

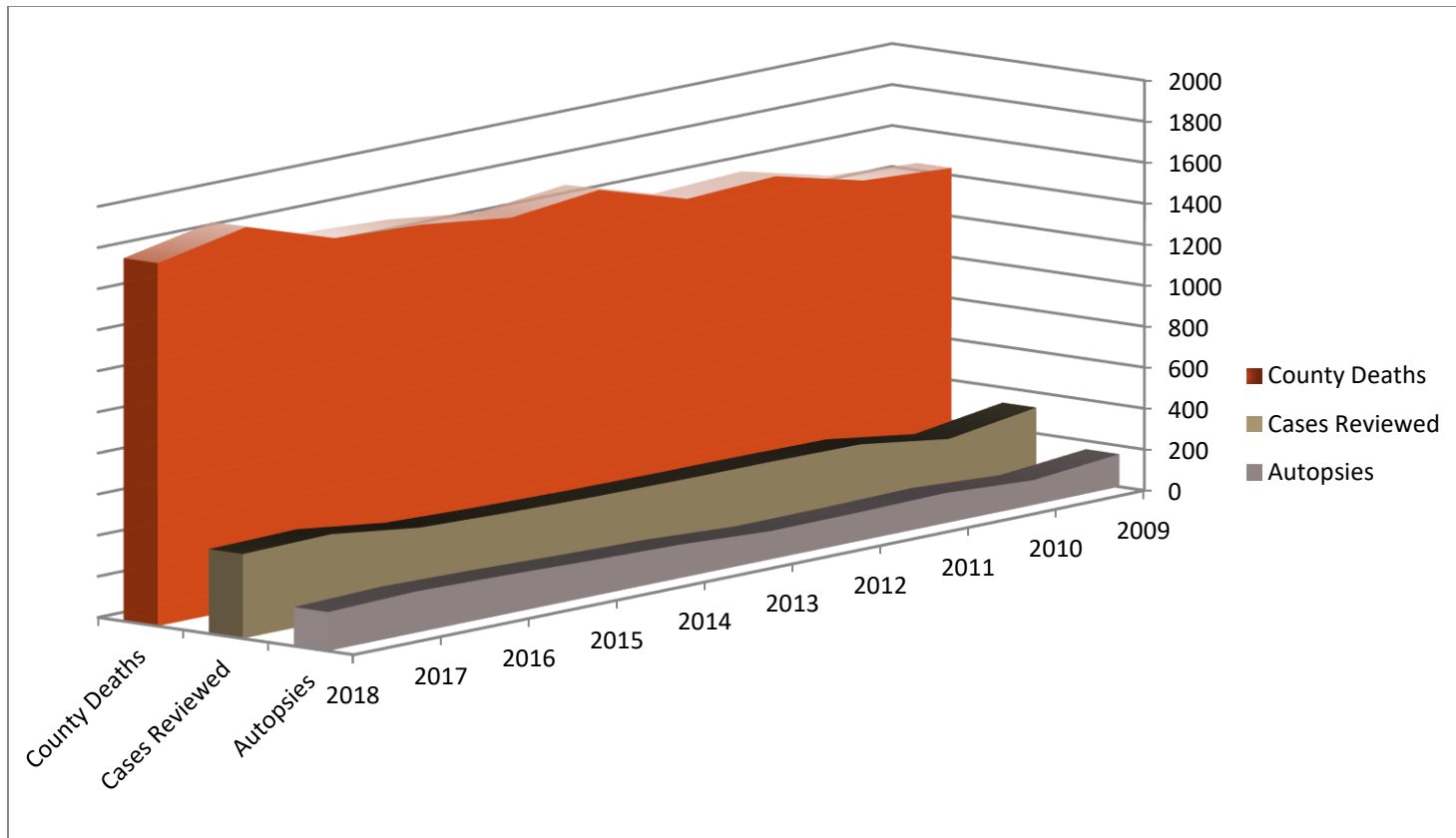
MEDICAL EXAMINER'S REPORT

2009 – 2018

SUBMITTED BY: JOHN C. MAINO II, MD ◦ CHIEF MEDICAL EXAMINER ◦ JACKSON COUNTY ◦ MICHIGAN

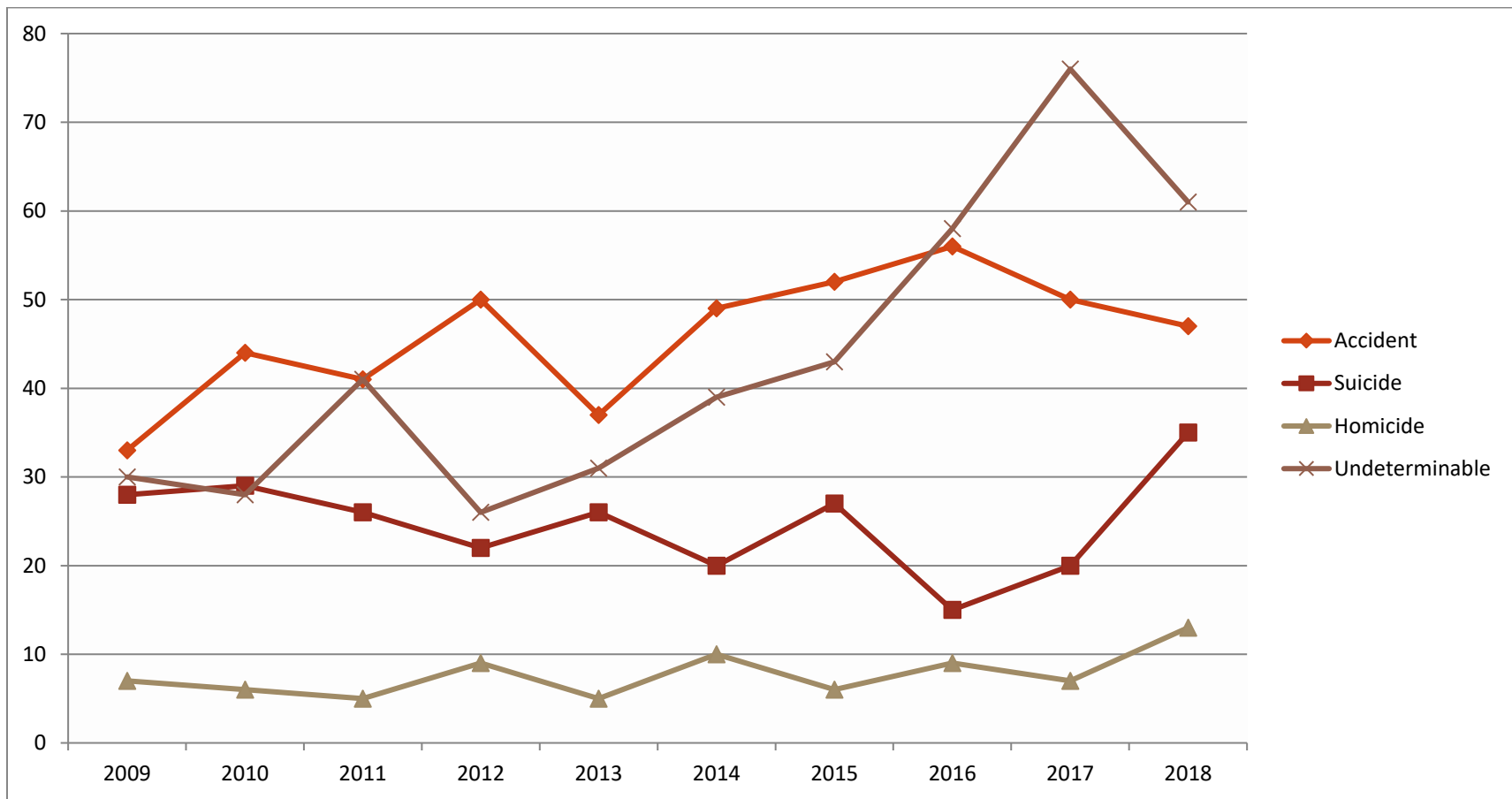
TOTAL COUNTY DEATHS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
County Deaths	1435	1462	1571	1549	1682	1634	1690	1712	1854	1767
Cases Reviewed	326	261	324	329	331	336	346	362	419	411
Autopsies	159	121	147	140	138	163	175	190	201	189



MANNER OF DEATH BREAKDOWN

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Natural	228	154	211	222	245	218	218	224	266	255
Accident	33	44	41	50	37	49	52	56	50	47
Suicide	28	29	26	22	26	20	27	15	20	35
Homicide	7	6	5	9	5	10	6	9	7	13
Undeterminable	30	28	41	26	31	39	43	58	76	61



