32	W	M	fentanyl, heroin	49686
32	H	M	fentanyl	49617
32	W	F	mitragynine	49686
36	A	M	diazepam, fentanyl	49685
38	W	M	fentanyl, methamphetamine, para-fluorofentanyl	49601
39	W	M	diazepam, fentanyl	49650
41	AI/H	M	acetyl-fentanyl, fentanyl, mitragynine, para-fluorofentanyl	49643
42	W	M	7-amino clonazepam, acetyl-fentanyl, cocaine, fentanyl, heroin, meth-amphetamine, mitragynine, nordiazepam, para-fluorofentanyl, xylazine	49686
43	W	F	fentanyl, methamphetamine	Unknown
44	W	M	fentanyl	49685
48	W	M	fentanyl	49686
56	W	F	amitriptyline, gabapentin	49686
57	W	M	acetyl-fentanyl, fentanyl, heroin, methamphetamine, para-fluorofentanyl	49633
66	W	M	clonazepam, diphenhydramine	49616
68	B	M	fentanyl, methamphetamine, para-fluorofentanyl	49643
68	W	F	bupropion	49649
68	B	M	ethanol, fentanyl, methylphenidate, para-fluorofentanyl, ritalinic acid, xylazine	49686

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Kalamazoo

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
23	W	F	fentanyl	49008
23	B	M	methamphetamine	Unknown
24	B	M	acetyl-fentanyl, fentanyl, heroin, methamphetamine	49009
25	W	F	fentanyl, methamphetamine	49017
25	W	F	fentanyl, methamphetamine, morphine	49002
25	W	M	Acute and chronic ethanol use*	Unknown
26	B	M	fentanyl, methamphetamine	49048
26	W	M	alprazolam, fentanyl, methamphetamine	49009
27	W	F	fentanyl, methamphetamine, para-fluorofentanyl	49001
27	W	F	alprazolam, fentanyl, heroin, para-fluorofentanyl	49007
30	W	M	methamphetamine	Unknown
30	W	M	fentanyl	49004
31	W	M	Pt. I: cardiac tamponade due to aortic dissection; Pt. II: methamphetamine*	49048
32	B	M	cocaine	Unknown
33	W	M	fentanyl, tramadol	49007
33	W	M	fentanyl, heroin, methadone, para-fluorofentanyl	49024
35	A	F	alprazolam, fentanyl, heroin, methamphetamine, para-fluorofentanyl, sertraline,	49002
35	W	M	acetyl fentanyl, alprazolam, cocaine, fentanyl, hydrocodone, para-fluorofentanyl	49007
35	W	F	fentanyl, methamphetamine	49037
36	W	M	fentanyl	49014

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Kalamazoo

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
36	W	M	ethanol, fentanyl, mitragynine	49006
36	B	F	fentanyl, cocaine, cocaethylene, ethanol	49008
36	W	M	fentanyl	49008
37	W	F	methamphetamine	49008
37	W	M	alprazolam, fentanyl, para-fluorofentanyl	49048
38	W	F	alprazolam, methamphetamine, oxyocodone	49245
38	W	F	Pt. I: complications of type I diabetes mellitus; Pt. II: methamphetamine*	49024
39	W	M	fentanyl, para-fluorofentanyl	Unknown
39	B	M	acetyl-fentanyl, fentanyl, methamphetamine, para-fluorofentanyl	49007
39	W	F	fentanyl, fluoxetine, methamphetamine, norfluoxetine	49007
39	W	M	ethanol, fentanyl	49007
40	W	M	Acute and chronic ethanol use*	49009
41	W	M	chlordiazepoxide, diphenhydramine, fentanyl, heroin, para-fluorofentanyl, tramadol, xylazine	49012
41	W	M	cocaethylene, cocaine, ethanol, fentanyl, para-fluorofentanyl	49024
42	W	M	fentanyl, methamphetamine, mitragynine, para-fluorofentanyl	49007
42	B	M	methamphetamine	Unknown
42	B	M	Pt I: hypertensive cardiovascular disease; Pt. II: cocaine*	49001
43	W	M	methamphetamine, nordiazepam, orphenadrine, oxycodone	49093
44	W	M	fentanyl, para-fluorofentanyl, acetyl-fentanyl	49006
45	B	M	butalbital, ethanol, heroin	49008

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Kalamazoo

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
45	B	F	cocaethylene, cocaine, ethanol, fentanyl, para-fluorofentanyl	49007
45	W	M	fentanyl, gabapentin	49006
45	B	M	methamphetamine	49001
47	W	F	fentanyl	Unknown
49	W	F	Pt. I: gastrointestinal hemorrhage, uncertain source; Pt. II: chronic alcohol use, methamphetamine*	49001
50	W	F	fentanyl, methamphetamine, para-fluorofentanyl	49048
50	W	M	fentanyl, methamphetamine	49009
50	W	F	diphenhydramine, gabapentin, hydrocodone	49002
50	B	M	cocaethylene, cocaine, ethanol, fentanyl, methamphetamine	49007
50	B	M	methamphetamine	49048
50	W	F	diazepam, fentanyl, gabapentin, morphine	49048
52	W	M	amitriptyline, hydrocodone, methamphetamine	49001
54	W	M	methamphetamine	49007
54	B	M	methamphetamine	49001
54	B	M	acetyl-fentanyl, fentanyl, methamphetamine, para-fluorofentanyl	49007
55	W	M	methamphetamine	49001
55	B	M	cocaethylene, ethanol, fentanyl	49048
55	W	F	alprazolam, diphenhydramine, methadone, trazodone	49001
55	W	F	methamphetamine	Unknown
55	W	F	fentanyl, gabapentin, methadone, para-fluorofentanyl, promethazine, tramadol	49048

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Kalamazoo

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
56	W	F	acetyl-fentanyl, fentanyl, gabapentin, hydroxyzine, mitragynine, morphine	49006
56	B	M	methamphetamine	49007
56	W	M	fentanyl, methamphetamine	Unknown
57	W	M	acetaminophen	49002
57	B	F	fentanyl, para-fluorofentanyl, methamphetamine	49048
57	W	F	methamphetamine	49001
58	B	M	hydrocodone	49001
58	W	F	fentanyl, methamphetamine	49009
58	W	F	fentanyl, gabapentin	49079
58	W	M	amlodipine, ethanol, metoprolol, venlafaxine	49009
60	W	F	ethanol, fentanyl	49048
60	W	M	doxepin, duloxetine, methadone	49090
60	B	M	methamphetamine	49007
60	W	F	ethanol, fentanyl, methamphetamine,	49001
60	W	M	acetyl-fentanyl, ethanol, fentanyl, para-fluorofentanyl,	49053
61	W	M	Pt. I: sudden cardiac event; Pt. II: cocaine*	49001
61	W	M	gabapentin, methadone	49001
61	B	F	clonazepam, duloxetine, fentanyl, fluoxetine, morphine	49007
62	W	M	gabapentin, tramadol	49034
62	W	F	1,1-difluoroethane, bromazolam, fentanyl, methamphetamine, para-fluorofentanyl,	49006

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Kalamazoo

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
62	W	M	Pt. I: pulmonary thromboemboli; Pt. II: fentanyl, methadone*	49048
63	W	M	1,1-difluoroethane, bromazolam, fentanyl, methamphetamine, para-fluorofentanyl,	49048
63	W	M	Pt. I: pulmonary thromboemboli; Pt. II: fentanyl, methadone*	49007
64	B	M	cocaine	49048
65	W	F	methamphetamine	Unknown
66	B	M	fentanyl, nordiazepam, para-fluorofentanyl	49048
66	B	M	Pt. I: intracerebral hemorrhage; Pt. II: cocaine*	49007
69	W	F	cocaine, ethanol	49048
70	W	F	sertraline	49080
70	B	M	Pt. I: gastric ulcer (perforated); Pt. II: acetyl-fentanyl, fentanyl, heroin*	49001
71	B	F	fentanyl, heroin	49048
76	W	F	methamphetamine	49002

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Leelanau

Age	Race	Sex	Death certificate: Substances contributing to death	Injury zip code
33	W	M	fentanyl	49654
38	W	M	ethanol, hydroxyzine, nordiazepam	49670
41	W	M	acetyl-fentanyl, diphenhydramine, fentanyl, methadone, methamphetamine, morphine	49682
60	W	M	diphenhydramine, fentanyl	49664

All drug-related deaths: Mason

Age	Race	Sex	Death certificate: Substances contributing to death	Injury zip code
27	W	F	amitriptyline, citalopram, fluoxetine, mirtazapine, topiramate	49431
28	W	M	fentanyl, methamphetamine	49454
35	W	M	alprazolam, fentanyl, methamphetamine, mitragynine, para-fluorofentanyl	49431
35	W	M	cocaine, fentanyl, methamphetamine	Unknown
36	W	M	fentanyl, methamphetamine, para-fluorofentanyl	49431
38	W	F	buprenorphine, bupropion, methamphetamine, venlafaxine	49431
57	W	F	7-aminoclonazepam, acetyl-fentanyl, cocaine, fentanyl	49431
69	W	F	diphenhydramine, duloxetine, oxycodone, topiramate	49449

All drug-related deaths: Osceola

Age	Race	Sex	Death certificate: Substances contributing to death	Injury zip code
32	W	M	fentanyl, methamphetamine	49631
34	W	M	cyclobenzaprine, fentanyl, methamphetamine, para-fluorofentanyl, xylazine	49655
51	W	M	fentanyl, methamphetamine, methadone, tramadol	49631
53	B	M	fentanyl, methamphetamine	49639
61	W	M	methamphetamine	49677

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Muskegon

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
19	W	F	fentanyl, mitragynine	49440
19	B	M	amitriptyline	49442
20	W	M	fentanyl, heroin	49441
21	W	F	fentanyl, methamphetamine	49444
22	W	M	mitragynine	49461
23	B	M	ethanol, fentanyl	49441
26	W	F	cocaine, ethanol, fentanyl	49441
28	W	F	cocaine, fentanyl	49440
29	W	M	fentanyl, methamphetamine	49441
29	B	F	alprazolam, fentanyl, hydrocodone	49441
29	W	F	fentanyl, methamphetamine, morphine	49442
30	W	M	fentanyl, methamphetamine	49456
30	W	M	fentanyl, methamphetamine, para-fluorofentanyl	49442
30	H	M	methamphetamine	Unknown
32	B	M	acetyl fentanyl, chlorpheniramine, diphenhydramine, fentanyl, hydrocodone	49442
33	W	F	fentanyl, gabapentin, morphine, para-fluorofentanyl, tramadol	49461
33	W	F	fentanyl, heroin, methamphetamine, para-fluorofentanyl	49444
33	ME	M	cocaine, fentanyl, hydroxyzine, gabapentin	49442
34	W	F	1,1-difluoroethane	49437
35	W	F	cocaine, fentanyl, para-fluorofentanyl	49441

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Muskegon

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
36	B	M	cocaine, ethanol, fentanyl	49442
36	W	M	diphenhydramine, fentanyl, methamphetamine, para-fluorofentanyl	49445
37	W	F	methamphetamine, mitragynine	49444
37	W	M	fentanyl	49442
38	W	F	diphenhydramine, fentanyl, gabapentin, trazodone	49441
39	W	M	cocaine, fentanyl	49442
40	W	M	fentanyl, methamphetamine, xylazine	49451
40	W	F	fentanyl, methamphetamine, para-fluorofentanyl	49441
40	W	M	amphetamine, cyclobenzaprine, diazepam, fentanyl, heroin, oxycodone	49445
43	W	F	fentanyl	49442
45	W	M	methamphetamine	49437
46	B	M	cocaine, cocaethylene, ethanol, fentanyl, methamphetamine	49442
47	W	M	fentanyl	49441
47	W	M	butyrylfentanyl, diphenhydramine, fentanyl	49442
48	W	M	fentanyl, hydrocodone, para-fluorofentanyl	Unknown
49	W	F	methamphetamine, methylphenidate	49444
49	B	M	cocaine, ethanol, fentanyl, morphine, para-fluorofentanyl	49444
49	W	F	fentanyl, methamphetamine, nordiazepam, para-Flourofentanyl	49441
51	W	M	fentanyl, methamphetamine	49442
51	W	M	cocaethylene, cocaine, ethanol, fentanyl, heroin	49441

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Muskegon

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
52	W	M	cocaethylene, cocaine, ethanol, fentanyl	49442
53	B	M	cocaine, fentanyl	49442
53	W	F	fentanyl, methamphetamine	49461
54	W	M	cyclobenzaprine, ethanol, fentanyl, gabapentin	49441
56	W	F	cocaine, fentanyl	49441
56	B	F	cocaine, fentanyl	49441
56	A	F	ibuprofen	49445
57	B	M	cocaine, fentanyl, heroin	49442
57	W	F	fentanyl, gabapentin	49442
57	B	M	cocaethylene, cocaine, ethanol, fentanyl, flubromazepam, para-fluorofentanyl, xylazine	49444
58	B	M	carisoprodol, fentanyl, hydrocodone, oxycodone, para-fluorofentanyl	49444
59	W	M	amphetamine, ethanol, fentanyl, hydrocodone	49444
59	B	F	fentanyl, methadone, methamphetamine	49444
60	W	M	salicylate	49442
60	W	M	fentanyl	49440
61	W	M	cocaine	49457
61	W	M	cocaethylene, cocaine, ethanol, fentanyl	49442
64	W	M	fentanyl, para-fluorofentanyl	49415
66	W	M	fentanyl	49421
66	W	F	acute and chronic ethanol use*	49441

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Muskegon

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
66	B	F	cocaethylene, cocaine, ethanol	49444
68	B	M	acetyl-fentanyl, fentanyl, heroin	49441
73	B	M	cocaine, hydrocodone, para-fluorofentanyl	49444
90	W	M	apixaban, hydrocodone, morphine	49441

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: St. Joseph

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
30	B	F	alprazolam, fentanyl, hydrocodone	49093
31	W	F	ethylene glycol	49040
32	B	M	alprazolam, amphetamine, cocaine, fentanyl, methamphetamine	49093
37	W	F	fentanyl, methamphetamine	unknown
38	W	M	7-amino clonazapam, cyclobenzaprine, fentanyl, hydrocodone	49093
41	W	M	Pt. I: Staphylococcus aureus sepsis, source uncertain; Pt. II: methamphetamine*	Unknown
49	W	F	alprazolam, cyclobenzaprine, methamphetamine	unknown
59	W	F	Pt. I: Colonic perforation; Pt. II: methamphetamine, morphine, oxycodone, alprazolam, and gabapentin*	49072
60	B	M	cocaine, fentanyl	49093
61	W	M	fentanyl, methamphetamine, morphine, oxycodone	49093

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Van Buren

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
26	W	M	ethanol, fentanyl	49064
27	W	F	methamphetamine	49057
32	W	M	amphetamine, ethanol, fentanyl	49047
32	W	F	7-amino clonazepam, alprazolam, cocaine, fentanyl, hydrocodone, morphine	49090
33	W	M	methamphetamine	49079
35	W	M	fentanyl, gabapentin, mitragynine	49079
38	W	M	acetyl fentanyl, fentanyl, methamphetamine, para-flourofentanyl	49045
39	W	F	amitriptyline, methamphetamine, tramadol	49079
40	W/AI	M	ethanol, fentanyl, heroin, methamphetamine	49026
41	W	M	fentanyl, para-fluorofentanyl	49079
42	W	M	clonazepam/7-amino clonazepam, fentanyl, oxycodone	49071
45	W	F	cyclobenzaprine, ethanol, lorazepam, morphine	49026
48	W	M	fentanyl, methadone, morphine, para-fluorofentanyl	49013
49	W	M	acetyl-fetanyl, alprazolam, clonazepam, fentanyl, methamphetamine	49043
51	W	M	hydroxyzine, mirtazapine, sodium nitrite	49027
51	W	M	Pt. I: inferior right temporal lobe hemorrhage with subarachnoid hemorrhage; Pt. II: methamphetamine*	49056
54	W	F	fentanyl	49090
55	W	M	methamphetamine	49045
58	W	M	Pt. I: hypertensive cardiovascular disease; Pt. II: methamphetamine*	49026

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

All drug-related deaths: Van Buren

Age	Race	Sex	Death certificate: Substances contributing to death	Injury Zip code
59	W	M	methamphetamine	49064
63	W	F	alprazolam, hydromorphone, morphine, methamphetamine	49079
75	W	M	phentermine	49038

*Not included in report (n=19)

