

Michigan Hepatitis A 2016-2019 Outbreak Summary

Epi Summary for Hepatitis A Cases in Michigan (Kent, Shiawassee, Washtenaw & Wayne)*† for Confirmed Cases Referred August 1, 2016 – January 16, 2019‡

	2 nd Half CY2016	1 st Half CY2017	2 nd Half CY2017	1 st Half CY2018	Q3 CY2018	Oct-18	Nov-18	Dec-18	Jan-19	Total
Total # of Cases (by Onset)	58	138	495	169	38	9	0	3	0	910
# Primary Confirmed Cases w/ Outbreak Strains	21	73	314	112	28	7	0	2	0	557
# Primary Confirmed Cases w/out sequencing	36	51	125	42	8	1	0	1	0	264
# Secondary Confirmed Cases	1	14	56	15	2	1	0	0	0	89
Female, n (%)	20 (34.5)	49 (35.5)	171 (34.5)	59 (34.9)	13 (34.2)	2 (22.2)	-	2 (66.7)	-	316 (34.7)
Hospitalized, n (%)	50 (86.2)	117 (84.8)	392 (79.2)	136 (80.5)	26 (68.4)	7 (77.8)	-	3 (100.0)	-	731 (80.3)
Min Age (years)	24	21	<1	2	24	26	-	33	-	<1
Max Age (years)	83	86	90	87	75	70	-	59	-	90
Median Age (years)	44.5	42.5	40	36	39	40	-	53	-	40
Deaths, n (%)	4 (6.9)	9 (6.5)	11 (2.2)	3 (1.8)	1 (2.6)	0 (0.0)	-	0 (0.0)	-	28 (3.1)