MANNER – ACCIDENTAL

Method	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Motor Vehicle Accident	14	17	15	19	14	19	20	17	18	20
Fall	11	15	18	22	11	22	16	26	28	21
Asphyxia	4	2	2	3	4	2	4	2	0	3
Drowning	0	3	1	3	3	0	3	2	1	2
Choking	1	1	1	0	0	0	0	3	0	0
Hypothermia / Hyperthermia	0	1	2	1	1	0	1	1	1	1
Inhalation of Smoke / Gases	0	1	0	0	1	2	4	1	2	0
Medical Misadventure	0	2	0	0	1	0	0	1	0	0
Electrocution	0	0	0	0	0	0	0	0	0	0
Air Plane Crash	0	0	0	0	0	0	0	0	0	0
Other	3	2	2	2	2	4	4	3	0	0

Age Breakdown	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0 to9	4	2	2	3	3	2	4	4	2	3
10 to 19	2	0	2	4	3	2	3	1	1	2
20 to 29	1	4	3	6	5	0	6	7	4	3
30 to 39	1	5	1	1	3	6	4	3	3	4
40 to 49	4	4	5	5	4	5	3	2	3	3
50 to 59	6	4	1	4	11	8	3	8	7	3
60 to 69	5	3	4	4	5	10	9	4	4	7
70 to 79	2	5	5	12	7	8	9	5	9	6
80 to 89	4	12	9	4	4	6	10	12	7	11
90 to 99	4	4	8	7	1	2	1	9	10	5
100 to 110	0	1	1	0	0	0	0	1	0	0

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	24	28	24	31	28	30	38	30	31	23
Female	9	16	17	19	9	19	14	26	19	24

MANNER – HOMICIDE

Method	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Stabbing/Cutting	0	0	0	0	1	1	1	1	1	1
Gunshot	4	4	3	5	2	5	3	8	6	11
Assault / Beating	3	0	1	3	2	2	1	0	0	1
Strangle / Asphyxiate	0	2	0	1	0	1	1	0	0	0
Vehicular	0	0	1	0	0	0	0	0	0	0
Fire / Arson	0	0	0	0	0	1	0	0	0	0
Drugs / Poison	0	0	0	0	0	0	0	0	0	0
Drowning	0	0	0	0	0	0	0	0	0	0

Age Breakdown	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0 to9	0	0	0	1	0	1	0	0	0	1
10 to 19	1	0	1	0	1	0	0	2	1	3
20 to 29	0	4	1	1	1	3	3	3	2	1
30 to 39	1	0	2	1	2	2	0	2	3	3
40 to 49	2	1	0	2	1	1	2	0	1	2
50 to 59	3	0	1	2	0	2	0	1	0	1
60 to 69	0	1	0	1	0	1	0	0	0	2
70 to 79	0	0	0	0	0	0	1	1	0	0
80 to 89	0	0	0	1	0	0	0	0	0	0
90 to 99	0	0	0	0	0	0	0	0	0	0

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	4	4	4	4	3	8	4	7	5	12
Female	3	2	1	5	2	2	2	2	2	1

MANNER –SUICIDE

Method	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Drugs/Alcohol/Poisoning	4	6	5	5	3	5	5	0	1	1
Gunshot	15	10	11	10	13	9	12	8	14	27
Hanging	6	8	9	6	4	4	6	6	4	5
Carbon Monoxide	1	1	0	0	0	0	1	0	1	0
Jump/Fall	0	1	0	0	3	0	0	0	0	0
Asphyxiation	0	0	0	1	1	2	1	0	0	0
Vehicular	0	0	0	0	1	0	1	0	0	1
Train	1	0	0	0	0	0	0	1	0	0
Drowning	0	0	0	0	0	0	0	0	0	0
Stabbing / Cutting	0	2	1	0	1	0	1	0	0	1
Other	1	1	0	0	0	0	0	0	0	0

Age Breakdown	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0 to9	0	0	0	0	0	0	0	0	0	0
10 to 19	3	0	2	1	1	0	0	0	1	1
20 to 29	3	7	5	7	3	3	4	2	4	1
30 to 39	2	6	2	3	4	3	10	3	4	7
40 to 49	3	4	6	1	5	4	1	1	2	8
50 to 59	8	6	8	4	6	5	4	2	3	6
60 to 69	3	3	1	1	4	2	3	4	4	6
70 to 79	4	2	2	2	2	3	2	2	1	5
80 to 89	2	1	0	3	1	0	3	1	0	1
90 to 99	0	0	0	0	0	0	0	0	1	0