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

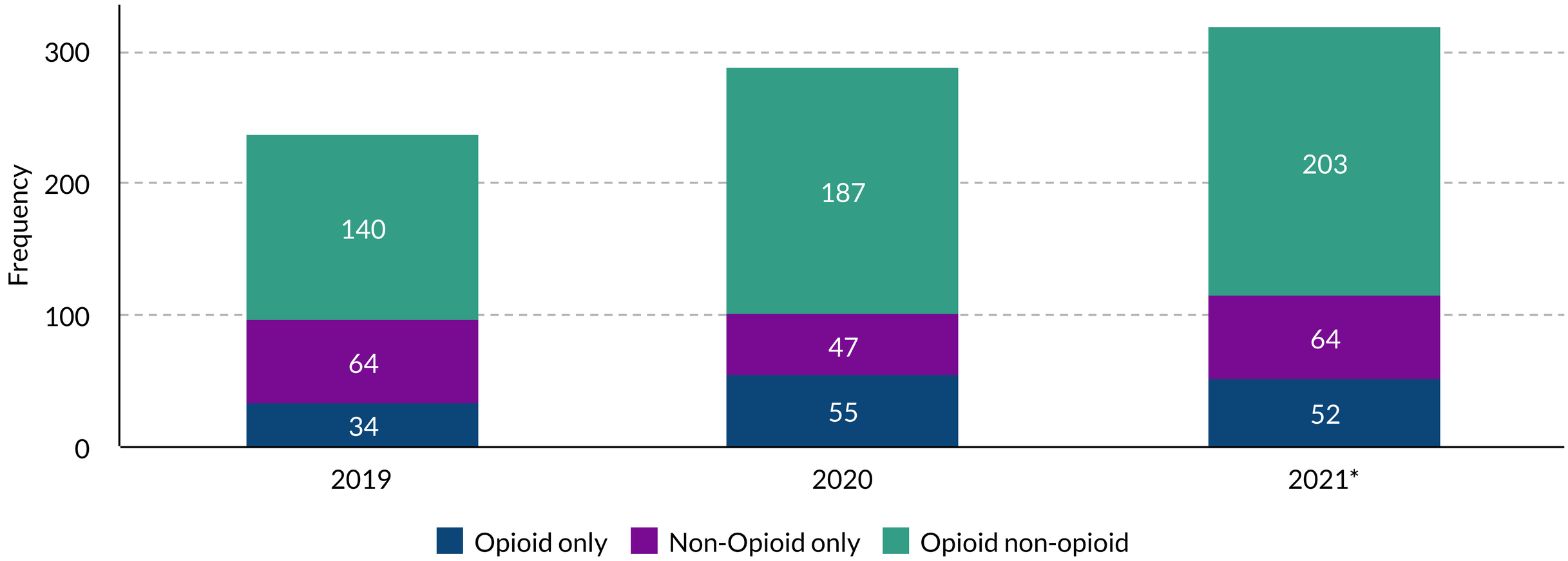
Total Deaths Due to Drugs*

Year	2019	2020	2021*
Total deaths	238	289	319
Deaths per 10,000	2.0	2.4	2.6

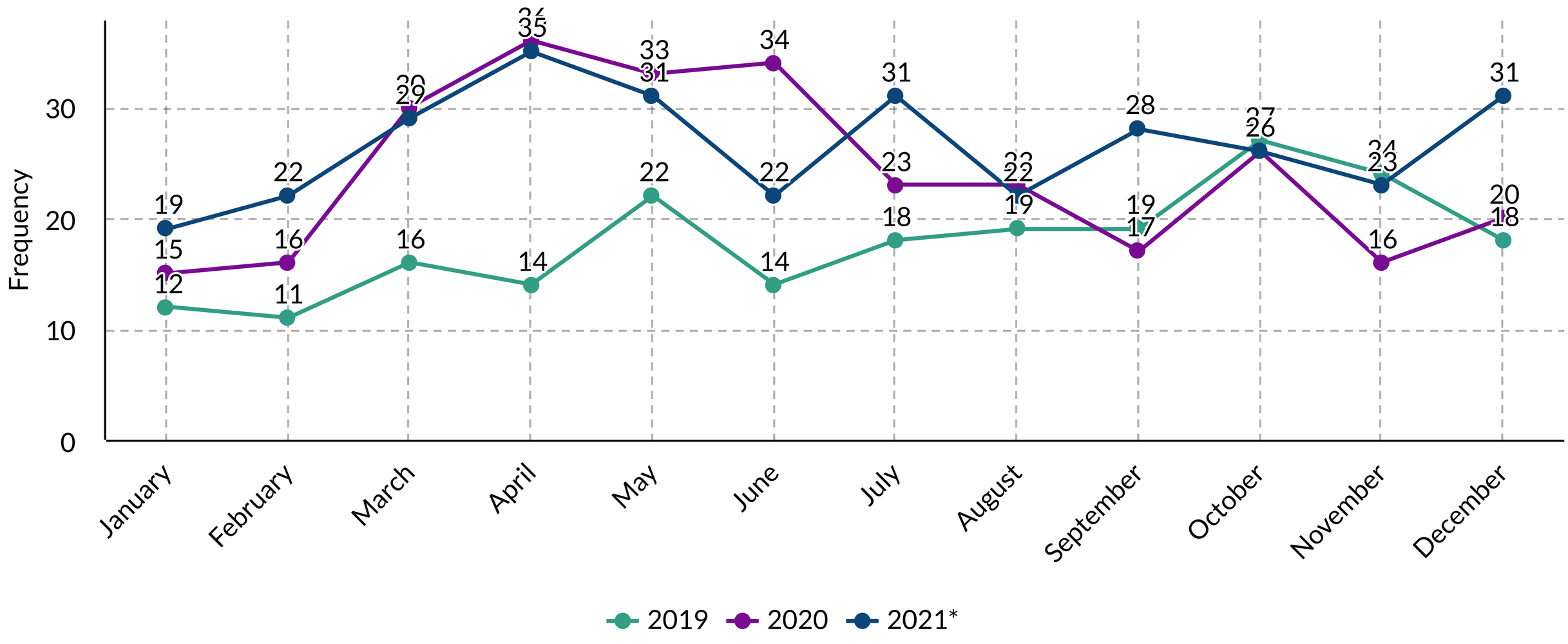
Percent change*

▲ 10% from 2020 to 2021

DRUG-RELATED DEATHS BY DRUG TYPE



DRUG-RELATED DEATHS BY MONTH AND YEAR

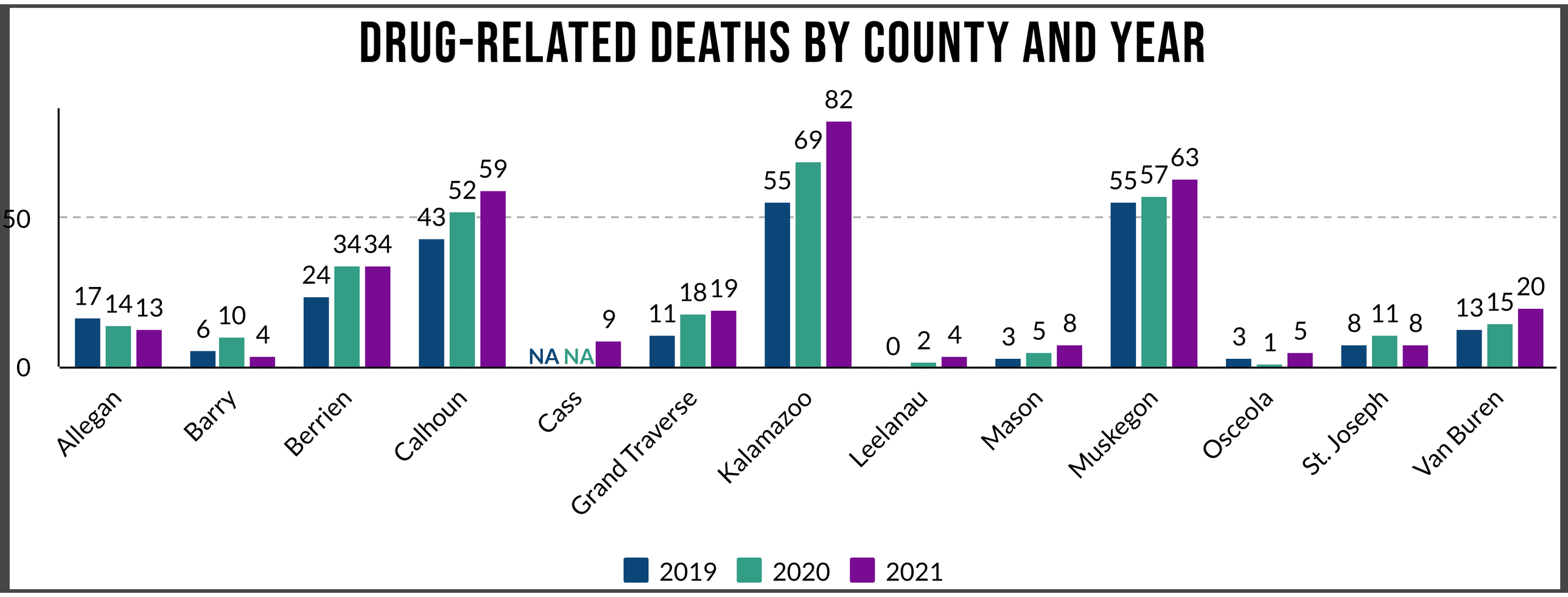


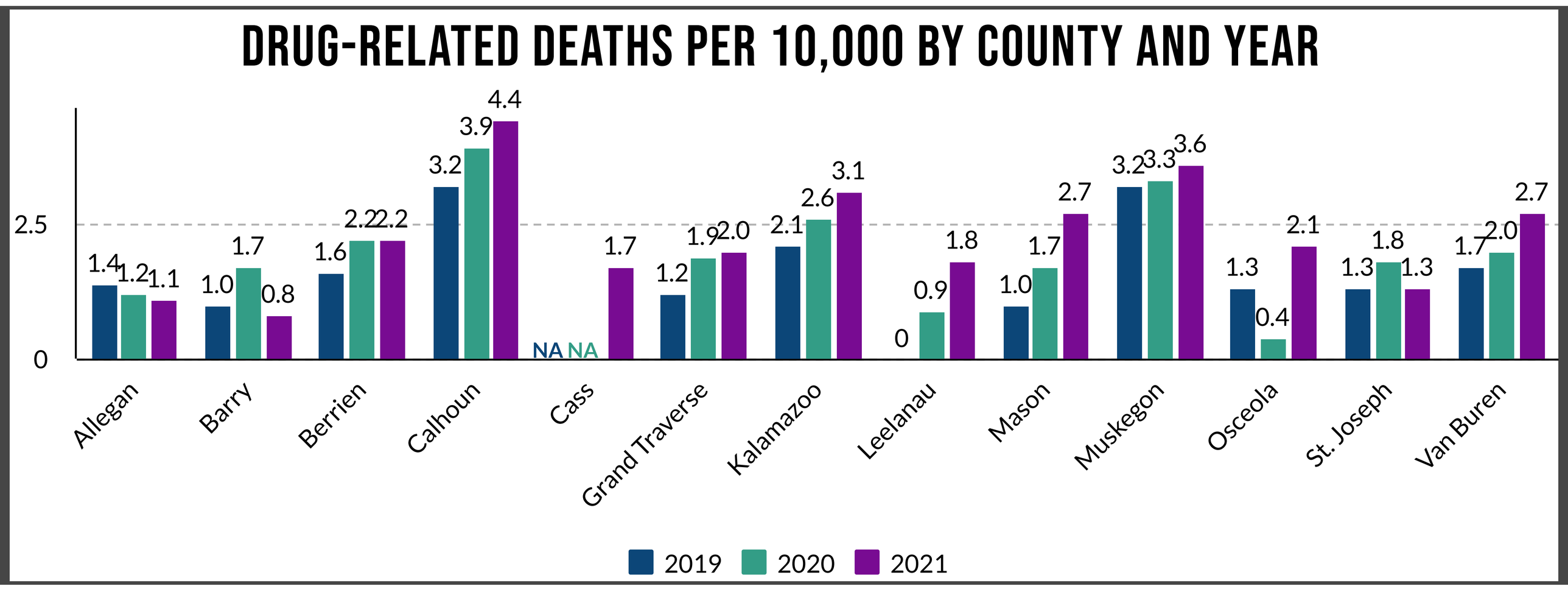
*Cass county excluded 2021 (n=9)

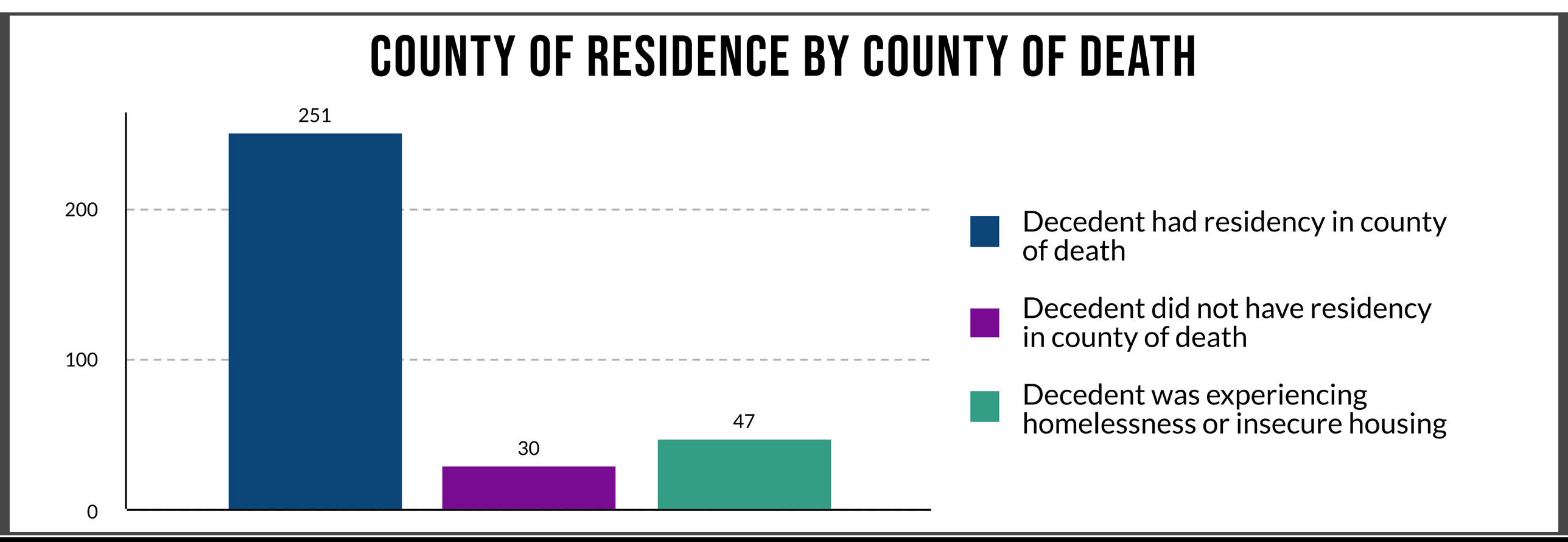
Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Total Deaths Due to Drugs by County





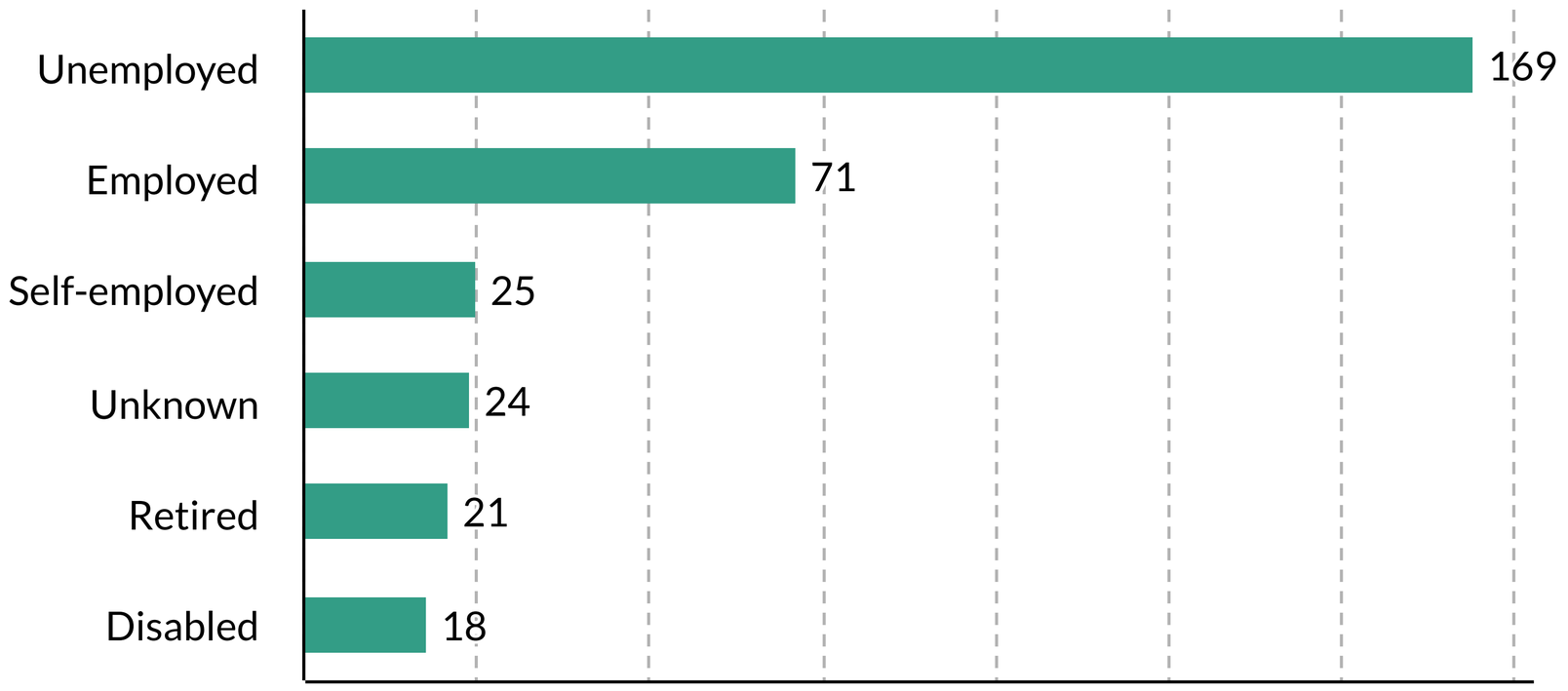


Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Demographics

DECEDENT'S EMPLOYMENT STATUS



RACE

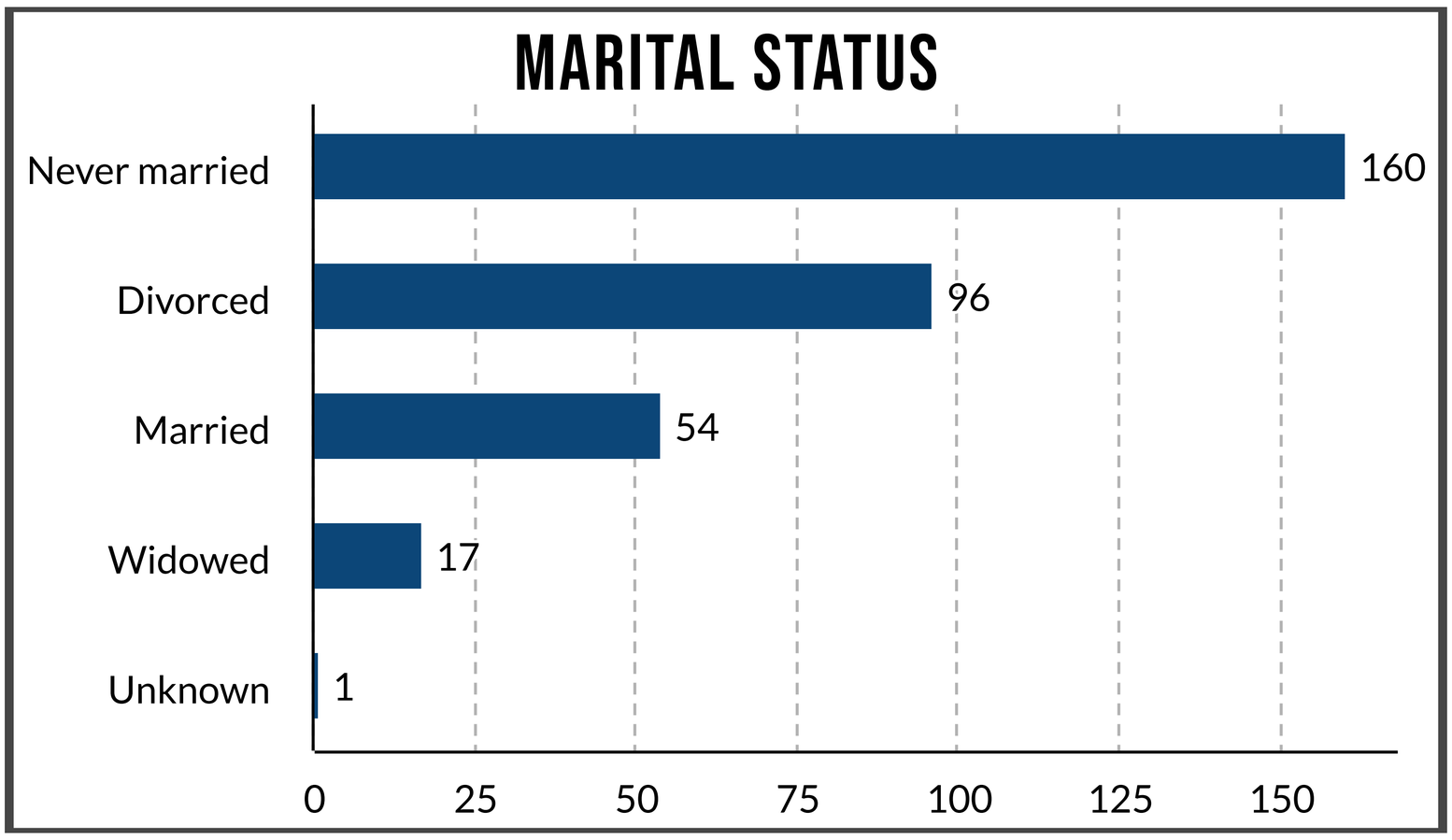
- White (76%)
- African American/Black (18%)
- Hispanic (4%)
- Other (2%)*

