

# Michigan Hepatitis A 2016-2019 Outbreak Summary

## Epi Summary for Hepatitis A Cases in Michigan\*\*† for Confirmed Cases Referred August 1, 2016 – February 5, 2020‡

	2 <sup>nd</sup> Half CY2016	1 <sup>st</sup> Half CY2017	2 <sup>nd</sup> Half CY2017	1 <sup>st</sup> Half CY2018	2 <sup>nd</sup> Half CY2018	1 <sup>st</sup> Half CY2019	2 <sup>nd</sup> Half CY2019	Jan-20	Total
<b>Total # of Cases (by Onset)</b>	58	138	495	169	50	8	2	0	920
<b># Primary Confirmed Cases w/ Outbreak Strains</b>	21	73	314	112	38	8	2	0	568
<b># Primary Confirmed Cases w/out sequencing</b>	36	51	125	42	9	0	0	0	263
<b># Secondary Confirmed Cases</b>	1	14	56	15	3	0	0	0	89
<b>Female, n (%)</b>	20 (34.5)	49 (35.5)	171 (34.5)	59 (34.9)	17 (34.0)	1 (12.5)	-	-	318 (34.6)
<b>Hospitalized, n (%)</b>	50 (86.2)	117 (84.8)	392 (79.2)	136 (80.5)	36 (72.0)	6 (75.0)	-	-	738 (80.2)
<b>Min Age (years)</b>	24	21	<1	2	24	25	-	-	<1
<b>Max Age (years)</b>	83	86	90	87	75	69	-	-	90
<b>Median Age (years)</b>	44.5	42.5	40	36	40	49	-	-	40
<b>Deaths, n (%)</b>	4 (6.9)	9 (6.5)	11 (2.2)	5 (3.0)	1 (2.0)	0 (0.0)	-	-	30 (3.3)

### Data below excludes secondary cases

<b>No Substance Abuse + No Homeless/Transient Living, n (%)</b>	32 (56.1)	38 (30.6)	184 (41.9)	51 (33.1)	16 (32.0)	2 (25.0)	-	-	323 (38.9)
<b>Documented Substance Abuse, n (%)</b>	19 (33.3)	77 (62.1)	211 (48.1)	91 (59.1)	28 (56.0)	6 (75.0)	-	-	434 (52.2)
<b>Homeless/Transient Living, n (%)</b>	10 (17.5)	25 (20.2)	47 (10.7)	24 (15.6)	6 (16.7)	0 (0.0)	-	-	112 (13.5)
<b>History of Hepatitis B, n (%)</b>	3 (5.3)	4 (3.2)	9 (2.1)	9 (5.8)	3 (8.3)	0 (0.0)	-	-	28 (3.4)
<b>History of Hepatitis C, n (%)</b>	10 (17.5)	39 (31.5)	125 (28.5)	33 (21.4)	10 (20.0)	2 (25.0)	-	-	219 (26.4)
<b>Men Who Have Sex with Men (MSM), n (%) -Data includes only male cases</b>	1 (2.7)	3 (3.7)	57 (18.9)	15 (14.6)	1 (2.0)	1 (14.3)	-	-	78 (13.9)
<b>Correctional Facility Inmates, n (%)</b>	1 (1.8)	8 (6.5)	40 (9.1)	14 (9.1)	3 (6.0)	0 (0.0)	-	-	66 (7.9)
<b>Healthcare Worker, n (%)</b>	1 (1.8)	1 (0.8)	15 (3.4)	6 (3.9)	1 (2.0)	0 (0.0)	-	-	25 (3.0)
<b>Food Worker, n (%)</b>	2 (3.5)	4 (3.2)	22 (5.0)	9 (5.8)	3 (6.0)	0 (0.0)	-	-	41 (4.9)
<b>Cases Lost to Follow-up, n (%)</b>	14 (24.6)	41 (33.1)	85 (19.4)	16 (10.4)	6 (12.0)	0 (0.0)	-	-	162 (19.5)