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	24	24	21	20	23	15	21	14	15	30
Female	4	5	5	2	3	5	6	1	5	5

MANNER – UNDETERMINABLE

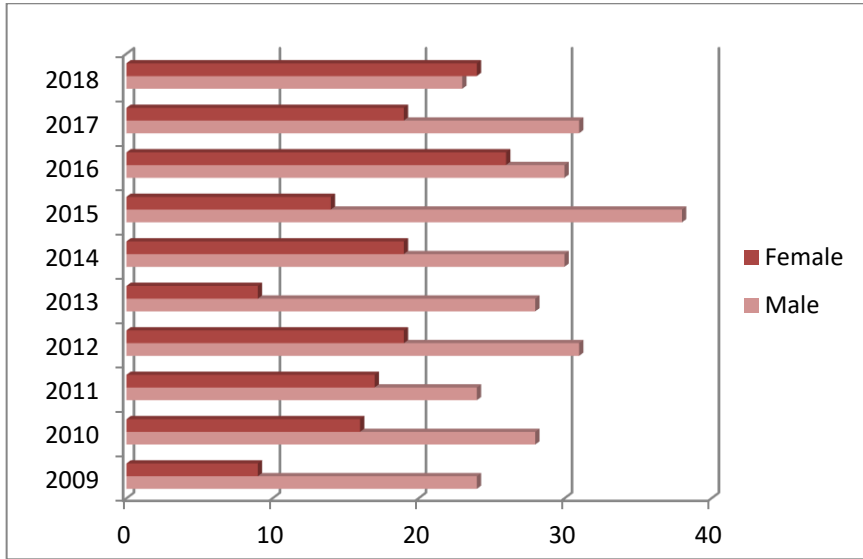
Method	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Drug / Alcohol Related	26	22	36	25	27	36	42	52	75	56
Undetermined Cause	2	2	1	0	1	1	0	5	0	2
Asphyxia	0	0	0	0	1	0	0	0	0	0
Drowning	0	0	0	0	0	0	0	0	0	0
Trauma	0	0	2	0	2	0	0	0	0	0
Other	2	4	2	1	0	2	1	1	1	3

Age Breakdown	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0 to 9	0	0	1	0	0	1	0	1	0	3
10 to 19	1	1	1	0	0	0	0	0	0	0
20 to 29	7	4	2	3	1	4	7	6	14	9
30 to 39	1	3	8	7	11	5	11	18	22	18
40 to 49	8	8	12	8	8	12	12	13	18	13
50 to 59	10	7	12	7	8	13	9	14	16	15
60 to 69	2	2	2	0	2	3	3	5	6	3
70 to 79	0	0	0	1	0	0	0	1	0	0
80 to 89	0	2	2	0	1	1	0	0	0	0
90 to 99	1	1	1	0	0	0	1	0	0	0

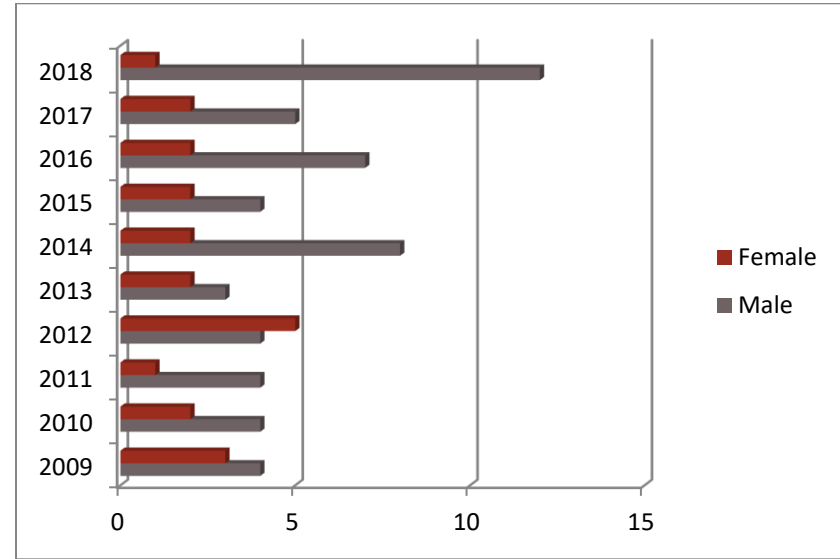
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	19	15	20	14	18	24	27	42	49	45
Female	11	13	21	12	13	15	16	16	27	16