SEX

34%

66%

MARITAL STATUS



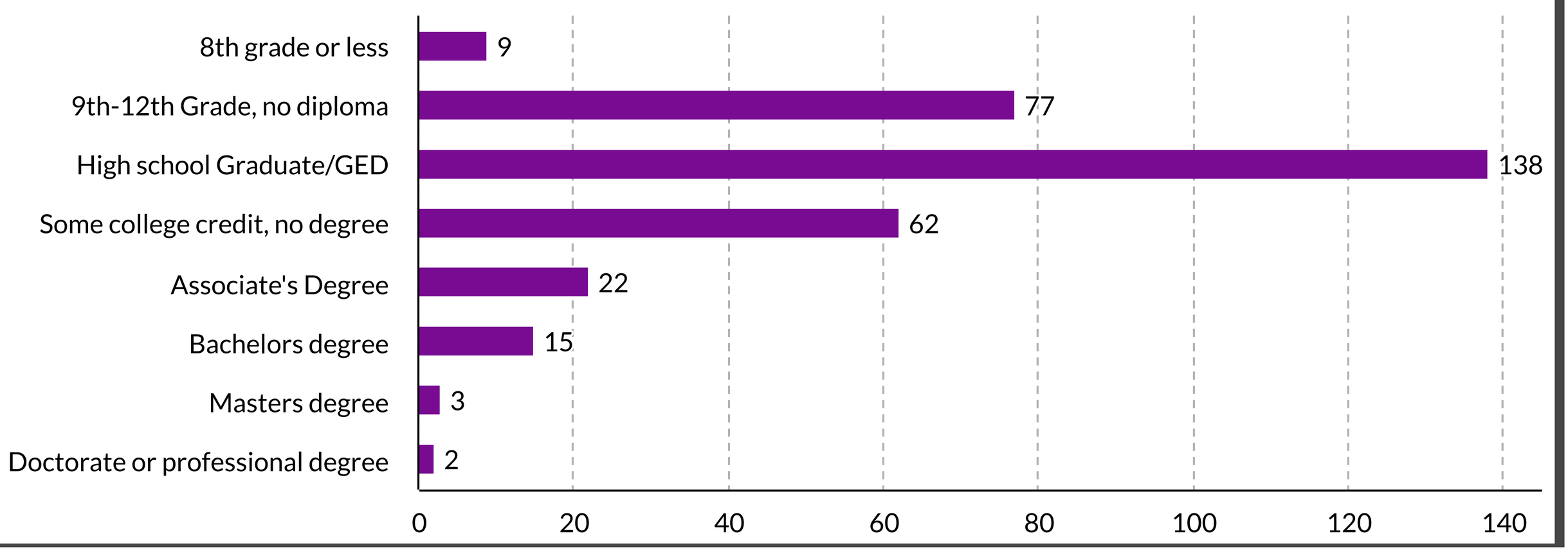
AGE

Minimum Age
19 years

Maximum Age
90 years

Average Age
45 years

DECEDENT'S HIGHEST LEVEL OF EDUCATION



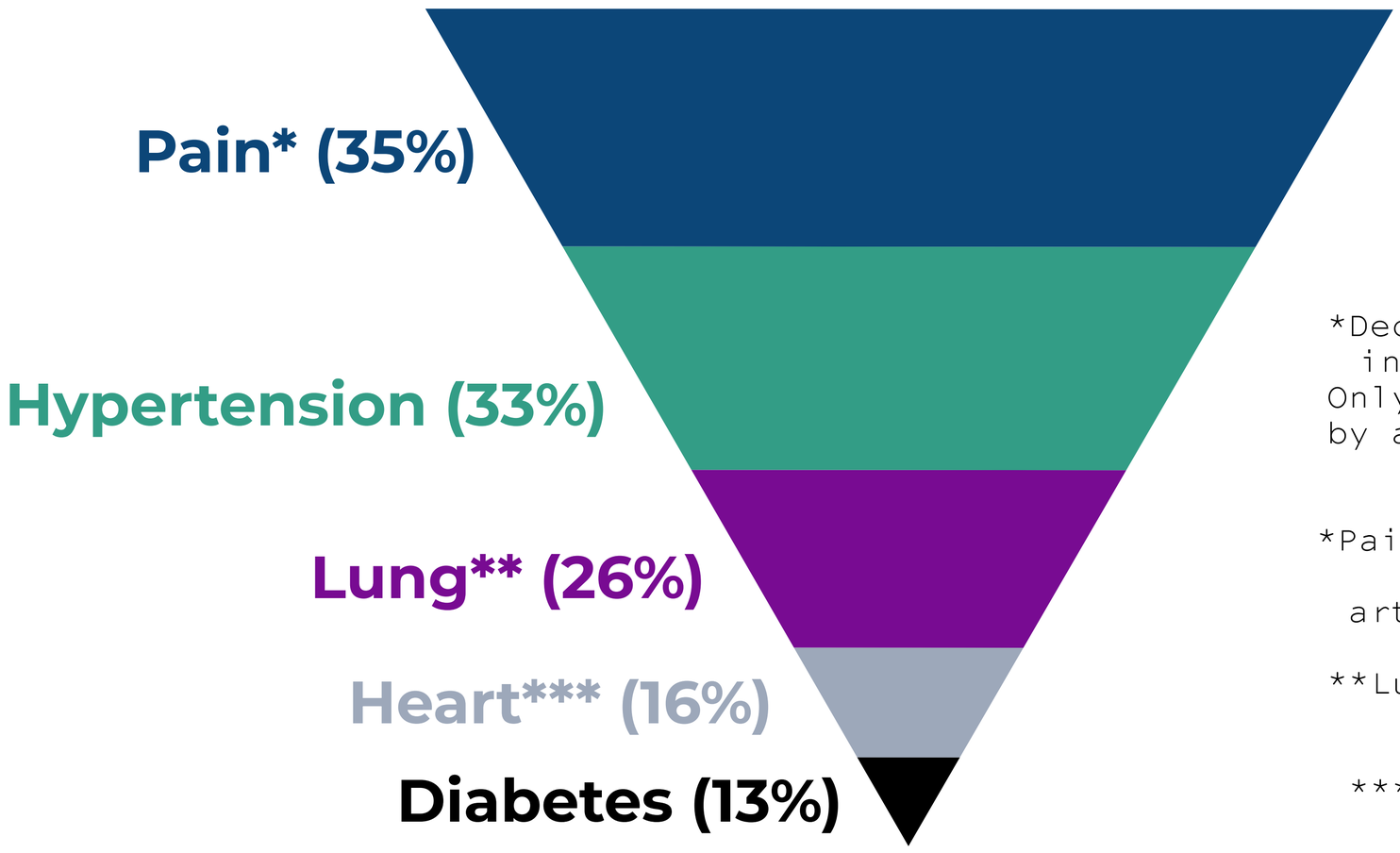
*Asian (n=3), Middle Eastern (n=2), White/American Indian (n=2), Black/Hispanic (n=1), American Indian/Hispanic (n=1)

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Health Factors

MOST COMMON AILMENTS*

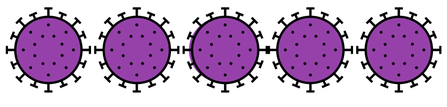


*Decedents may be represented in more than one category. Only illnesses with diagnosis by a medical professional are included.

*Pain includes back, neck, and knee pain, migraine, arthritis, neuropathy, DDD

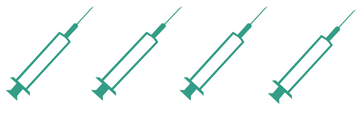
**Lung includes asthma, COPD, and emphysema

***Heart includes MI, CABG, CAD, AFib, and CHF



At least **49** decedents were **Hepatitis C** positive

33 of these decedents were known to use **drugs intravenously**



Decedent used tobacco **77%**

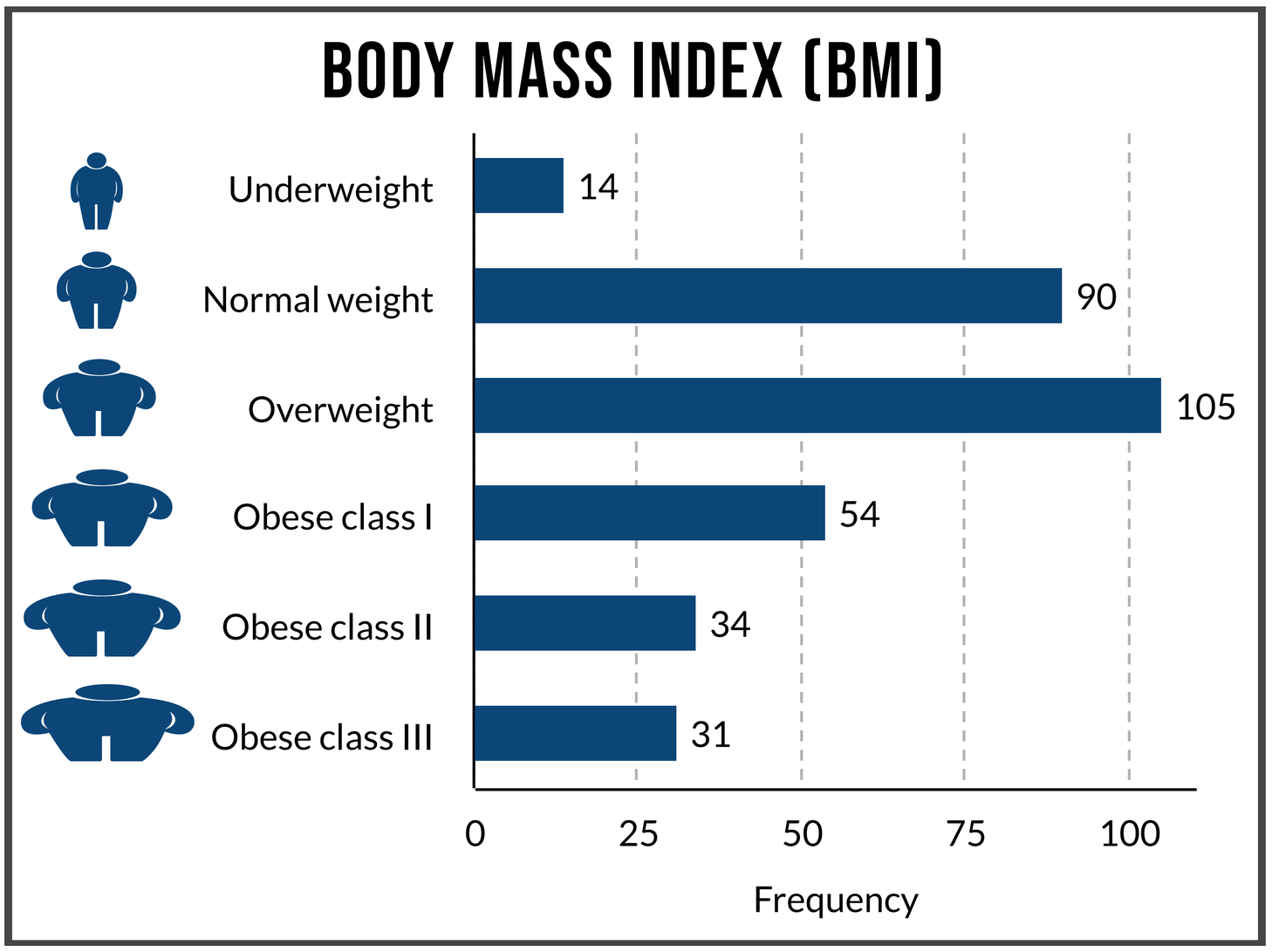
Decedent drank alcohol **44%**

*Moderate to heavy use

Decedent had a PCP **51%**

*Primary care physician

BODY MASS INDEX (BMI)

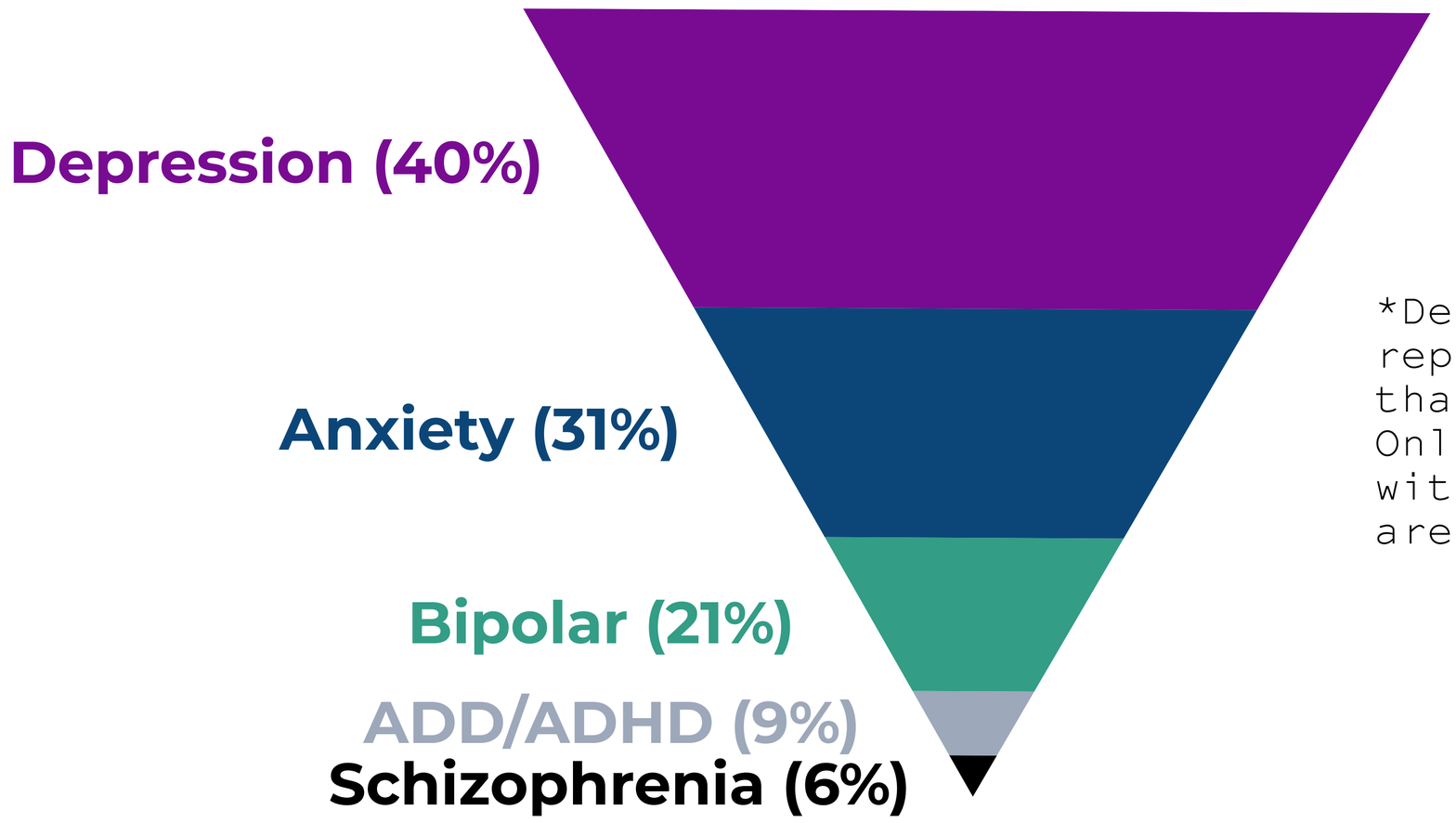


Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Mental Health Factors

MOST COMMON MENTAL ILLNESSES



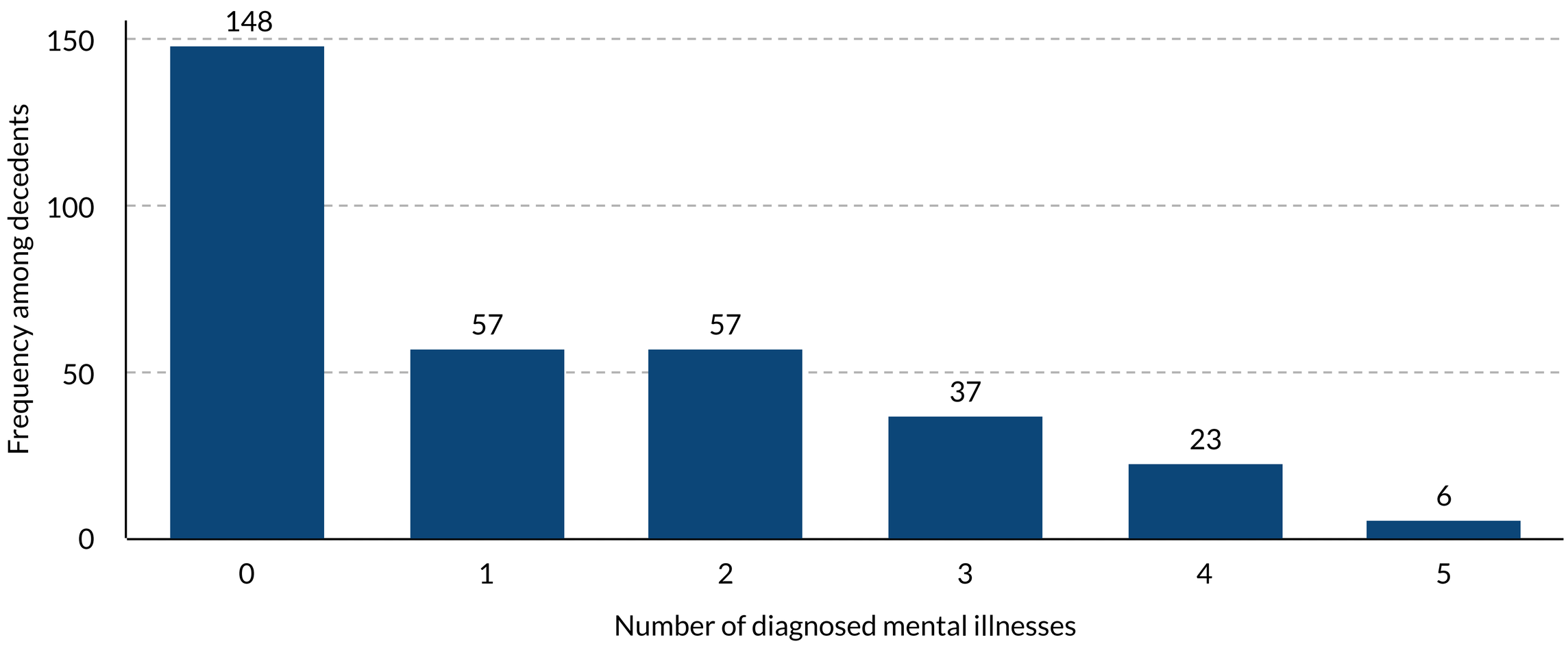
*Decedents may be represented in more than one category. Only mental illnesses with official diagnosis are included.