Data below excludes secondary cases

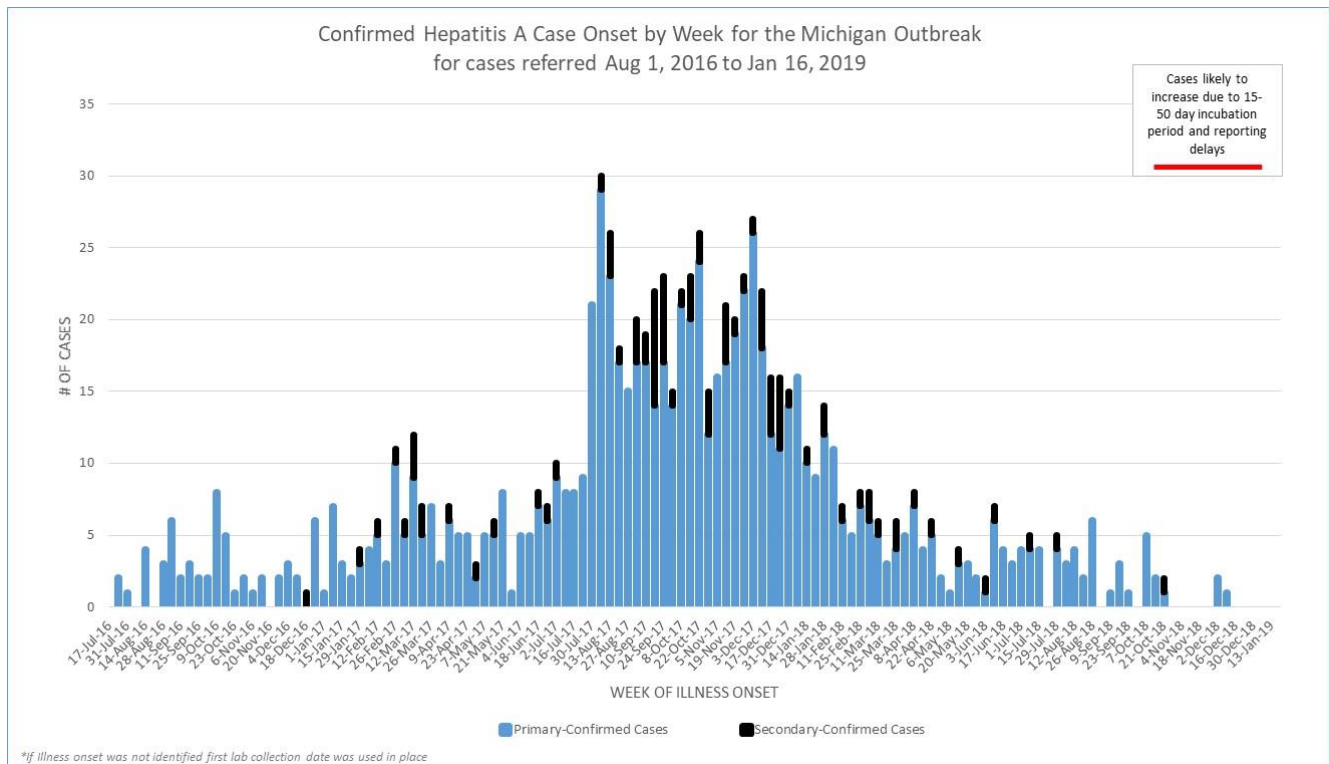
No Substance Abuse + No Homeless/Transient Living, n (%)	32 (56.1)	38 (30.6)	184 (41.9)	51 (33.1)	12 (33.3)	4 (50.0)	-	0 (0.0)	-	321 (39.1)
Documented Substance Abuse, n (%)	19 (33.3)	77 (62.1)	211 (48.1)	91 (59.1)	21 (58.3)	4 (50.0)	-	3 (100.0)	-	426 (51.9)
Homeless/Transient Living, n (%)	10 (17.5)	25 (20.2)	47 (10.7)	24 (15.6)	6 (16.7)	0 (0.0)	-	0 (0.0)	-	112 (13.6)
History of Hepatitis B, n (%)	3 (5.3)	4 (3.2)	9 (2.1)	9 (5.8)	3 (8.3)	0 (0.0)	-	0 (0.0)	-	28 (3.4)
History of Hepatitis C, n (%)	10 (17.5)	39 (31.5)	125 (28.5)	33 (21.4)	8 (22.2)	1 (12.5)	-	1 (33.3)	-	217 (26.4)
Men Who Have Sex with Men (MSM), n (%) -Data includes only male cases	1 (2.7)	3 (3.7)	57 (18.9)	15 (14.6)	1 (4.4)	0 (0.0)	-	0 (0.0)	-	77 (13.9)
Correctional Facility Inmates, n (%)	1 (1.8)	8 (6.5)	40 (9.1)	14 (9.1)	2 (5.6)	1 (12.5)	-	0 (0.0)	-	66 (8.0)
Healthcare Worker, n (%)	1 (1.8)	1 (0.8)	15 (3.4)	6 (3.9)	0 (0.0)	1 (12.5)	-	0 (0.0)	-	24 (2.9)
Food Worker, n (%)	2 (3.5)	4 (3.2)	22 (5.0)	9 (5.8)	3 (8.3)	0 (0.0)	-	0 (0.0)	-	40 (4.9)
Cases Lost to Follow-up, n (%)	14 (24.6)	41 (33.1)	85 (19.4)	16 (10.4)	6 (16.7)	0 (0.0)	-	0 (0.0)	-	162 (19.7)

*Also includes cases from Allegan, Bay, Clare, Hillsdale, Huron, Ionia, Leelanau, Lenawee, Newaygo, Schoolcraft & 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 (9 cases), City of Detroit (173 cases), Clinton (6 cases), Eaton (5 cases), Genesee (27 cases), Grand Traverse (4 cases), Gratiot (3 cases), Ingham (29 cases), Isabella (8 cases), Lapeer (7 cases), Livingston (6 cases), Macomb (223 cases), Mecosta (2 cases), Midland (3 cases), Monroe (18 cases), Oakland (120 cases), Saginaw (4 cases), Sanilac (6 cases), and St. Clair (33 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



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

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Confirmed Hepatitis A Cases Meeting the Michigan Hep A Outbreak Case Definition		
County (or City)	Total # of Cases as of January 9, 2019	Total # of Cases as of January 16, 2019
City of Detroit	172	173
Allegan	2	2
Bay	1	1
Calhoun	9	9
Clare	1	1
Clinton	6	6
Eaton	5	5
Genesee	27	27
Grand Traverse	4	4
Gratiot	3	3
Hillsdale	1	1
Huron	1	1
Ingham	29	29
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
Monroe	18	18
Newaygo	1	1
Oakland	120	120
Saginaw	4	4
Sanilac	6	6
Schoolcraft	1	1
Shiawassee	22	22
St. Clair	33	33
Van Buren	1	1
Washtenaw	20	20
Wayne	165	164
Other*	2	2
Total	910	910
*Jackson MDOC		