MALE TO FEMALE RATIO

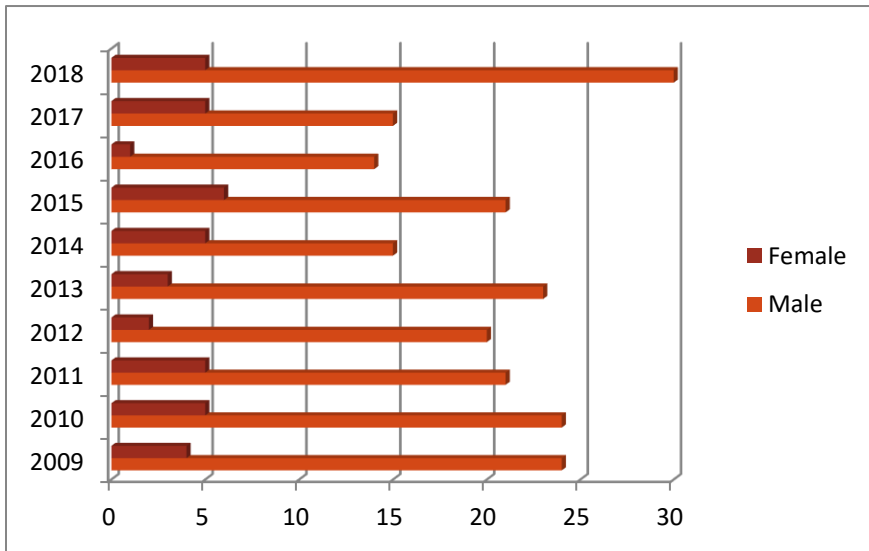
ACCIDENTAL DEATHS



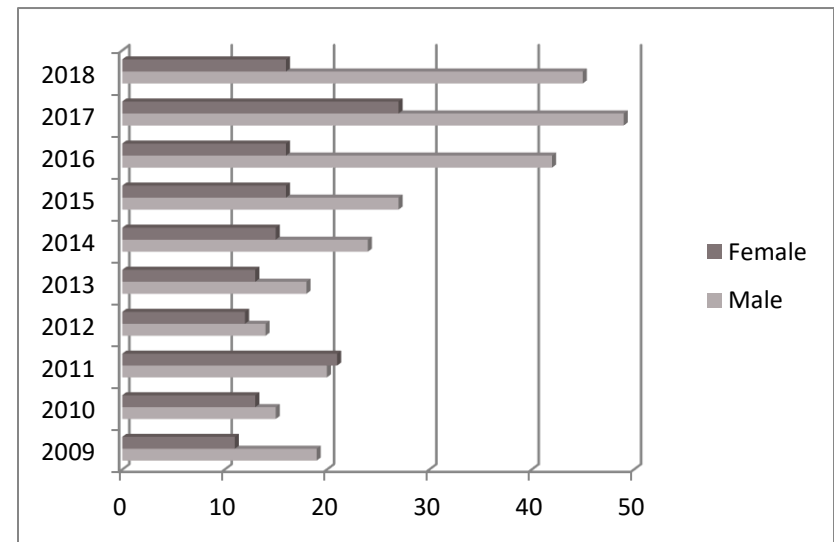
HOMICIDE DEATHS



SUICIDE DEATHS



UNDETERMINABLE DEATHS



Drug Related Death Date

	2014	2015	2016	2017	2018
Drug Deaths	42	47	52	79	60

	2014	2015	2016	2017	2018
0 to9	0	0	0	0	1
10 to 19	0	0	0	0	0
20 to 29	4	8	6	14	8
30 to 39	6	12	16	21	17
40 to 49	11	12	12	18	14
50 to 59	16	11	13	18	16
60 to 69	4	3	5	8	4
70 to 79	0	0	0	0	0
80 to 89	0	0	0	0	0
90 to 99	0	1	0	0	0

	2014	2015	2016	2017	2018
Female	18	20	13	28	16
Male	24	27	39	51	44

	2014	2015	2016	2017	2018
Black	0	3	6	8	7
White	41	44	46	71	51
Other	1	0	0	0	2

	2014	2015	2016	2017	2018
Cocaine*	10	10	13	20	21
Fentanyl**	1	8	24	38	36
Heroin***	16	22	21	20	9

The chart above represents deaths that occurred in Jackson County where the cause of death or contributory cause of death were a result of drug use and/or abuse.