PERCENTAGE OF DECEDENTS

24% ...who have ever had **suicidal ideations**

12% ...with **previous suicide attempts**

NUMBER OF DIAGNOSED MENTAL ILLNESSES AMONG DECEDENTS



Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Social Factors

5% Decedent was a **veteran**

16% Decedent was **experiencing homelessness or insecure housing** at time of death

29% Decedent has ever been **incarcerated**

19% Decedents **ever incarcerated** were released in past 60 days

Children

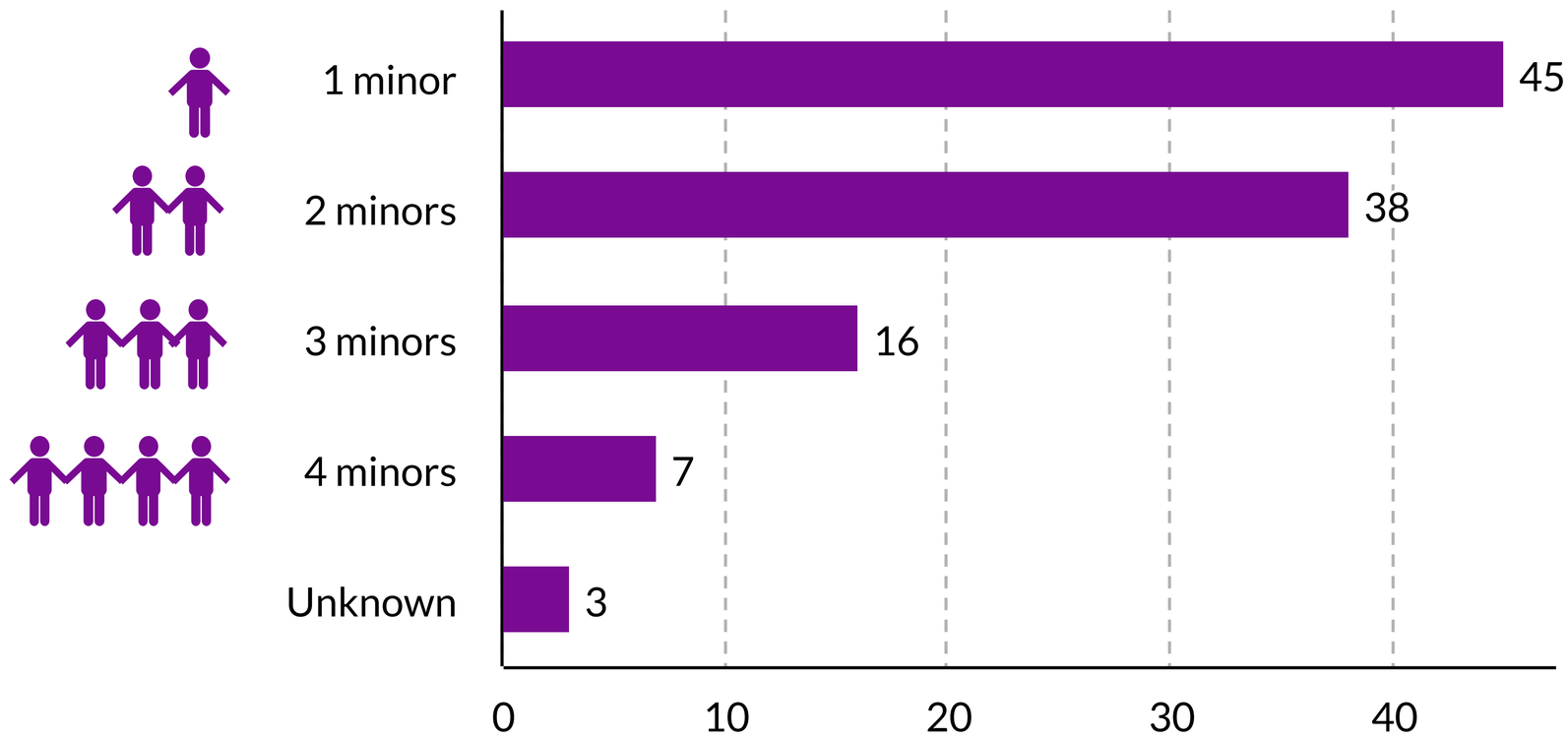
DECEDENT HAD....

34% Adult children only

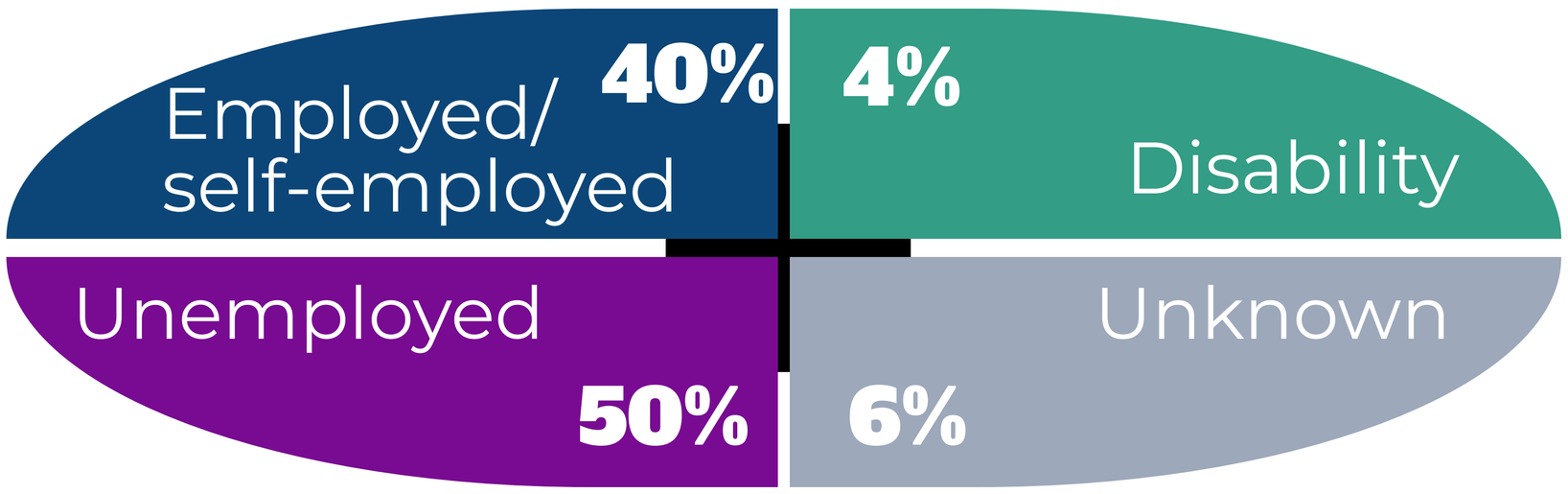
34% At least one minor child

32% No children

NUMBER OF MINOR BIOLOGICAL CHILDREN



EMPLOYMENT STATUS OF THOSE WITH MINOR CHILDREN



23 decedents lived with their minor child(ren) at time of death

Deaths Related to Opioids and Other Drugs

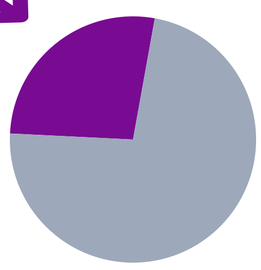
Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Substance Use History

At least 92% of decedents were known to use or abuse substances

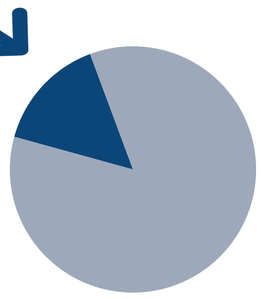
At least 40% of those decedents used substances intravenously

At least 27% of decedents have had at least one prior overdose

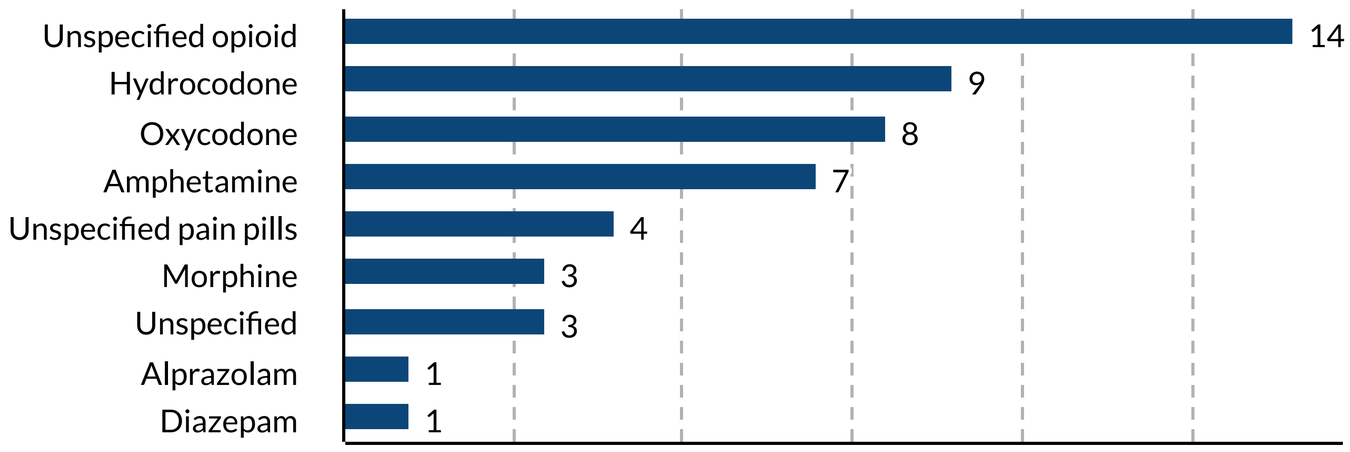


At least 43% of those decedents have had two or more prior overdoses

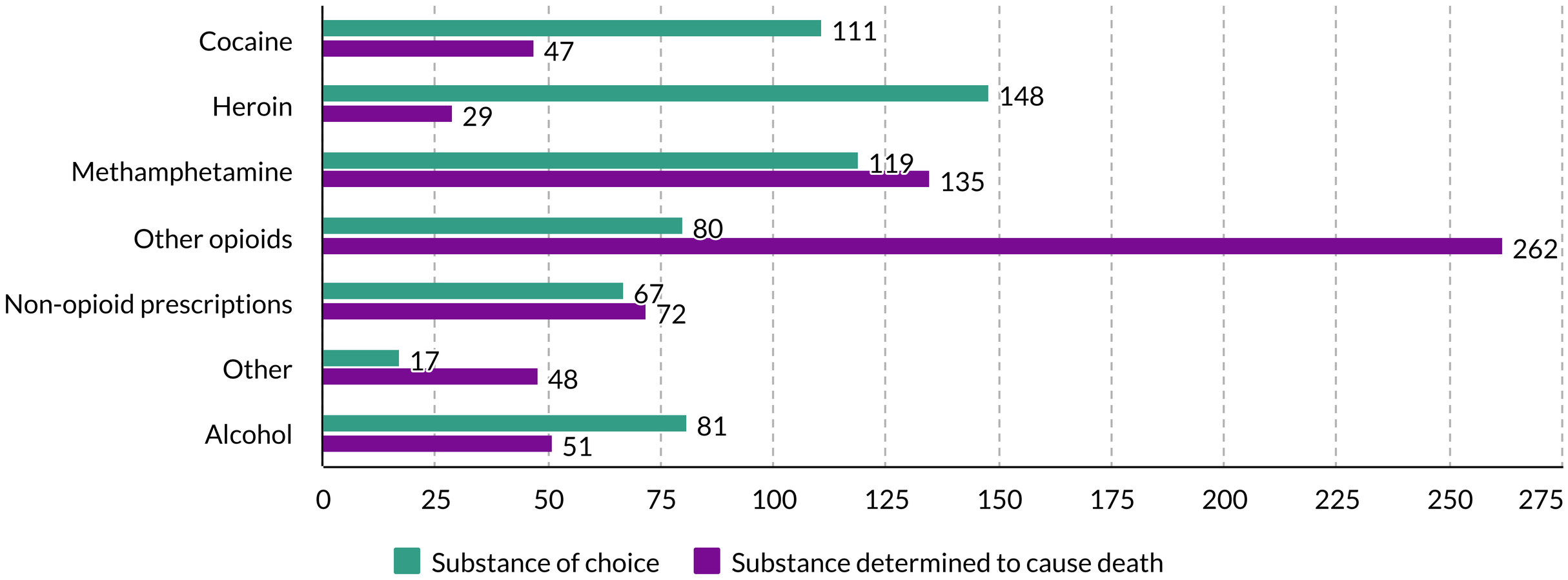
At least 15% of decedent's substance use started from a prescription



TYPE OF PRESCRIPTION



DECEDENT'S SUBSTANCE(S) OF CHOICE VS. SUBSTANCE(S) THAT CAUSED DEATH*



*Decedent may have had more than one substance of choice and in their toxicology.
NOTE: 12 decedents would use any substance available, 26 were not known to use substances, and substance use history is unavailable for 3 decedents.
Other substance of choice includes LSD, acid, huffing agents, mushrooms, and MDMA.
Other substance contributing to death includes 1,1-difluoroethane, acetaminophen, bromazolam, chloroethane, cocaethylene, diphenhydramine, ethylene glycol, etizolam, salicylate, and xylazine.

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Substance Use History, cont.

PREFERRED METHOD OF ADMINISTRATION (N=299)*

Method	Male (n=199)	Female (n=100)	White (n=226)	Black (n=55)	Hispanic (n=11)	Other** (n=7)	Total (n=299)
Intravenous	84	38	104	10	5	3	121
Snort	70	20	64	23	2	1	90
Smoke	58	26	63	16	1	4	84
Transdermal	0	1	1	0	0	0	1
Huff	3	1	4	0	0	0	4
Oral	37	30	56	9	2	0	67
Unknown	25	12	27	6	3	1	37

*Decedent may have had more than one preferred method of administration. Only includes decedents with a substance use history. **Other race includes Asian (n=2), Middle Eastern (n=2), White/American Indian (n=2), Black/Hispanic (n=1), American Indian/Hispanic (n=1).

RECOVERY HISTORY (N=299)*

20%

Decedent has been to a **treatment clinic or detox center** at least one time

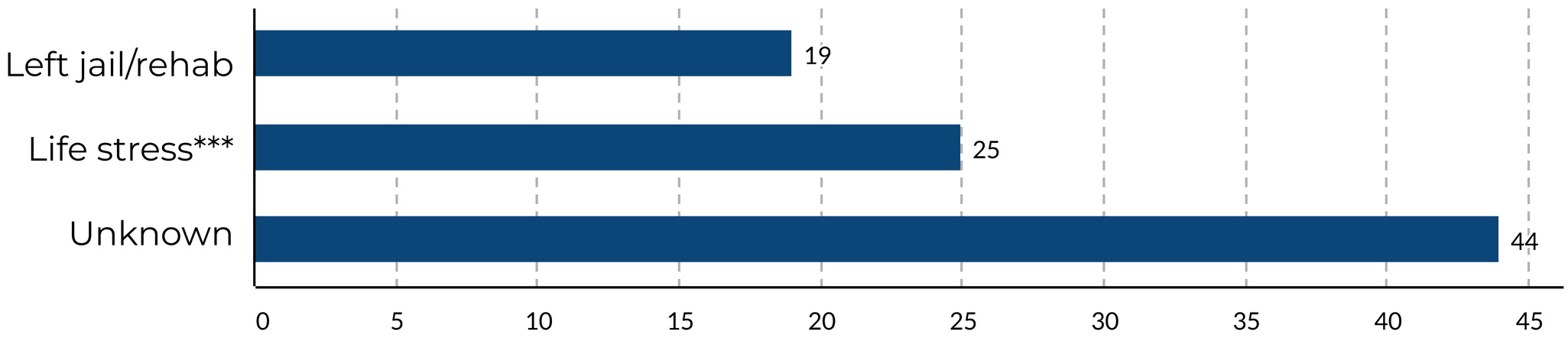
Decedent was recently **substance free** in the past three weeks

30%

11%

Decedent was currently receiving or has received **OUD medication** in the past two years

SUSPECTED REASON FOR RELAPSE**



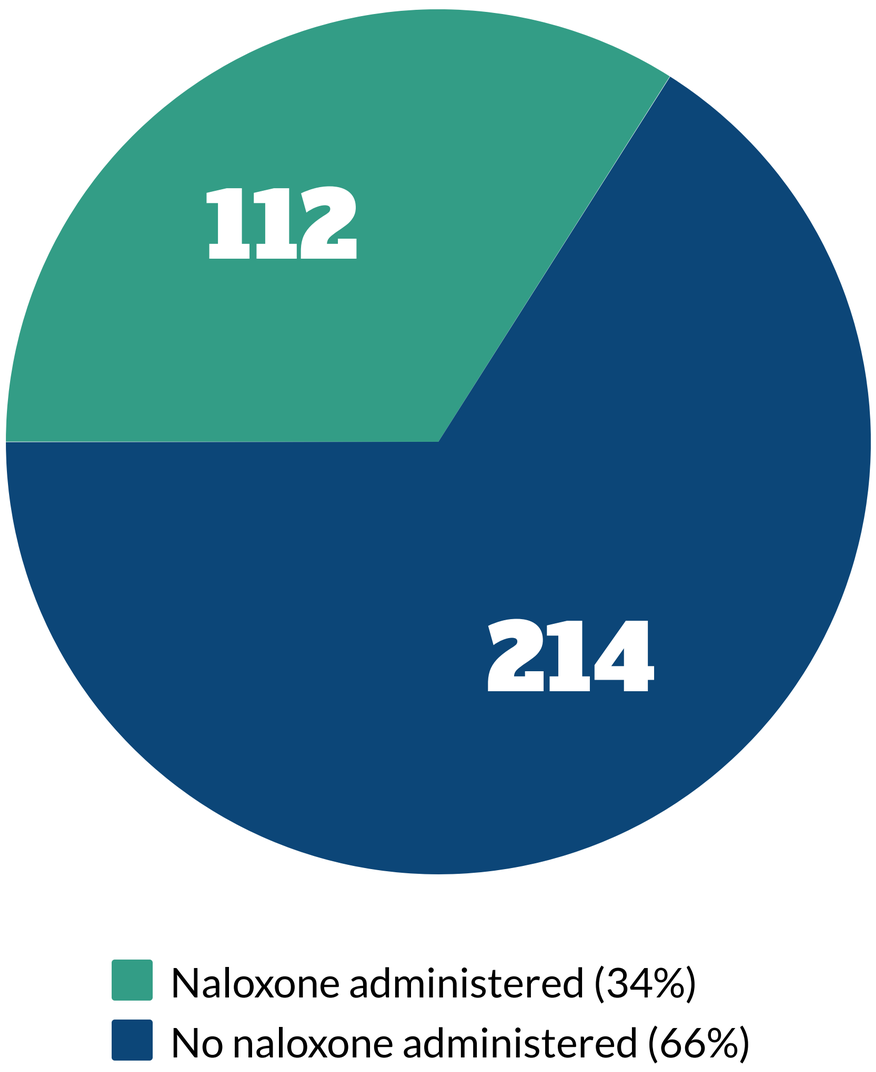
*ONLY Decedents known to use substances are included.
**These factors were mentioned by those close to the decedent for why they may have begun to use substances again after being substances free for at least three weeks.
***Life stress includes recent unemployment, death of loved on, loss of S/O, recent homelessness, social influences, and attempts to stop severe pain.