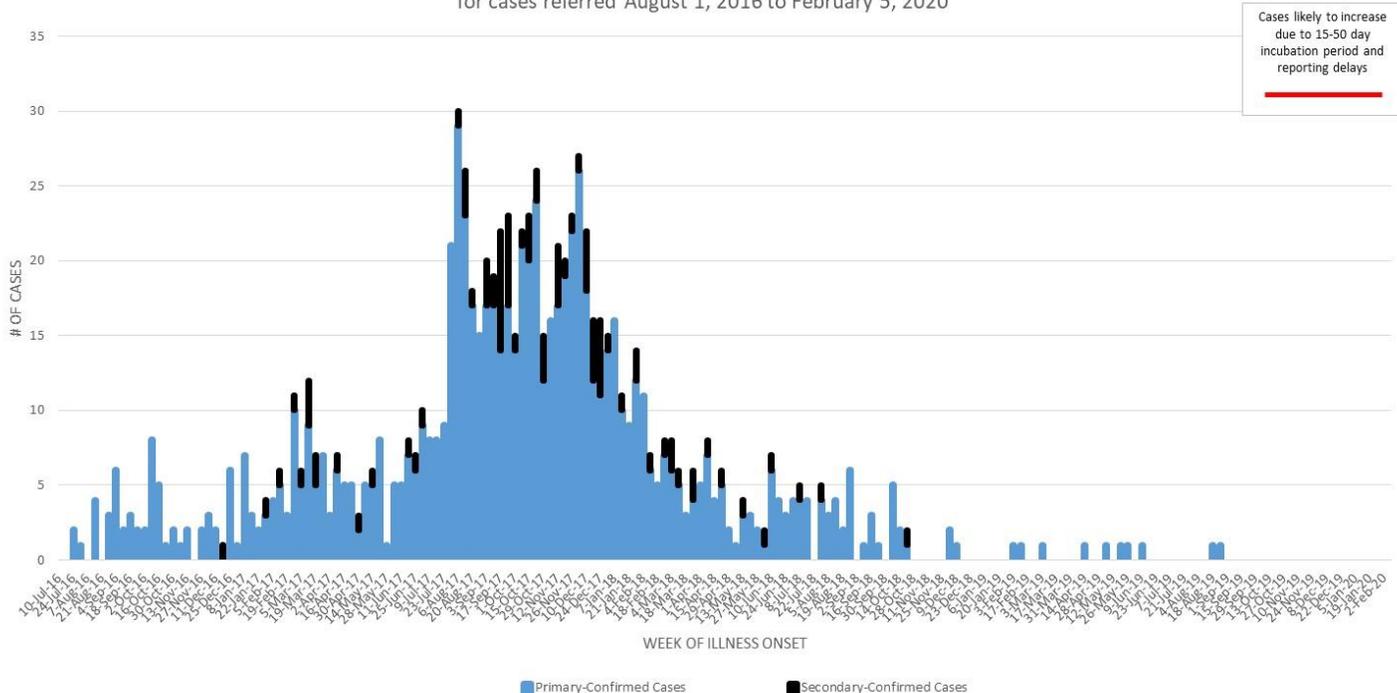
\*Also includes cases from Allegan, Bay, Charlevoix, Clare, Hillsdale, Huron, Ionia, Leelanau, Lenawee, Missaukee, Newaygo, Schoolcraft, St. Joseph, & Van Buren Counties and a MDOC Facility (Jackson County) that were found to have the outbreak strain when sequenced but do not meet the criteria to be an outbreak jurisdiction.

† Includes cases from counties that have met the criteria to be removed as an outbreak jurisdiction. That includes the counties of Calhoun (10 cases), Cass (2 cases), City of Detroit (173 cases), Clinton (6 cases), Eaton (6 cases), Genesee (28 cases), Grand Traverse (4 cases), Gratiot (3 cases), Ingham (30 cases), Isabella (8 cases), Kent (4 cases), Lapeer (7 cases), Livingston (6 cases), Macomb (223 cases), Mecosta (2 cases), Midland (3 cases), Monroe (18 cases), Oakland (120 cases), Saginaw (5 cases), Sanilac (6 cases), Shiawassee (22 cases), St. Clair (33 cases), Washtenaw (20 cases), and Wayne (164 cases)

‡ Analysis excludes cases that have been sequenced and found to be PCR Negative, have a different strain from the outbreak strains, or have international travel in the 2-6 weeks prior to illness onset.

§ Source of data: MDSS

Confirmed Hepatitis A Case Onset by Week for the Michigan Outbreak  
for cases referred August 1, 2016 to February 5, 2020



\*If illness onset was not identified first lab collection date was used in place

Report is a preliminary ad hoc analysis. Information to be considered DRAFT.

## Michigan Hepatitis A 2016-2019 Outbreak Summary

<b>Confirmed Hepatitis A Cases Meeting the Michigan Hep A Outbreak Case Definition</b>		
<b>County (or City)</b>	<b>Total # of Cases as of January 15, 2020</b>	<b>Total # of Cases as of February 5, 2020</b>
City of Detroit	173	173
Allegan	2	2
Bay	1	1
Calhoun	10	10
Cass	2	2
Clare	1	1
Charlevoix	1	1
Clinton	6	6
Eaton	6	6
Genesee	28	28
Grand Traverse	4	4
Gratiot	3	3
Hillsdale	1	1
Huron	1	1
Ingham	30	30
Ionia	1	1
Isabella	8	8
Kent	4	4
Lapeer	7	7
Leelanau	1	1
Lenawee	1	1
Livingston	6	6
Macomb	223	223
Mecosta	2	2
Midland	3	3
Missaukee	1	1
Monroe	18	18
Newaygo	1	1
Oakland	120	120
Saginaw	5	5
Sanilac	6	6
Schoolcraft	1	1
Shiawassee	22	22
St. Clair	33	33
St. Joseph	1	1
Van Buren	1	1
Washtenaw	20	20
Wayne	164	164
Other*	2	2
Total	920	920
*Jackson MDOC		