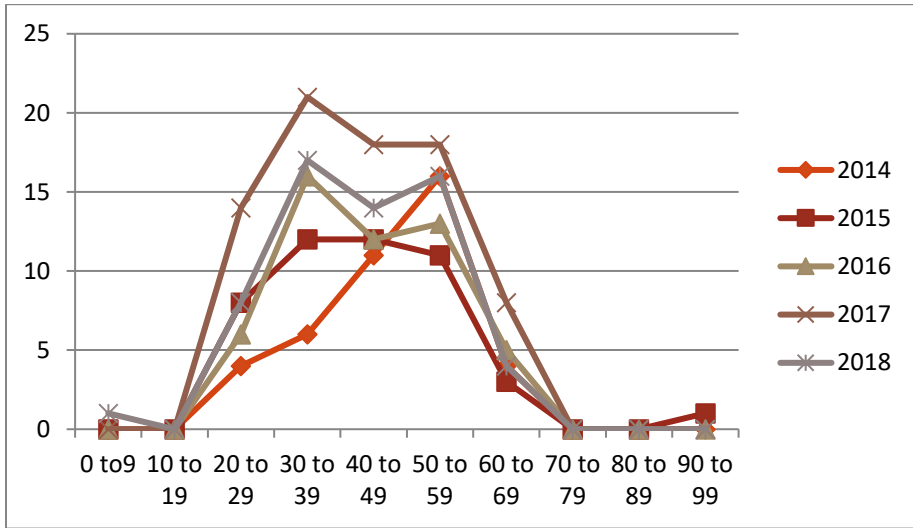
*Cocaine or Benzoylcegonine are present in the blood.

** Fentanyl, Norfentanyl, Acetylfentanyl, Carfentanyl, Furanylfentanyl or U4470 are present in the blood.

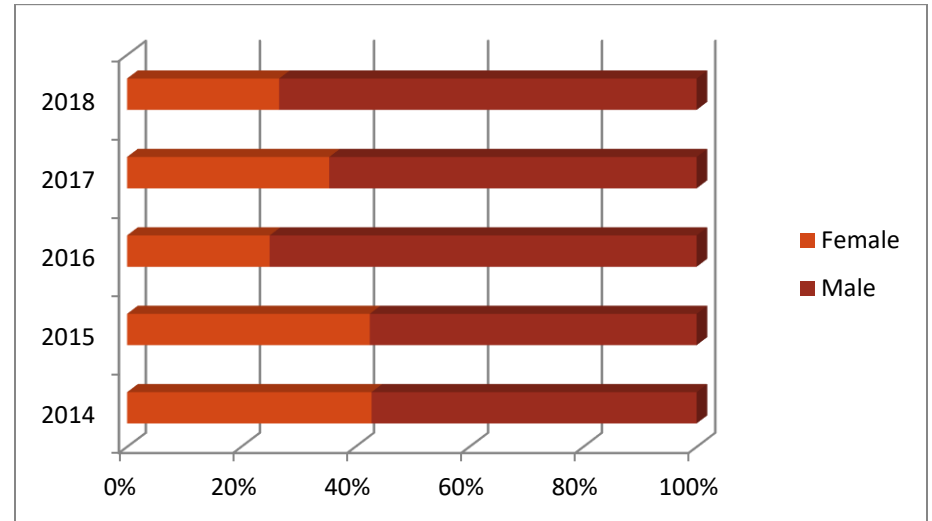
***Heroin is confirmed positive by the presence of Morphine in the blood and the presence of 6-Monoacetylmorphine whether it be in the blood or urine.

Note: Out of the total number of drug related deaths reported, these individuals may have one, none or a combination of these drugs in their blood at the time of their death. This is not an accurate reporting all drugs of abuse identified in the system, just of those we have chosen to focus on at this time.