Deaths Related to Opioids and Other Drugs

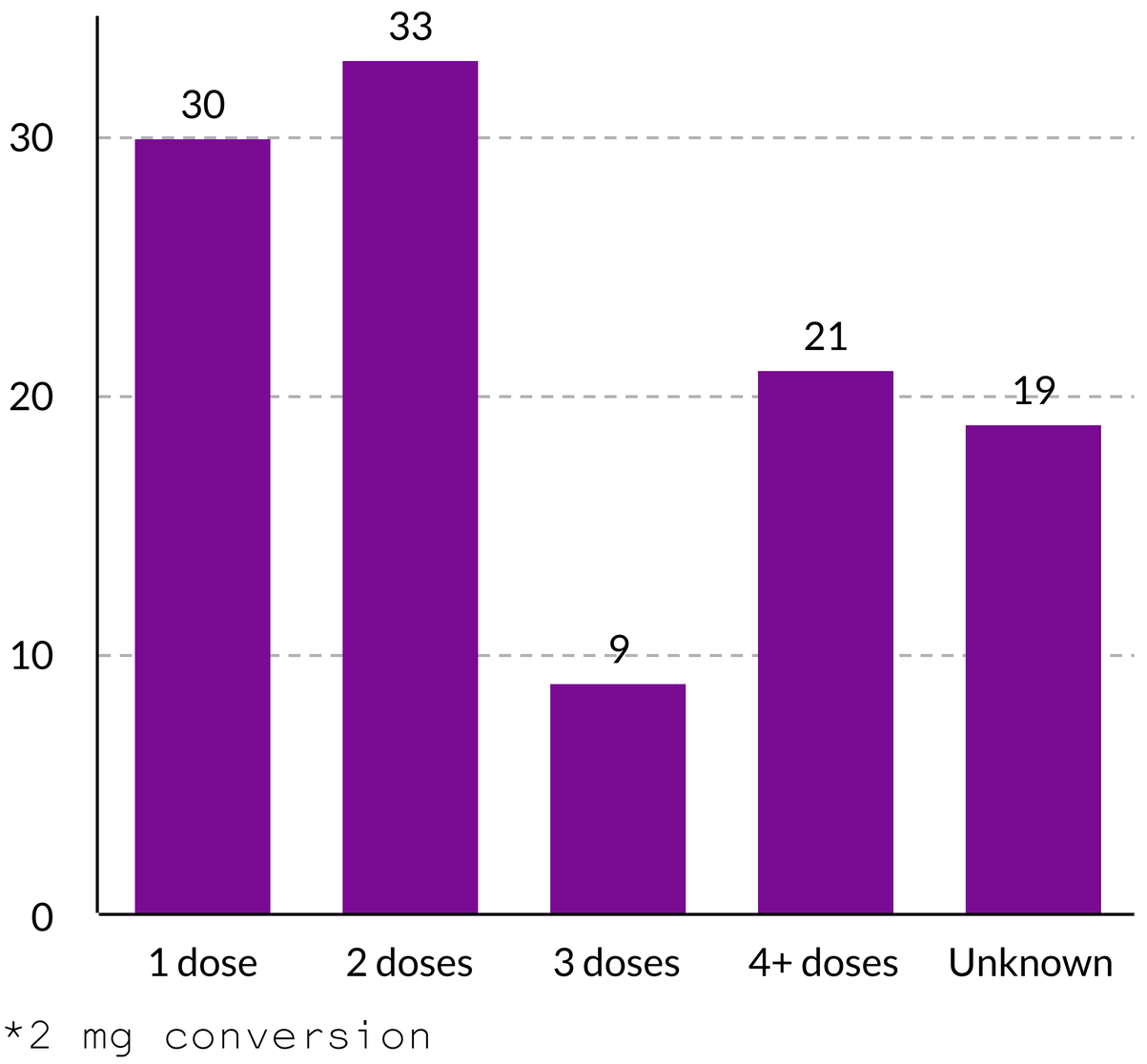
Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Naloxone Administration

NALOXONE ADMINISTRATION STATUS

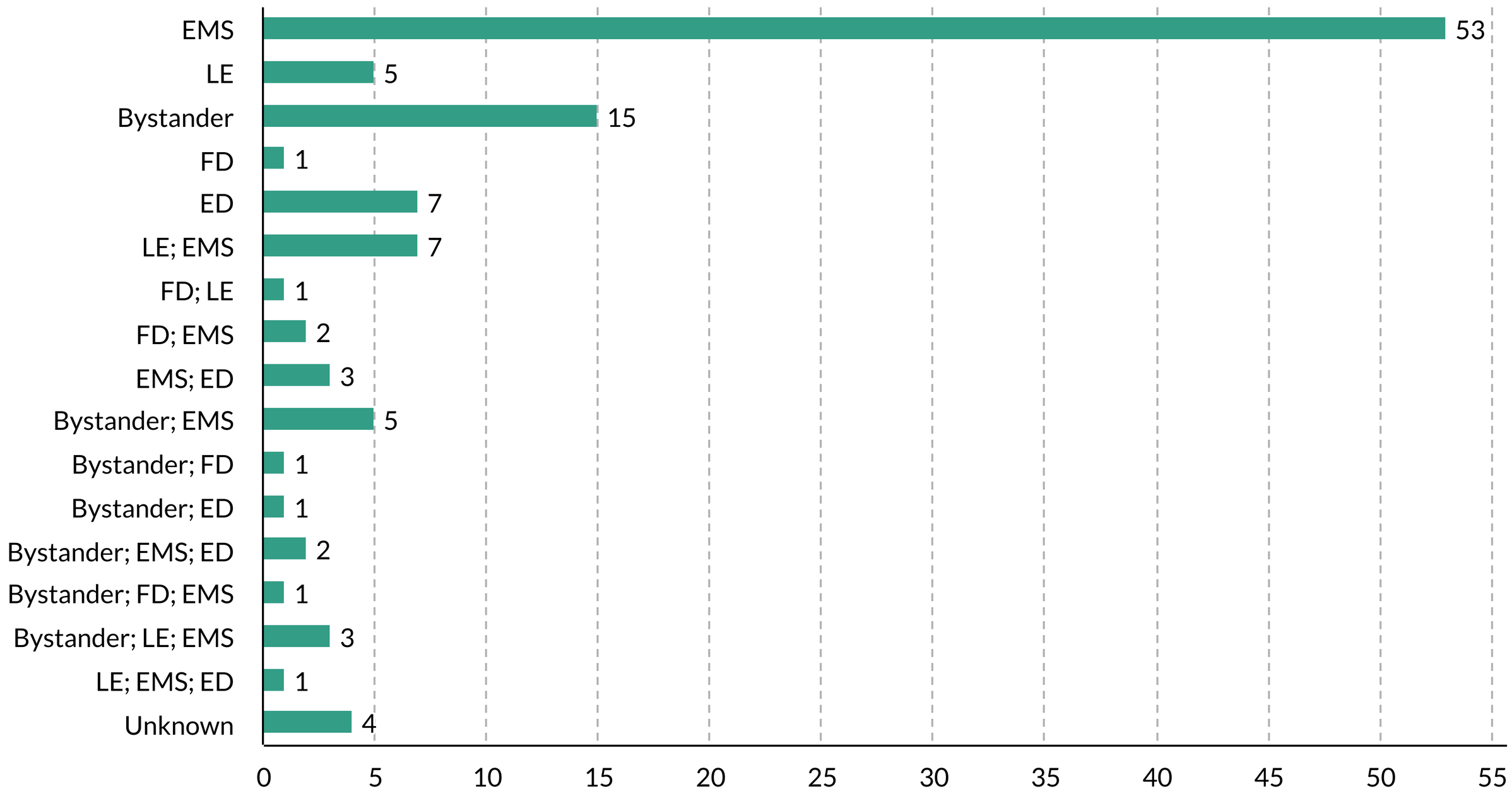


NUMBER OF DOSES ADMINISTERED*



*2 mg conversion

WHO ADMINISTERED NALOXONE?



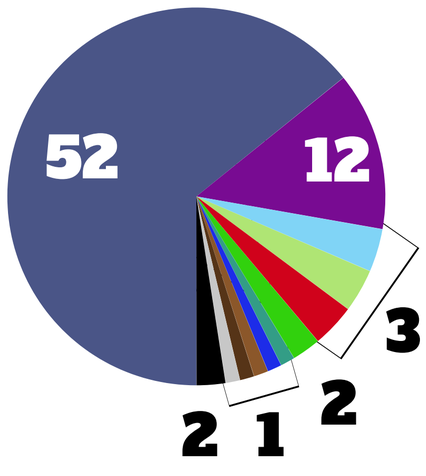
Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

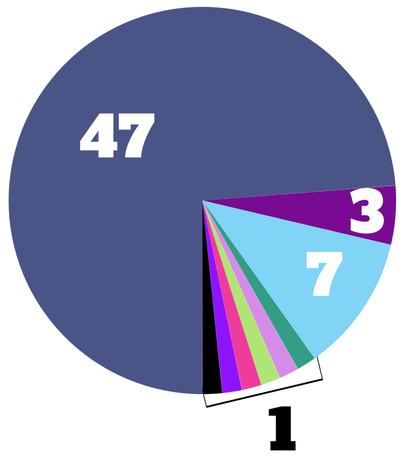
Naloxone Administration, cont.

- No Naloxone Administered
- EMS
- Law enforcement (LE)
- Bystander
- Fire department (FD)
- Hospital (ED)
- LE & EMS
- FD & LE
- FD & EMS
- EMS & ED
- Bystander & EMS
- Bystander & FD
- Bystander & ED
- Bystander, EMS, & ED
- Bystander, FD, & EMS
- Bystander, LE, & EMS
- LE, EMS, & ED
- Unknown

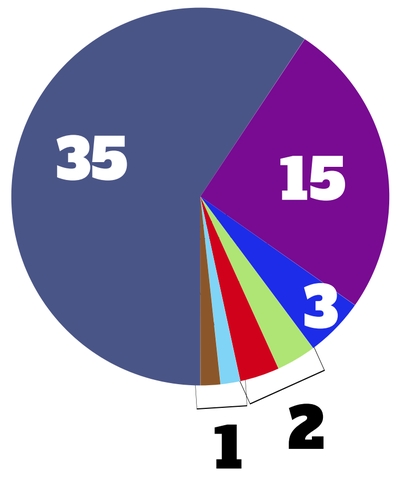
Kalamazoo (n=81)



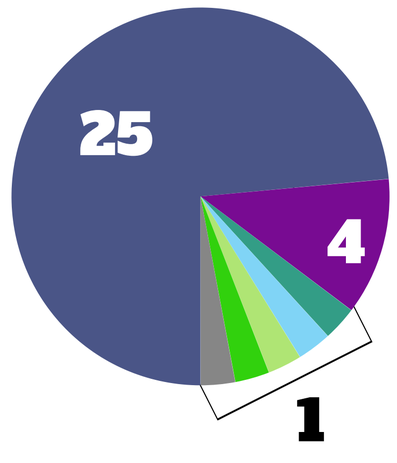
Muskegon (n=61)



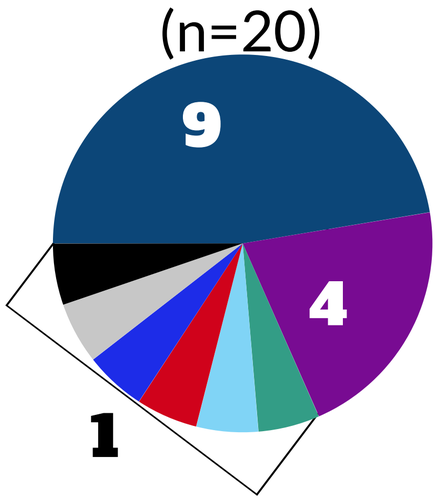
Calhoun (n=59)



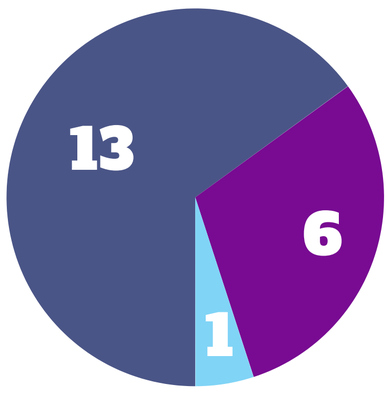
Berrien (n=34)



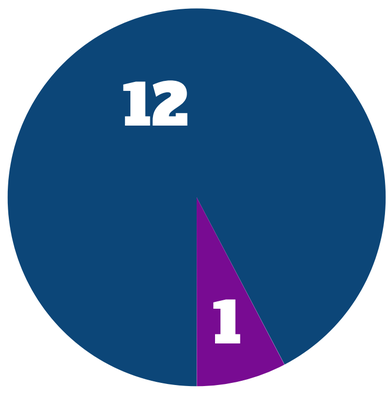
Grand Traverse (n=20)



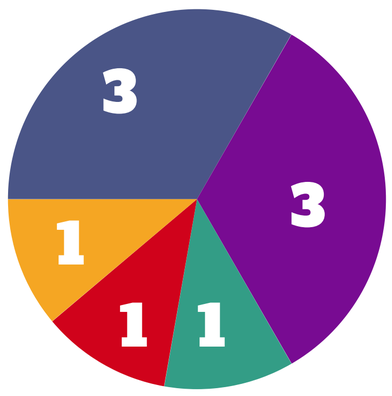
Van Buren (n=20)



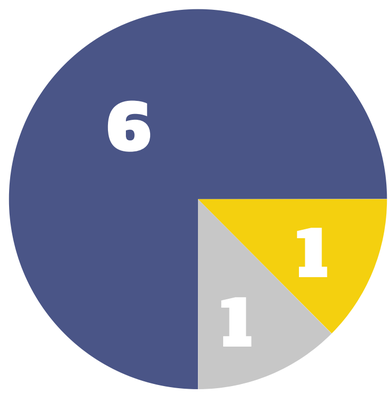
Allegan (n=13)



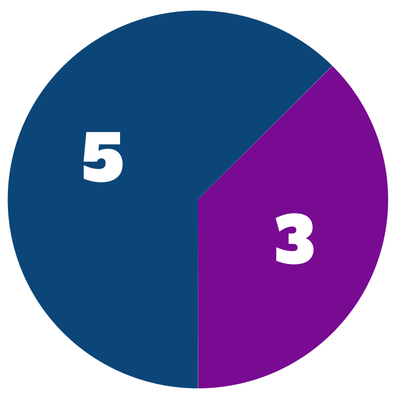
Cass (n=9)



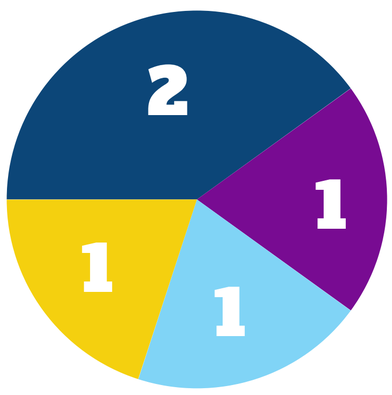
Mason (n=8)



St. Joseph (n=8)

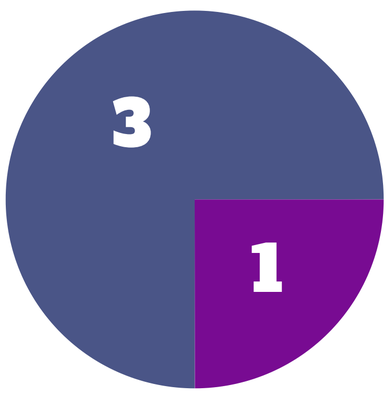


Osceola (n=5)



Barry (n=4)

Leelanau (n=4)



Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Death Scene Findings

37% Were found by **family**

2% Were found by a **minor**

6% Were found on welfare check

61% Died at their residence

20% Died at the **hospital**

4% Died at a hotel/motel

22% **Medication** was found on scene

55% **Syringes** were found on scene

8% Had **Narcan** on scene

20% **Suspected overdose** before autopsy

21% **Suspected illicit substance(s)** were found on scene

14% **Pipes** were found on scene

22% Decedent was found **face down**

54% Were dead upon **EMS** arrival

78% Used the fatal substance(s) **alone**

9% Decedent was **snoring**

2% Decedent was making **gurgling sounds**

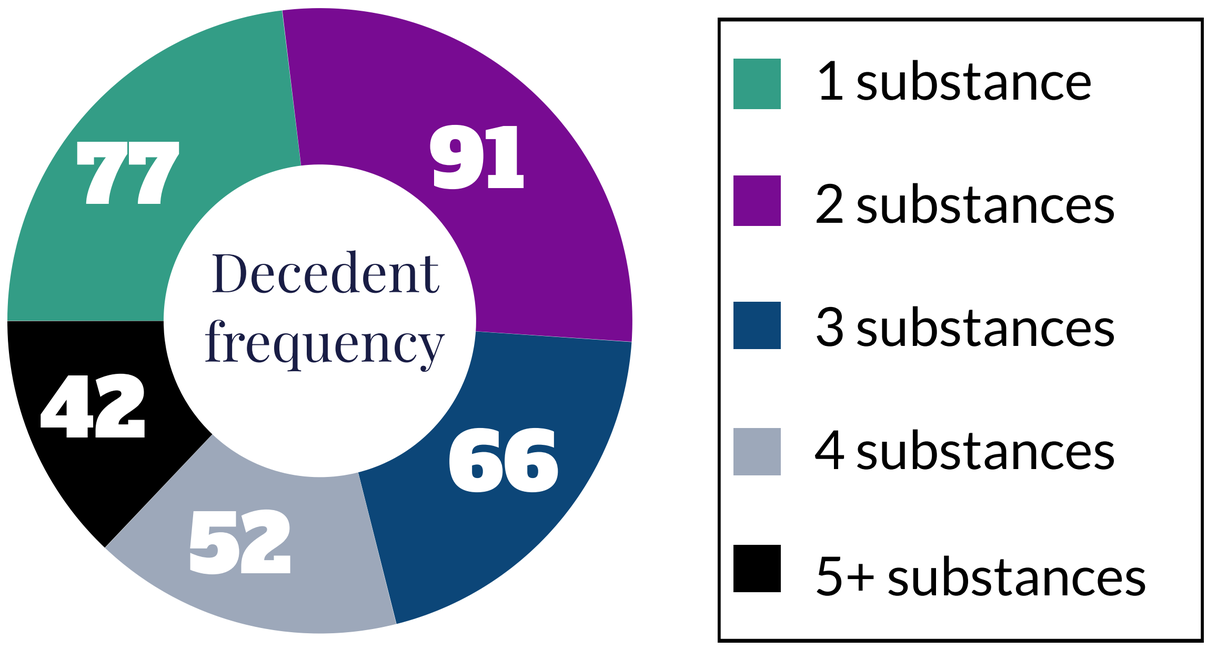
9% Decedent had **foam cone**

Deaths Related to Opioids and Other Drugs

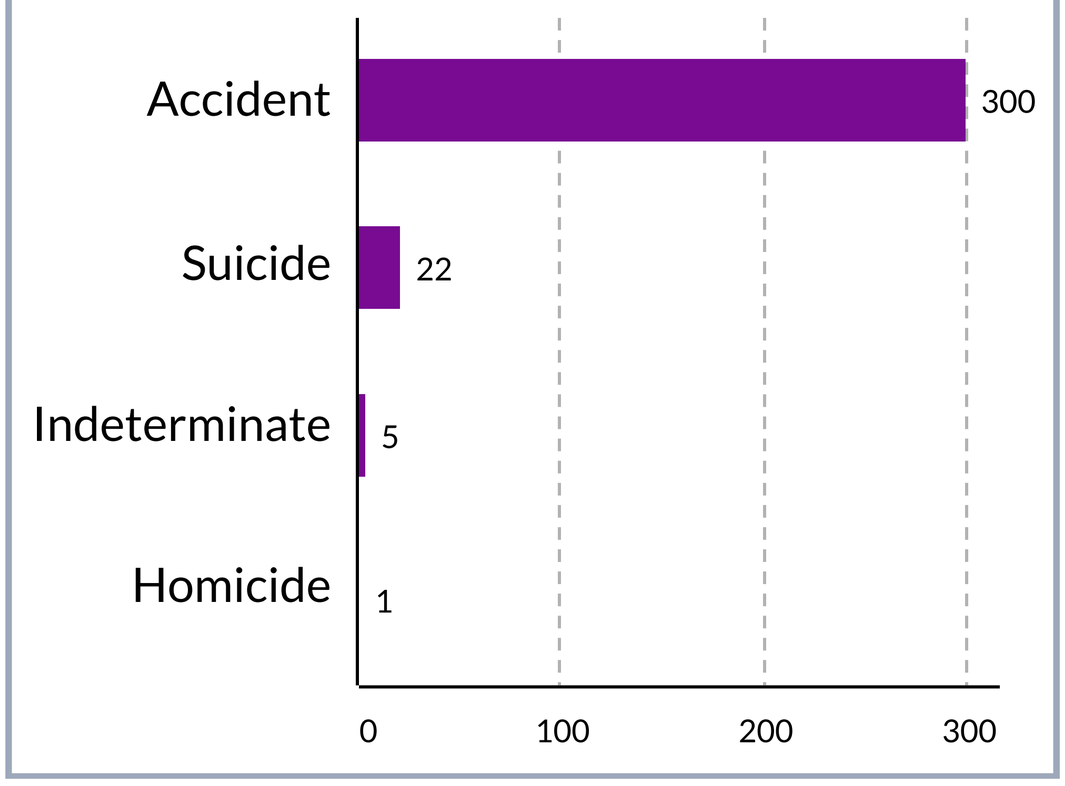
Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Autopsy and Toxicology Results

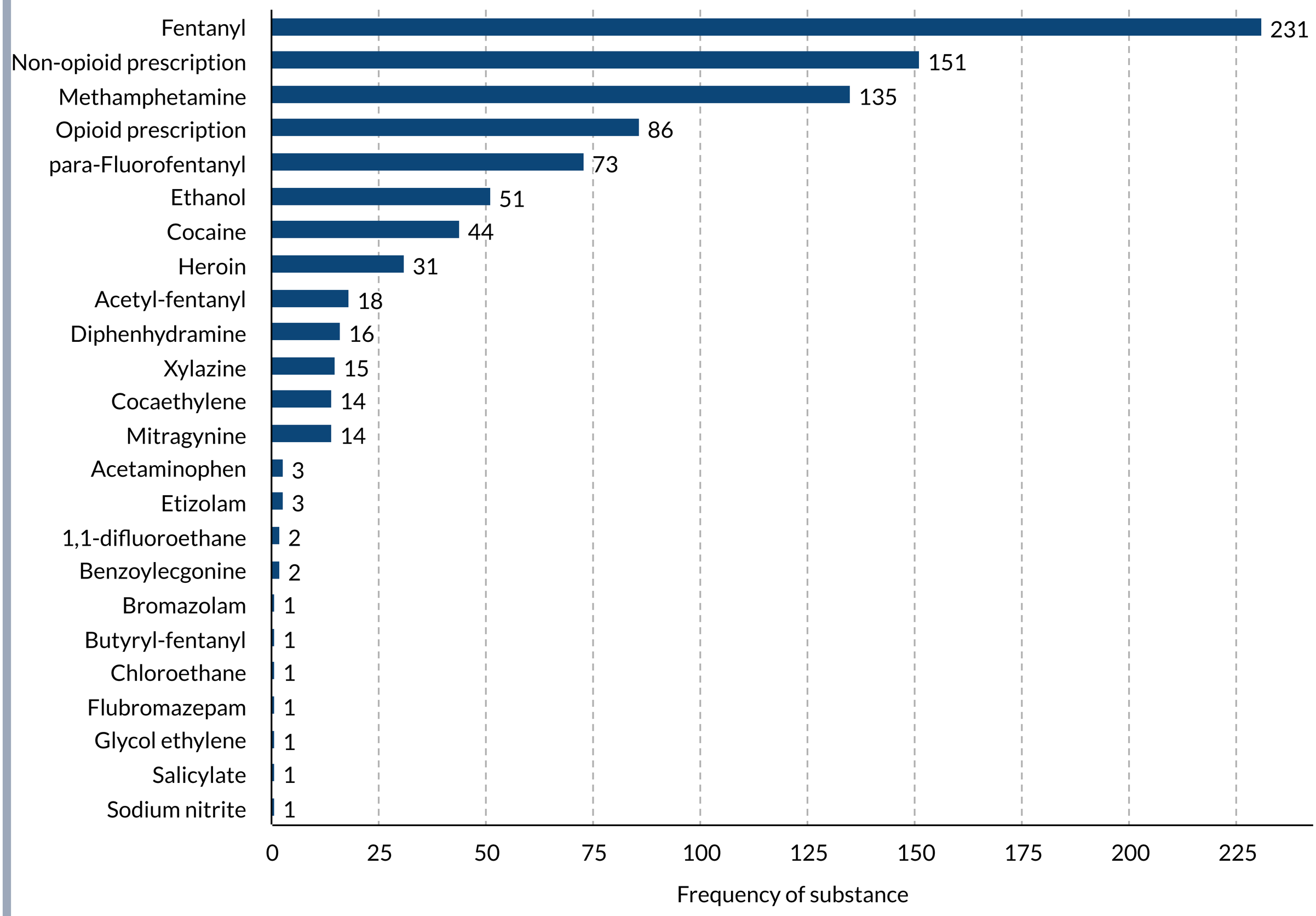
NUMBER OF SUBSTANCES CONTRIBUTING TO DEATH



MANNER OF DEATH



SUBSTANCES CONTRIBUTING TO DEATH

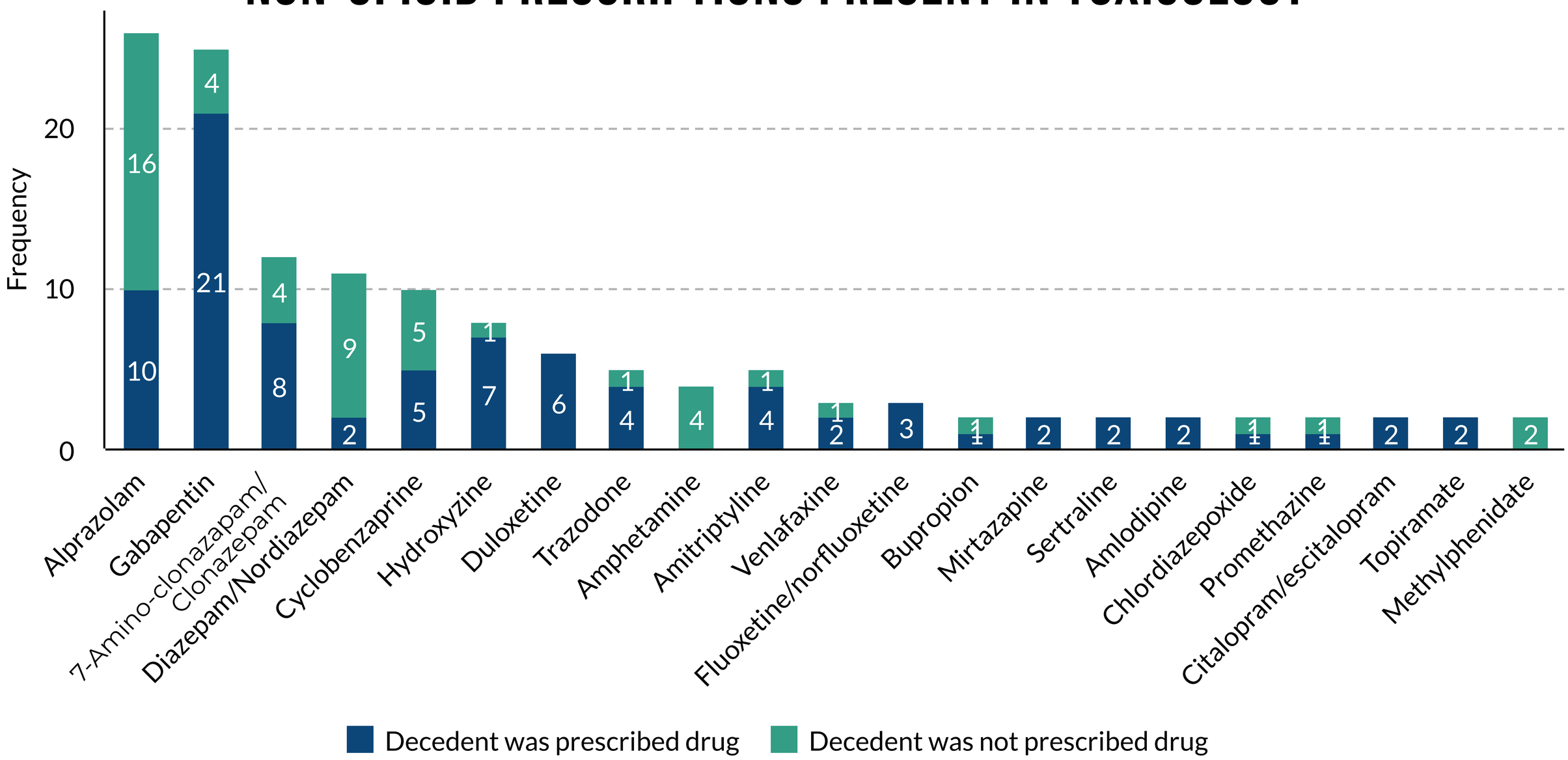


Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

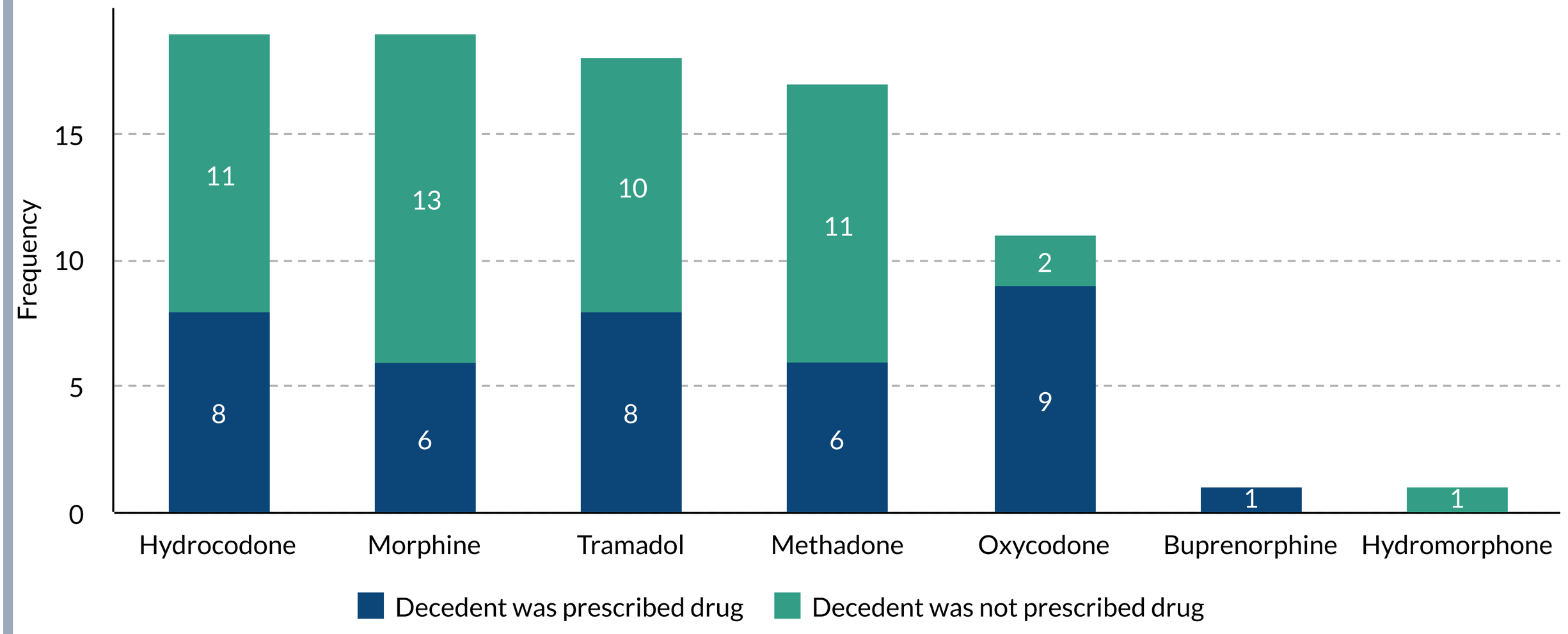
Autopsy and Toxicology Results, cont.

NON-OPIOID PRESCRIPTIONS PRESENT IN TOXICOLOGY



The following drugs were found one time in toxicology results:
Decedent was prescribed: clozapine, carisoprodol, metoprolol, zolpidem, olanzapine, dicyclomine, doxepin, apixaban, butalbital
Decedent was not prescribed: phentermine, lorazepam, paroxetine, chlorpheniramine, orphenadrine

OPIOID PRESCRIPTIONS PRESENT IN TOXICOLOGY



Note: Of the 230 decedents with fentanyl present in their toxicology, 3 decedents were prescribed fentanyl

Deaths Related to Opioids and Other Drugs

Allegan, Barry, Berrien, Calhoun, Cass, Grand Traverse, Kalamazoo, Leelanau, Mason, Muskegon, Osceola, St. Joseph, & Van Buren County

Highlights

OPIOIDS AND POSITIONAL ASPHYXIA

26% (68 of 263) of decedents who died of an opioid were originally found in a **potentially airway asphyxiating position**

These positions include decedent **drowning** or decedent found **face down on the floor, their bed, or on another surface**

6% (4 of 65) of decedents who died of a non-opioid were originally found in a **potentially airway asphyxiating position**

Opioids depress the respiratory system and when coupled with positional asphyxia, there may be an increase risk of death. This MEO suggests that those who use substances not use alone and to ensure they are not at risk for slumping forward onto their face.

DECEDENT'S HOUSING STATUS AND METHAMPHETAMINE USE

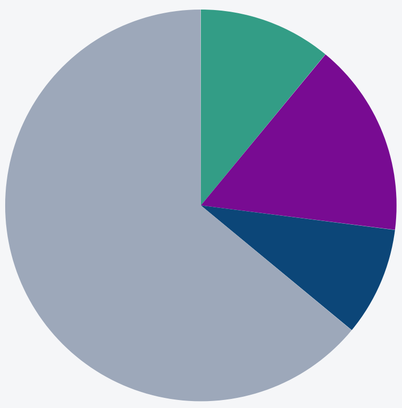
63% of decedents without stable housing had methamphetamine contribute to their overdose

37% of decedents with stable housing had methamphetamine contribute to their overdose

DECEDENT'S PRESCRIPTION STATUS AND MANNER OF DEATH

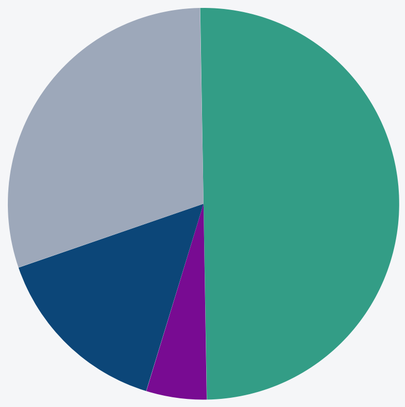
36% of decedents whose death was ruled an accident had prescription medication contributing to death

11% had prescriptions for those medications
16% did not have prescriptions for those medications
9% had prescriptions for some medications but not for others

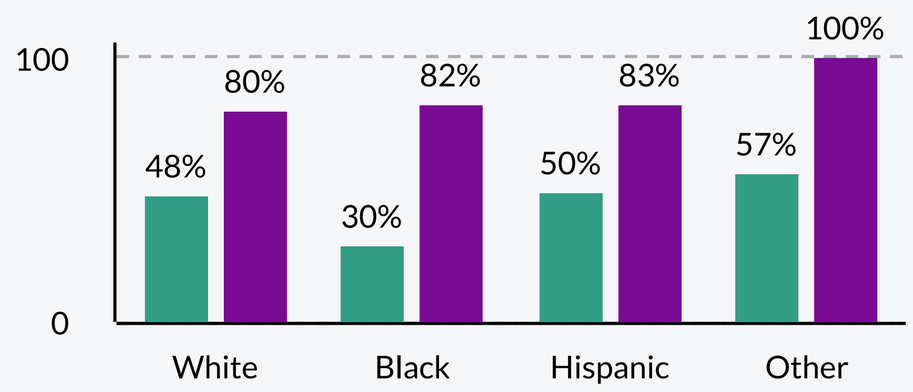


70% of decedents whose death was ruled a suicide had prescription medication contributing to death

50% had prescriptions for those medications
5% did not have prescriptions for those medications
15% had prescriptions for some medications but not for others



SUBSTANCE OF CHOICE VS SUBSTANCE CONTRIBUTING TO DEATH BY RACE



AGENDA REQUEST FORM

PROPOSED FOR MEETING OF: AUGUST 9, 2022 BOC

DEPARTMENT: CDBG – PROGRAM INCOME

PREPARED BY: Marilyn Smith

SUBJECT: PUBLIC HEARING AND GUIDELINES

SPECIFIC ACTION(S) REQUESTED: To recommend to the Board of Commissioners approval to schedule a public hearing regarding CDBG Emergency Program Income guidelines at the regular meeting of the Barry County Board of Commissioners on August 9, 2022, and after the public hearing, to approve the CDBG Program Income Emergency Repair Program and Guidelines.

SPECIFIC ACTION(S) RECOMMENDED BY THE COW (Admin. use only): Approval of the CDBG Program Income Emergency Repair Program and Guidelines.

DESCRIPTION OF ACTION: PROGRAM INCOME PUBLIC HEARING AND APPROVAL OF GUIDELINES.

TIME FRAME OF ACTION: August 2, 2022 –COW TO **REQUEST** PUBLIC HEARING AND **REQUEST** APPROVAL OF EMERGENCY PROGRAM GUIDELINES FOR EMERGENCY CDBG AT August 9, 2022 BOC MEETING.

FUNDING REQUIRED: YES_____ NO __XX__

IF YES, ANSWER THE FOLLOWING:

1. FUNDING SOURCE (Federal, State, or Local) _____
2. IF LOCAL, SPECIFY FUND: _____
3. AMOUNT REQUESTED: _____
4. AMOUNT OF ONGOING COST, AND INTERVAL (Monthly, Quarterly, Annual, etc.)_____
5. FINANCIAL IMPACT ON OTHER DEPARTMENTS:_____

PERSONNEL IF REQUIRED: NONE

NEW OR RENEWAL: NEW

ANY OTHER PERTINENT INFORMATION: See attached Notice of Public Hearing and Barry County Emergency Home Improvement Guidelines.

CONTACT PERSON WITH PHONE NUMBER: Marilyn Smith, 734-341-1866

BARRY COUNTY
NOTICE OF PUBLIC HEARING
FOR MICHIGAN COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)
FUNDING FOR EMERGENCY PROGRAM INCOME FUNDING

BARRY COUNTY will conduct a public hearing on August 9, 2022 at 9:00am in the Board of Commissioners' Chambers in the Barry County Court House, 220 West State Street, Hastings, MI 49058 for the purpose of affording citizens an opportunity to submit comments on the proposed Homeowner Emergency Program funded with Program Income received into the County.

BARRY COUNTY proposes to use $ 71,690.46 CDBG funds to provide emergency repairs to homeowners in Barry County whose incomes are at or below 80% of Area Median Income (AMI) for the County per HUD regulations. Zero persons will be displaced as a result of the proposed activities, and all repairs shall be classified as emergency conditions by MEDC/CDBG guidelines.