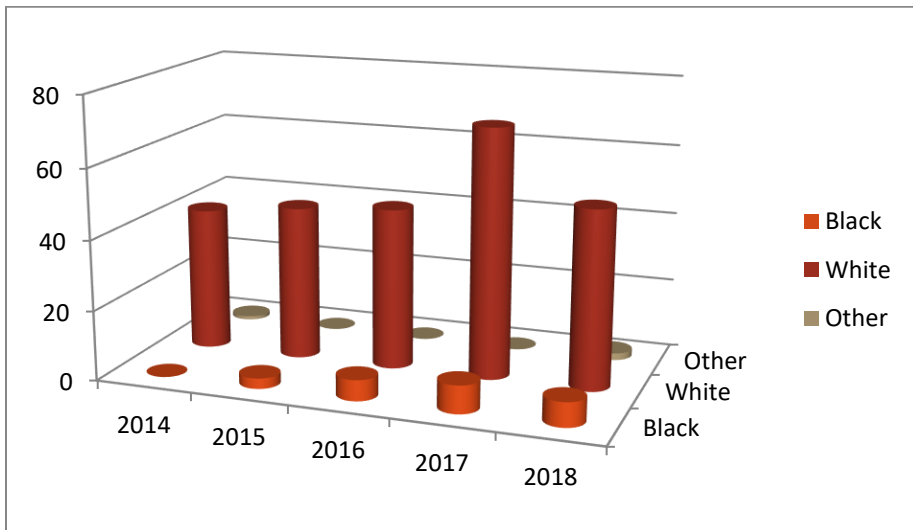
Age at Time of Drug Related Death by Year



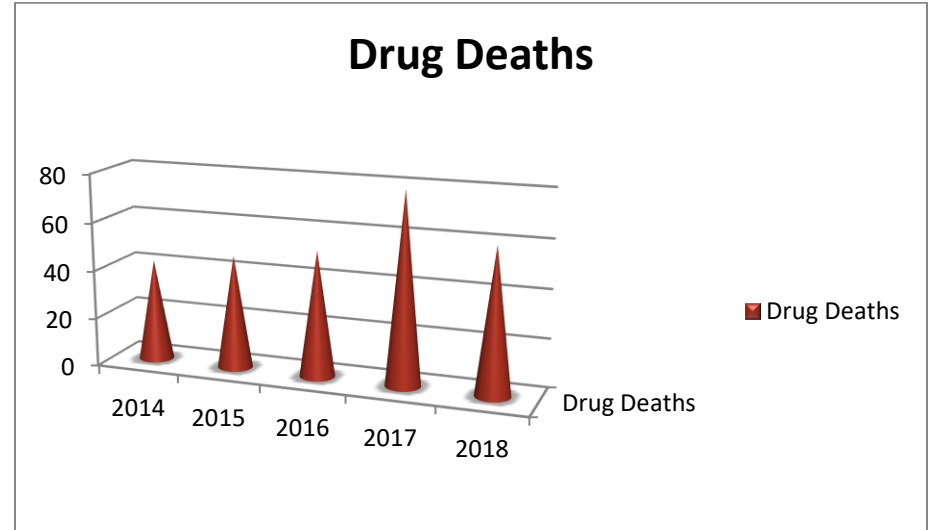
Gender Percentages on Drug Related Deaths



Race of Drug Related Deaths



Total Number of Drug Related Deaths



To the Jackson County Board of Commissioners:

Thank you for taking the time to go through our annual "Medical Examiner's Report".

Familiarizing ourselves with the data helps provide a better understanding of why and how deaths are occurring in Jackson County. This information is critical when addressing our "Strategic Priorities"; especially those related to a *Safe Community & a Healthy Community*.

Although you would think this office is on the opposite end of prevention, we provide crucial data for looking at certain types of deaths in order to prevent them from happening in the future. Examples of this would be our participation in the Drug Summit and Child Death Review.

As you can see from this year's report we have added data on drug related deaths as these numbers have risen exponentially. The drug crisis in our community has had a far reaching impact and has put stressors on families, health care, law enforcement, medical examiner offices, etc.

As always, if you have any questions regarding the data provided in this report please contact our office at (517) 788-4482.

In service to the Citizens of Jackson County:

John C. Maino II, M.D.
Chief Medical Examiner

Chief Medical Examiner

John C. Maino II, M.D.

Consulting Forensic Pathologists

Patrick Cho, M.D.

Ruben Ortiz-Reyes, M.D.

Bernardino Pacris, M.D.

Medical Examiner Field Investigators

Timothy Black

Ronald Dunfield (inactive)

Nathan Gross

Mark Jamieson

Doug Millican

Mark Sherwood

Ellen Spaulding (inactive)

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