Further information, including a copy of the Barry County Emergency Repair Program Guidelines, is available for review upon request. To inspect the documents, please contact Marilyn Smith at 734-341-1866, or you may review them in person at the County Clerk's office at 220 West State Street, Hastings, MI 49058. Comments may be submitted in writing to the attention of Marilyn Smith in care of the Clerks' office through August 9, 2022, or made in person at the public hearing.

Citizen views and comments on the proposed emergency program are welcome.

Barry County
Michael C. Brown, County Administrator
269/945-1400

Equal Opportunity Employer
Fair Housing Compliant

BARRY COUNTY EMERGENCY HOME IMPROVEMENT GUIDELINES

Date Approved and Signed: _____

Chair, Barry County Board of Commissioners_____

BARRY COUNTY

Community Development Block Grant (CDBG) Program Income Emergency-Repair Guidelines

National Objectives:

All CDBG funded activities fulfill one of three National Objectives established by Congress. The following paragraphs discuss the process of selecting one of the three National Objectives. This includes the procedures for documenting that the Barry County's activities fulfill the selected objective.

As outlined in Application Guide federal regulations stipulate that before any activity can be funded in whole or in part with CDBG funds, it shall be determined that the activity (e.g., economic development, public infrastructure) is eligible under Title I of the Housing and Community Development Act of 1974, as amended. In addition, CDBG requirements mandate that each funded activity (except for program administration and some planning initiatives, and described below) shall meet one of the established three National Objectives. The three National Objectives are:

- Benefiting Low and Moderate Income (LMI) persons.
- Aiding in the prevention or elimination of slums or blight.
- Meeting community development needs made urgent by conditions posing serious and immediate threats to community health or welfare, conditions that are of recent origin or recently became urgent, and where other financial resources are not reasonably available to meet such needs.

Reference Chapter 2-National Objective in MEDC's GAM for further information.
Link to the GAM:

LMI Housing:

The following documentation of program benefit is required with the application for all CDBG-funded activities that are carried out under the LMI Housing National Objective:

For each unit to be assisted, the size and income of the occupant household.

- The family size and income at or under 80% AMI for total household income for all occupants of a household, and the amount of CDBG funds spent on rehabilitation shall be reported.
- Data on the racial, ethnic and gender characteristics of persons who are applicants for, participants in, and/or beneficiaries of CDBG activities.

Therefore, Barry County is required to report income and demographic information for the adult members living in a household.
Reference Chapter 2-National Objective in MEDC's GAM for further information.
Link to the GAM:

Requirements for Household Eligibility:

Barry County shall certify that CDBG program recipients meet the HUD eligibility requirements. Barry County shall follow the HUD guidance for income calculations (80% Area Median Income for Barry County), using the **IRS Form 1040 Adjusted Gross Income Calculation** method: **https://www.hudexchange.info/incomecalculator**
When using the IRS Form 1040 definition to determine an applicant's annual income, Barry County shall use the **most current version** of the IRS Form 1040 – the version filed **for current year tax reporting purposes.** An example of the worksheet is Form 2-D. Barry County is responsible for maintaining all documents used to determine and verify CDBG program recipient's income used with the HUD income calculator.

Barry County has chosen to use their own application, but it shall capture the same information as the MEDC Form 2-E and Form 2-F.
Reference Chapter 2-National Objective in MEDC's GAM for further information.
Link to the GAM:

Homeowner Rehabilitation-Emergency Repair:

- Program Income has been used in accordance with Title I requirements, in accordance with CDBG Program Income Emergency Repair, and program requirements outlined in MEDC's GAM.

- Barry County has a system for tracking Program Income generated by CDBG Program funds.

- Program Income shall be deposited into a separate fund or account (may be interest-bearing).

- Program Income information in Barry County's accounting records shall match the information reported to the State.

- Program Income received is directly tied to an original Barry County mortgage and note or net proceeds of sale.

Barry County shall have the flexibility under CDBG Program Income Emergency Repair to meet the needs of their residents, and may include:

CDBG Program Income Emergency Repairs shall be performed to safeguard against imminent danger to human life, health or safety, or to protect the property from further structural damage

due to natural disaster, fire or structural collapse - which typically bring the property up to local codes and standards. For example:

- repairs to a roof that is leaking, but the whole house is not rehabilitated
- Malfunctioning hot water equipment resulting in total lack of running hot water in the household
- Plumbing repairs in cases where water supply or drainage lines have ruptured, and the house is without running water
- Septic tank is overflowing, or the drain field has deteriorated
- Electrical or gas repairs in electrical fire or gas hazard situations and or cases where the faulty electrical wiring has resulted in total lack of illumination in the household or inability to use such necessary major appliances as the refrigerator or range or furnace or water heater
- Structural damage that creates an emergency safety situation
- Emergency Handicapped accessibility improvements, such as installation of a ramp can be approved with an emergency health, triggering event
- Other emergency items not listed above shall be approved by MEDC's CDBG Program Specialist

Citizen Participation General:

Public hearings shall be provided to obtain citizen views and to respond to proposals and questions at all stages of CDBG Program Income Emergency Repair, including the revisions of proposed activities, and review of program performance. Hearings shall be held after adequate notice at times and locations convenient to potential or actual beneficiaries, and with accommodations for the handicapped. At a minimum, two hearings shall be provided: one at the time of program income certification, and one at the end of the program year.
Reference - Chapter 11-Citizen Participation and Other Requirements in MEDC's GAM for further information.
Link to the GAM:

Lien Requirements:

Barry County shall require loan repayment for all loans over $2,499, and loans shall be repayable at time of sale of the home or when the title is transferred. Loan repayment shall be proceeds-driven. If the sale of the property does not allow full repayment, then the amount that remains after all closing costs are calculated and paid shall be the total due. No debt shall be assumed for the difference between the original loan and the amount that remains with the proceeds from the sale.

Land Contracts: If the applicant for home repairs is under a Land Contract, then the Land Contact seller(s) shall sign Barry County's mortgage (if over $2,499), and a Land Contract Subordination Agreement. The Land Contract Subordination

Agreement would be recorded and would give Barry County a superior lien position to the Land Contract seller(s).

Lead Safe Housing Rule-Exemptions:

Some CDBG projects may be exempt from the Lead Safe Housing Rule, if they meet the criteria listed below:

- Housing units constructed after 1978
- CDBG Program Income Emergency Repairs are being performed to safeguard against imminent danger to human life, health or safety, or to protect the property from further structural damage due to natural disaster, fire or structural collapse. The exemption applies only to repairs necessary to respond to the emergency.
- Housing "exclusively" for the elderly or persons with disabilities, with the provision that children less than six years of age will not reside in the dwelling unit.
- An inspection performed according to HUD standards found the property contained no lead-based paint.
- Documented methodologies provided evidence that lead-based paint was identified and removed, and the property has achieved clearance.
- The rehabilitation will not disturb any painted surface.

Barry County shall implement the emergency repair program with lead requirements where applicable. Where no lead shall be disturbed (e.g. replacement of an existing water heater), no lead test or assessment shall be required.

All exemptions shall be documented in the project file. A Program Income Exempt Project Determination and a Lead-Based Paint Requirements Applicability Worksheet shall be submitted to and approved by MEDC for each activity before costs for the activity can be incurred.
Reference Chapter 5-Environmental Review in MEDC's GAM for further information.
Link to the GAM:

Lead-Based Paint Compliance:

Barry County acknowledges that failure to comply with the lead-based paint requirements under the regulation will render it subject to sanctions authorized under the Federal funding programs providing assistance to the property. Violations may be subject a recipient to other penalties available under state or local law. Notifying owners, purchasers, or occupants of possible lead-based paint hazards does not relieve Barry County of its responsibilities under the new regulation.

Not complying may expose households and contractors with potentially dangerous levels of lead dust and debris that can cause life threatening illnesses and developmental delays.
Reference Chapter 5-Environmental Review in MEDC's GAM for further information.
Link to the GAM:

Asbestos:

Barry County shall comply with EPA Asbestos regulations for home repairs. Since asbestos is a mineral fiber that was frequently added to products to strengthen them, and to provide heat insulation and fire resistance, it is commonly found in older homes. It was used for pipe and furnace insulation, in asbestos shingles, millboard and transite siding, floor tiles, and a variety of other coating materials. If it is determined that repairs could disturb or come in contact with asbestos, an asbestos review through a certified asbestos professional using Polarized Light Microscopy shall be utilized.

The handling of asbestos-containing materials is regulated by the Environmental Protection Agency (EPA) under the National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, and the Occupational Safety and Health Administration (OSHA) under regulation delineated in 29 CFR 1926.1101.
Reference Chapter 5-Environmental Review in MEDC's GAM for further information.
Link to the GAM:

Fair Housing and Equal Opportunity:

Barry County shall be required to comply with state and federal laws that provide for equal opportunity and non-discrimination in all aspects of the projects undertaken with program income. Applicable state and federal laws were established to ensure that protected groups are not subjected to discrimination under any program supported in whole or in part with CDBG funds. Extending opportunities to minority- and women-owned businesses (MBE/WBE), residents of project areas, training, and providing fair and equal access to housing is and has been a priority for Barry County.

Various laws, regulations, and executive orders apply to four general areas:

- Project beneficiaries
- Employment opportunities
- Contracting opportunities
- Fair Housing

These laws are applicable to private businesses and contractors involved in the covered projects, as well as Barry County.
Reference Chapter 9-Fair Housing and Equal Opportunity in MEDC's GAM for further information.
Link to the GAM:

Procurement and Contracting - Conflict of Interest:

An organizational conflict of interest means that, because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.
Conflicts of interest in the award and/or administration of contracts shall be avoided. "No employee of Barry County shall participate in selection, or in the award or administration of a contract supported by federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when the employee, any member of his or her immediate family, his or her partner has a financial or other interest in the firm selected for award" [24 CFR 85.36(b)(3)]. Other federal regulations with which Barry County shall comply are the conflict of interest requirements in 24 CFR 570.611, which are included as Form 4-C.

Note: HUD considers the awarding of an engineering contract and an administrative contract to the same firm as a conflict of interest. Contracts for both services to the same firm are prohibited. Reference Chapter 4-Procurement and Contracting in MEDC's GAM for further information.
Link to the GAM:

Conflicts Prohibited:

No persons described above may obtain a financial interest or benefit from a Barry County's program income emergency rehabilitation program -assisted activity, or have an interest in any contract, subcontract or agreement with respect thereto, or the proceeds thereunder, either for themselves or those with whom they have a family or business ties, during their tenure or for one year thereafter.

General Policies:

Barry County is charged with the fiscal responsibility of certifying that 100% of CDBG Program Income Emergency Repairs are being performed to safeguard against imminent danger to human life, health or safety, or to protect the property from further structural damage due to natural disaster, fire or structural collapse.

Superseding Information

Any memos, update bulletins or published manuals produced by MEDC that change the requirements will supersede Barry County's Program Income Guidelines.

Cooperation

At all times, Barry County shall cooperate fully with MEDC, MSF, MSF Fund Manager, HUD, Office of Inspector General or similar department, and law enforcement officials and agencies.

Citizen Participation -Conflict of Interest:

CDBG requirements pertaining to conflict of interest are summarized in the following paragraphs.

Conflicts Prohibited –Except for the use of CDBG funds to pay salaries and other related administrative or personnel costs, the general rule is that no persons (described below under "Persons Covered") who exercise or have exercised any functions or responsibilities with respect to CDBG activities or who are in a position to participate in a decision-making process or gain inside information with regard to such activities, may obtain a financial interest or benefit from a CDBG -assisted activity, or have an interest in any contract, subcontract or agreement with respect thereto, or the proceeds thereunder, either for themselves or those with whom they have family or business ties, during their tenure or for one year thereafter.

Persons Covered – The conflicts of interest provisions apply to any person who is an employee, agent, consultant, officer, or elected official or appointed official of the State, Barry County.

Exceptions –Upon a written request, Barry County may grant an exception to the provisions of this section on a case-by-case basis when it determines that such an exception will further the purposes of Title I and the effective and efficient administration of the program, project of the State, or Barry County. An exception may be considered only after the following has been provided to Barry County:

- A disclosure of the nature of the conflict, accompanied by an assurance that there has been public disclosure of the conflict and a description of how the public disclosure was made.

- A certification the affected person has withdrawn from his or her functions or responsibilities, or the decision -making process with respect to the specific assisted activity in question.

- An opinion of Barry County's attorney that the interest for which the exception is sought would not violate State or local law. In addition, grants administration may also require an opinion from the State Ethics Board that the conflict does not violate State law.

Factors to Be Considered for Exceptions – In determining whether to grant a requested Exception, Barry County shall consider the cumulative effect of the following factors, where applicable:

- Whether the exception would provide a significant cost benefit or an essential degree of expertise to the program or project which would otherwise not be available.

- Whether an opportunity was provided for open, competitive bidding, or negotiation.

- Whether the person affected is a member of a group of low or moderate-income persons intended to be the beneficiaries of the assisted activity, and the exception will permit such person to receive generally the same interests or benefits as are being made available or provided to the group or class.

- Whether the interest or benefit was present before the affected person was in a position as previously described.

- Whether undue hardship will result either to the State, Barry County, or the person affected when weighed against the public interest served by avoiding the prohibited conflicts.

Reference Chapter 11-Citizen Participation and Other Requirements in MEDC's GAM for further information.
Link to the GAM:

Michael C. Brown, Certifying Officer
County Administrator

8/9/2022
Date

PROGRAM INCOME CERTIFICATION

Please review the Program Income Policy complete the questions below. For the purposes of this certification all potential CDBG program income generated in the program year should be counted and reported, regardless of the $35,000 threshold.

Program Income Contact

Unit of General Local Government Name:	BARRY COUNTY
Primary Program Income Contact for UGLG:	SUE VANDECAR, TREASURER
Contact email:	svandecar@barrycounty.org
Contact phone:	269-945-1287

Program Income Information for Program Year: (fill in years)	July 1, 2021 – June 30, 2022
Program Income (PI) was received for the program year above:	☒ YES ☐ NO
Total UGLG for the program year above, was less than $35,000:	☒ YES ☐ NO
Amount of PI received for the program year above, was:	$87,427.39

☒ UGLG has received receipts for **more than $35,000 for the above program year and will contact the MEDC in order setup the use of PI.** The budget for these funds is as follows:

Budget for Program Income received in excess of $35,000 in PY	
Emergency Repair Project Costs	$ 71690.46
Administration Costs	$ 15736.93
TOTAL	$ 87,427.39

☐ UGLG intends to **use PI under $35,000 for non-CDBG eligible activities** or without full CDBG compliance and requests confirmation from the MEDC to proceed.

☐ UGLG intends to **return all program income receipts** for the program year above. The MEDC – CDBG Program accepts return of funds via EFT or check. For questions relating to returning CDBG funds please contact either Louis Vinson at lvinson@michigan.org or Jonathon Lukco at lukcoj1@michigan.org

Pay by Electronic Funds Transfer	**Pay by Check**
Send payment to: Routing # 072000326 Account # 878375851 Account Name: Strategic Fund Agency ACH to: JP Morgan Chase Bank, N.A. For credit to: State of Michigan	Payable to: "State of Michigan" Memo: Grant Number if applicable Mail to: MEDC – CDBG Program 300 N. Washington Square Lansing, MI 48913

Certification: I certify that to the best of my knowledge and belief that the report is true, complete, and accurate. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).

Date: July 15 2022

X Susan VandeCar

Susan VandeCar, Treasurer

8/9/2022				
		PRE-PAID INVOICES		
(First Meeting of the Month Only)				**$4,139,873.72**
		CLAIMS		
				$52,520.48
		COMMISSIONER MILEAGE		
				$380.48

08/02/22		
From: Luella Dennison, Deputy County Administrator		
Re: July 2022 Prepaid Invoices		
	FUND #	AMOUNT
General Fund	101	$ 431,764.86
Central Dispatch Fund	205	$ 24,265.86
Charlton Park Fund	208	$ 26,241.10
Friend of the Court Fund	215	$ 373.45
Solid Waste Fund	228	$ 4,202.20
Animal Shelter Donation Fund	232	$ 1,000.00
Building Rehab Fund	248	$ 7,200.00
Park & Recreation Fund	250	$ 13,893.67
Master Land Use Program Fund	253	$ 4,230.00
Indigent Defense Fund	261	$ 23.97
Commission on Aging Fund	275	$ 38,313.92
Swift & Sure Sanctions Program Fund	281	$ 1,162.52
56B Sobriety Court Fund	282	$ 3,358.97
Community Corrections Fund	283	$ 3,825.00
2021 ARP Act Fund	284	$ 26,071.00
Adult Drug Court Fund	285	$ 3,871.90
Child Care Fund	292	$ 30,266.57
Airport Fund	295	$ 42,117.14
2021 BPW Middleville Sewer Const. Fund	475	$ 835,901.52
Thornapple Manor Fund	512	$ 1,623,944.03
Foreclosure Fund	517	$ 2,425.00
Transit Fund	588	$ 5,978.74
Commissary Fund	595	$ 11,284.14
Data Processing Fund	637	$ 200.05
Telephone Fund	660	$ 3,577.83
Health Insurance Fund	677	$ 156,308.49
Disability Fund	678	$ 393.75
Life Insurance Fund	681	$ 5,075.61
Dental/Optical Fund	683	$ 7,274.41
Trust & Agency Fund	701	$ 514,285.93
Library Fund	721	$ 34,534.53
Drain Fund	801	$ 250,607.70
Drain Maintenance Fund	804	$ 22,124.86
Gun Lake Weed Assessment Fund	843	$ 3,400.00
Algonquin Lake Maintenance Fund	852	$ 375.00
GRAND TOTAL		**$ 4,139,873.72**

Document Totals by Fund

Fund	Debits	Credits	Net
101 General	41,065.53	7.45	41,058.08
215 Friend of the Court	34.00	0.00	34.00
229 Two Seven Oh	700.00	0.00	700.00
232 Animal Shelter	585.00	0.00	585.00
637 Data Processing	7,449.40	0.00	7,449.40
661 Vehicle	2,694.00	0.00	2,694.00
Grand Total:	52,527.93	7.45	52,520.48

Account	Vendor	Description	Invoice	Amount	PO Num
101-101	**COMMISSIONERS**				
727-000	STAPLES	Commissioners/Coffee	3512936684	37.05	
		Sub Total 101-101 COMMISSIONERS		**37.05**	
101-140	**TRIAL COURT CRIMINAL & CIVIL**				
861-000	SCHIPPER, MICHAEL	Criminal/Civil/Teaching trial/Travel	004233	540.57	
		Sub Total 101-140 TRIAL COURT CRIMINAL & CIVIL		**540.57**	
101-148	**TRIAL COURT FAMILY DIV.**				
806-000	BYINGTON, ROBERT L.	Family Court/Legal fees	0020012346	1,708.50	
806-000	BYINGTON, ROBERT L.	Family Court/Legal fees	0002006837	1,861.50	
806-000	GREEN, BRENT H.	Family Court/Legal Fees	0002006839	65.00	
806-000	MCNEILL, GORDON S.	Family Court/Legal fees	0002006834	127.50	
806-000	NICHOLS, NOVIA M.	Family Court/Legal fees	0002006838	65.00	
806-000	NICHOLS, NOVIA M.	Family Court/Legal fees	0002006836	130.00	
861-000	VANDUSSELDORP, ALYSSA	Family Court/Travel	0002006835	30.00	
933-000	WILDER TIRE & AUTO LLC	Family Court/Oil Change	0002006841	45.99	
957-000	MCAA, C/O TABITHA WEDGE	Family Court/Employee Training	0002006840	325.00	
		Sub Total 101-148 TRIAL COURT FAMILY DIV.		**4,358.49**	
101-175	**ADMINISTRATION**				
727-000	STAPLES	Admin/Supplies	3512936684	13.84	
		Sub Total 101-175 ADMINISTRATION		**13.84**	
101-191	**ELECTIONS**				
730-000	SPECTRUM PRINTERS INC.	Clerk/August Ballots	70833	17,688.40	
		Sub Total 101-191 ELECTIONS		**17,688.40**	
101-211	**LEGAL COUNSEL**				
806-110	COHL, STOKER, & TOSKEY, P.C.	Legal Counsel/Pro Services June	53626	3,701.20	
		Sub Total 101-211 LEGAL COUNSEL		**3,701.20**	
101-225	**EQUALIZATION**				
727-000	BS&A SOFTWARE	Equalization/Annul Support/Aug/2023	141919-Eq	4,443.00	

Account	Vendor	Description	Invoice	Amount	PO Num
101-225	**EQUALIZATION**	**(Continued)**			
727-000	MARSHALL & SWIFT	Equalization/Renewal	004230	664.20	
		Sub Total 101-225 EQUALIZATION		**5,107.20**	
101-253	**TREASURER**				
966-000	BS&A SOFTWARE	Treasurer/P.R.E. Audit System Aug/2023	141919	408.00	
		Sub Total 101-253 TREASURER		**408.00**	
101-265	**BUILDING & GROUNDS**				
777-000	ONE WAY PRODUCTS	BLDG & Grounds/Multi fold towels	760877	344.70	
777-000	BEHRENS LIMITED LLC	BLDG & Grounds/Foamy Q&A/Vac bags	2121	179.50	
		Sub Total 101-265 BUILDING & GROUNDS		**524.20**	
101-299	**MISCELLANEOUS**				
816-100	WALKER, FLUKE & SHELDON PC	Misc./Pro services	2000206324	1,200.00	
		Sub Total 101-299 MISCELLANEOUS		**1,200.00**	
101-301	**SHERIFF'S DEPARTMENT**				
727-000	STAPLES	Sheriff/DVDR/Binders	8066918145	81.75	
737-000	TRACTOR SUPPLY, DEPT 30-1203283880	Sheriff/Dog Food/Griz/Jesse	717203	32.49	
744-000	CMP DISTRIBUTORS INC.	Sheriff/Vest-Vandenberg	71562	930.00	
748-000	HASTINGS ACE HARDWARE	Sheriff/Keys return	5934369	-2.89	
748-000	HASTINGS ACE HARDWARE	Sheriff/Keys - 2	5930250	5.18	
748-000	HASTINGS ACE HARDWARE	Sheriff/Wire	89748	20.00	
748-000	HASTINGS ACE HARDWARE	Sheriff/Hornet Foam	7496904	19.77	
813-000	PEARSON, GARY	Sheriff/Uniform cleaning	105687	11.40	
813-000	PEARSON, GARY	Sheriff/Uniform cleaning	105705	11.40	
813-000	PEARSON, GARY	Sheriff/Uniform cleaning	105662	11.40	
933-000	DB DESIGN	Sheriff/Updated decals Car #37	2499	354.00	
933-000	BURKEY SALES & SERVICE INC	Sheriff/Windshield Car #2	6263	536.36	
933-000	BURKEY SALES & SERVICE INC	Sheriff/Windshield - Impala	6264	558.58	
960-000	HASTINGS ACE HARDWARE	Sheriff/weed Killer	7330228	32.99	
		Sub Total 101-301 SHERIFF'S DEPARTMENT		**2,602.43**	
101-331	**MARINE**				

Account	Vendor	Description	Invoice	Amount	PO Num
101-331	**MARINE**	**(Continued)**			
744-000	GALLS LLC	Marine/Molded Nyon Belt Keeper	21539359	40.78	
			Sub Total 101-331 MARINE	**40.78**	
101-351	**JAIL**				
742-000	GORDON FOOD SERVICE, INC.	Jail/Food	220400835	2,429.69	
742-000	GORDON FOOD SERVICE, INC.	Jail/Food	220400832	408.23	
742-000	GORDON FOOD SERVICE, INC.	Jail/Food	220309053	329.93	
742-000	PRAIRIE FARMS DAIRY	Jail/Milk	9014338	242.47	
742-000	EDS BREADS	Jail/Bread	840281	81.66	
742-000	EDS BREADS	Jail/Bread	839845	99.00	
742-000	PRAIRIE FARMS DAIRY	Jail/CREDIT	7013959	-4.56	
742-000	PRAIRIE FARMS DAIRY	Jail/Milk	9007089	186.75	
744-000	NYE UNIFORM CO	Jail/Misc.	823479	52.00	
747-000	GORDON FOOD SERVICE, INC.	Jail/Supplies	220400842	100.25	
761-000	MCKESSON MEDICAL	Jail/Misc.	19582088	114.39	
777-000	LANSING SANITARY SUPPLY INC	Jail/Misc.	1168252	126.92	
777-000	CINTAS	Jail/Misc	4126062310	154.34	
777-000	CINTAS	Jail/Misc	4125338958	283.35	
809-000	GRIFFIN PEST SOLUTIONS	Jail/Pest inspection	2224987	55.00	
			Sub Total 101-351 JAIL	**4,659.42**	
101-355	**ANIMAL CONTROL - SHERIFF**				
835-000	BROADWAY VETERINARY	Animal Control/Bat Euth./Shipping	22-1763	24.25	
			Sub Total 101-355 ANIMAL CONTROL - SHERIFF	**24.25**	
101-400	**PLANNING**				
861-000	MCMANUS, JAMES	Planning & Zoning/Meeting	7-2022	152.25	
			Sub Total 101-400 PLANNING	**152.25**	
			Total 101 GENERAL FUND	**41,058.08**	
215-143	**FRIEND OF THE COURT**				
861-000	SMITH, JULIE	FOC/Travel	004231	15.00	
861-000	STAINES, KELSEA	FOC/Travel	004232	19.00	

Account	Vendor	Description	Invoice	Amount	PO Num
		Sub Total 215-143 FRIEND OF THE COURT		**34.00**	
		Total 215 FRIEND OF THE COURT FUND		**34.00**	
229-430	**ANIMAL SHELTER**				
835-000	BROADWAY VETERINARY	Animal Shelter/TNR	22-1758	700.00	
		Sub Total 229-430 ANIMAL SHELTER		**700.00**	
		Total 229 TWO SEVEN OH INC - T.N.R.		**700.00**	
232-430	**ANIMAL SHELTER**				
835-000	BROADWAY VETERINARY	Animal Shelter/TNR	22-1758	585.00	
		Sub Total 232-430 ANIMAL SHELTER		**585.00**	
		Total 232 ANIMAL SHELTER DONATION FUND		**585.00**	
637-258	**DATA PROCESSING**				
807-000	AMALGAM LLC	IT/Fetch GIS web/BLDG info	072022-10	5,500.00	
807-000	AMALGAM LLC	IT/Delinquent Tax module	07202210	800.00	
980-030	CDW GOVERNMENT, INC	IT/Cyberpower Smart App LCD	BF33274	1,149.40	
		Sub Total 637-258 DATA PROCESSING		**7,449.40**	
		Total 637 DATA PROCESSING FUND		**7,449.40**	
661-000	**DEPT**				
981-030	DB DESIGN	Vehicle/Decals for 3 new Tahoes/#16,19,	2494	2,694.00	
		Sub Total 661-000 DEPT		**2,694.00**	
		Total 661 VEHICLE FUND		**2,694.00**	
		Grand Total		**52,520.48**	

Bank code : 001

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
224970	8/1/2022	049985 AMALGAM LLC	07202210		IT/DELINQUENT TAX MODULE	800.00
			072022-10		IT/FETCH GIS WEB/BLDG INFO	5,500.00
					Total :	**6,300.00**
224971	8/1/2022	045777 BEHRENS LIMITED LLC	2121		BLDG & GROUNDS/FOAMY Q&A/VA	179.50
					Total :	**179.50**
224972	8/1/2022	005936 BROADWAY VETERINARY	22-1758		ANIMAL SHELTER/TNR	1,285.00
			22-1763		ANIMAL CONTROL/BAT EUTH./SHIF	24.25
					Total :	**1,309.25**
224973	8/1/2022	005987 BS&A SOFTWARE	141919		TREASURER/P.R.E. AUDIT SYSTEM	408.00
			141919-Eq		EQUALIZATION/ANNUL SUPPORT/A	4,443.00
					Total :	**4,851.00**
224974	8/1/2022	006200 BURKEY SALES & SERVICE INC	6263		SHERIFF/WINDSHIELD CAR #2	536.36
			6264		SHERIFF/WINDSHIELD - IMPALA	558.58
					Total :	**1,094.94**
224975	8/1/2022	009700 BYINGTON, ROBERT L.	0002006837		FAMILY COURT/LEGAL FEES	1,861.50
			0020012346		FAMILY COURT/LEGAL FEES	1,708.50
					Total :	**3,570.00**
224976	8/1/2022	006533 CDW GOVERNMENT, INC	BF33274		IT/CYBERPOWER SMART APP LCD	1,149.40
					Total :	**1,149.40**
224977	8/1/2022	048180 CINTAS	4125338958		JAIL/MISC	283.35
			4126062310		JAIL/MISC	154.34
					Total :	**437.69**
224978	8/1/2022	039919 CMP DISTRIBUTORS INC.	71562		SHERIFF/VEST-VANDENBERG	930.00
					Total :	**930.00**
224979	8/1/2022	007717 COHL, STOKER, & TOSKEY, P.C.	53626		LEGAL COUNSEL/PRO SERVICES	3,701.20
					Total :	**3,701.20**
224980	8/1/2022	045238 DB DESIGN	2494		VEHICLE/DECALS FOR 3 NEW TAH	2,694.00

Bank code : 001

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
224980	8/1/2022	045238 DB DESIGN	(Continued)			
			2499		SHERIFF/UPDATED DECALS CAR #	354.00
					Total :	**3,048.00**
224981	8/1/2022	050532 EDS BREADS	839845		JAIL/BREAD	99.00
			840281		JAIL/BREAD	81.66
					Total :	**180.66**
224982	8/1/2022	038926 GALLS LLC	21539359		MARINE/MOLDED NYON BELT KEEI	40.78
					Total :	**40.78**
224983	8/1/2022	014300 GORDON FOOD SERVICE, INC.	220309053		JAIL/FOOD	329.93
			220400832		JAIL/FOOD	408.23
			220400835		JAIL/FOOD	2,429.69
			220400842		JAIL/SUPPLIES	100.25
					Total :	**3,268.10**
224984	8/1/2022	054002 GREEN, BRENT H.	0002006839		FAMILY COURT/LEGAL FEES	65.00
					Total :	**65.00**
224985	8/1/2022	014574 GRIFFIN PEST SOLUTIONS	2224987		JAIL/PEST INSPECTION	55.00
					Total :	**55.00**
224986	8/1/2022	034865 HASTINGS ACE HARDWARE	5930250		SHERIFF/KEYS - 2	5.18
			5934369		SHERIFF/KEYS RETURN	-2.89
			7330228		SHERIFF/WEED KILLER	32.99
			7496904		SHERIFF/HORNET FOAM	19.77
			89748		SHERIFF/WIRE	20.00
					Total :	**75.05**
224987	8/1/2022	021007 LANSING SANITARY SUPPLY INC	1168252		JAIL/MISC.	126.92
					Total :	**126.92**
224988	8/1/2022	044674 MARSHALL & SWIFT	004230		EQUALIZATION/RENEWAL	664.20
					Total :	**664.20**
224989	8/1/2022	021857 MCAA, C/O TABITHA WEDGE	0002006840		FAMILY COURT/EMPLOYEE TRAINII	325.00

Bank code : 001

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
224989	8/1/2022	021857 021857 MCAA, C/O TABITHA WEDGE	(Continued)		**Total :**	**325.00**
224990	8/1/2022	053673 MCKESSON MEDICAL	19582088		JAIL/MISC.	114.39
					Total :	**114.39**
224991	8/1/2022	022675 MCMANUS, JAMES	7-2022		PLANNING & ZONING/MEETING	152.25
					Total :	**152.25**
224992	8/1/2022	053248 MCNEILL, GORDON S.	0002006834		FAMILY COURT/LEGAL FEES	127.50
					Total :	**127.50**
224993	8/1/2022	053960 NICHOLS, NOVIA M.	0002006836		FAMILY COURT/LEGAL FEES	130.00
			0002006838		FAMILY COURT/LEGAL FEES	65.00
					Total :	**195.00**
224994	8/1/2022	025800 NYE UNIFORM CO	823479		JAIL/MISC.	52.00
					Total :	**52.00**
224995	8/1/2022	053076 ONE WAY PRODUCTS	760877		BLDG & GROUNDS/MULTI FOLD TC	344.70
					Total :	**344.70**
224996	8/1/2022	026759 PEARSON, GARY	105662		SHERIFF/UNIFORM CLEANING	11.40
			105687		SHERIFF/UNIFORM CLEANING	11.40
			105705		SHERIFF/UNIFORM CLEANING	11.40
					Total :	**34.20**
224997	8/1/2022	029500 PRAIRIE FARMS DAIRY	7013959		JAIL/CREDIT	-4.56
			9007089		JAIL/MILK	186.75
			9014338		JAIL/MILK	242.47
					Total :	**424.66**
224998	8/1/2022	046522 SCHIPPER, MICHAEL	004233		CRIMINAL/CIVIL/TEACHING TRIAL/T	540.57
					Total :	**540.57**
224999	8/1/2022	038362 SMITH, JULIE	004231		FOC/TRAVEL	15.00
					Total :	**15.00**
225000	8/1/2022	054001 SPECTRUM PRINTERS INC.	70833		CLERK/AUGUST BALLOTS	17,688.40

Bank code : 001

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
225000	8/1/2022	054001 054001 SPECTRUM PRINTERS INC.	(Continued)		**Total :**	**17,688.40**
225001	8/1/2022	053075 STAINES, KELSEA	004232		FOC/TRAVEL	19.00
					Total :	**19.00**
225002	8/1/2022	053592 STAPLES	3512936684		ADMIN/SUPPLIES	50.89
			8066918145		SHERIFF/DVDR/BINDERS	81.75
					Total :	**132.64**
225003	8/1/2022	050364 TRACTOR SUPPLY, DEPT 30-120328388(	717203		SHERIFF/DOG FOOD/GRIZ/JESSE	32.49
					Total :	**32.49**
225004	8/1/2022	055659 VANDUSSELDORP, ALYSSA	0002006835		FAMILY COURT/TRAVEL	30.00
					Total :	**30.00**
225005	8/1/2022	036260 WALKER, FLUKE & SHELDON PC	2000206324		MISC./PRO SERVICES	1,200.00
					Total :	**1,200.00**
225006	8/1/2022	040022 WILDER TIRE & AUTO LLC	0002006841		FAMILY COURT/OIL CHANGE	45.99
					Total :	**45.99**

37 Vouchers for bank code : 001 **Bank total :** **52,520.48**

37 Vouchers in this report **Total vouchers :** **52,520.48**

AGENDA REQUEST FORM

PROPOSED FOR MEETING OF: 08/09/2022 BOC

DEPARTMENT: Drain Commissioner

PREPARED BY: Tammy Hayes

SUBJECT: Resolution To Exceed Maintenance Limit, Jordan Lake

SPECIFIC ACTION(S) REQUESTED:
To recommend to the Board of Commissioners adoption of Resolution #22-12 To Exceed Maintenance Limit for Jordan Lake.

SPECIFIC ACTION(S) RECOMMENDED BY THE COW (Admin. use only):
Adoption of Resolution #22-12 To Exceed Maintenance Limit for Jordan Lake.

DESCRIPTION OF ACTION: On 7/7/22 the Little Thornapple River IC Drain Board authorized the Jordan Lake Lake Level District to make repairs to the dam as required by the State of Michigan Dam Safety Unit; as the Delegated Authority under Part 307, the Drain Commissioner must maintain the normal lake level.

TIME FRAME OF ACTION: Immediate.

FUNDING REQUIRED: YES_____ NO ___x_____

IF YES, ANSWER THE FOLLOWING:

1. FUNDING SOURCE (Federal, State, or Local) _____
2. IF LOCAL, SPECIFY FUND: _____
3. AMOUNT REQUESTED: _____
4. AMOUNT OF ONGOING COST, AND INTERVAL (Monthly, Quarterly, Annual, etc.)_____
5. FINANCIAL IMPACT ON OTHER DEPARTMENTS:_____

PERSONNEL IF REQUIRED: N/A

NEW OR RENEWAL: New

ANY OTHER PERTINENT INFORMATION: N/A

CONTACT PERSON WITH PHONE NUMBER: Jim Dull 945-1385

Barry County Board of Commissioners
Resolution #22-12

Resolution

RESOLUTION TO EXCEED MAINTENANCE LIMIT
JORDAN LAKE

At a meeting of the Barry County Board of Commissioners, Barry County, Michigan, held on August 9, 2022 at 9:00 a.m., Eastern Standard Time;

PRESENT:
ABSENT:

The following resolution was offered by Commissioner _____ and supported by Commissioner _____.

WHEREAS, Part 307 of the Natural Resources and Environmental Protection Act (Inland Lake Levels), MCL 324.30701 *et seq.*, ("Part 307") requires the County Board of Commissioners and their delegated authority, to maintain established normal lake levels; and

WHEREAS, Jordan Lake, located in Odessa Township, Ionia County, Michigan and Woodland Township, Barry County, Michigan has an established normal lake level under Part 307 by the Ionia County Circuit Court; and

WHEREAS, the Barry County Drain Commissioner is the delegated authority for Barry County to maintain Jordan Lake's normal level under Part 307; and

WHEREAS, the Barry County Drain Commissioner, as delegated authority under Part 307, has the responsibility to perform activities to maintain the normal level of Jordan Lake, in coordination with the delegated authority appointed for Jordan Lake under Part 307 by the Ionia County Board of Commissioners (the Ionia County Drain Commissioner); and

WHEREAS, it has been determined based on inspections that certain maintenance, repairs, and other activities are necessary to be performed to maintain the normal level of Jordan Lake; and

WHEREAS, the Barry County Drain Commissioner has authority to expend up to $10,000 in any one year for activities related to the maintaining the normal level of Jordan Lake including repairs and maintenance to lake level infrastructure. Any annual expenditure of over $10,000 must be approved the County Board of Commissioners; and

WHEREAS, the Barry County Drain Commissioner has advised the Barry County Board of Commissioners that it will be necessary to make an annual expenditure in excess of $10,000 to maintain the normal level of Jordan Lake and requests approval of such an expenditure by the County Board of Commissioners.

NOW, THEREFORE, BE IT RESOLVED:

1. The Barry County Board of Commissioners authorizes the Barry County Drain Commissioner to make an annual expenditure in excess of $10,000 under Section 30722(4) of Part 307 for activities to maintain the normal level of Jordan Lake, including, but not limited to, maintenance and repairs to lake level infrastructure. MCL 324.30722(4).
2. All costs associated with the activities authorized above shall be reimbursed by a lake level special assessment district to the extent permitted by Part 307.
3. All resolutions and parts of resolutions conflicting with the above are hereby rescinded.

Benjamin D. Geiger, Chairperson
Barry County Board of Commissioners

Pamela A. Palmer
Barry County Clerk

ADOPTED: Yeas:
Nays:

Adopted 8/9/22