

Michigan Hepatitis A 2016-2019 Outbreak Summary

Epi Summary for Hepatitis A Cases in Michigan**† for Confirmed Cases Referred August 1, 2016 – June 12, 2019‡

	2 nd Half CY2016	1 st Half CY2017	2 nd Half CY2017	1 st Half CY2018	2 nd Half CY2018	Q1 CY2019	Apr-19	May-19	Total
Total # of Cases (by Onset)	58	138	495	169	50	3	1	2	916
# Primary Confirmed Cases w/ Outbreak Strains	21	73	314	112	38	3	1	2	564
# Primary Confirmed Cases w/out sequencing	36	51	125	42	9	0	0	0	263
# Secondary Confirmed Cases	1	14	56	15	3	0	0	0	89
Female, n (%)	20 (34.5)	49 (35.5)	171 (34.5)	59 (34.9)	17 (34.0)	0 (0.0)	-	-	317 (34.6)
Hospitalized, n (%)	50 (86.2)	117 (84.8)	392 (79.2)	136 (80.5)	36 (72.0)	2 (66.7)	-	-	735 (80.2)
Min Age (years)	24	21	<1	2	24	49	-	-	<1
Max Age (years)	83	86	90	87	75	51	-	-	90
Median Age (years)	44.5	42.5	40	36	40	50	-	-	40
Deaths, n (%)	4 (6.9)	9 (6.5)	11 (2.2)	3 (1.8)	1 (2.0)	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)	16 (32.0)	1 (33.3)	-	-	323 (39.1)
Documented Substance Abuse, n (%)	19 (33.3)	77 (62.1)	211 (48.1)	91 (59.1)	28 (56.0)	2 (66.7)	-	-	430 (52.0)
Homeless/Transient Living, n (%)	10 (17.5)	25 (20.2)	47 (10.7)	24 (15.6)	6 (16.7)	0 (0.0)	-	-	112 (13.5)
History of Hepatitis B, n (%)	3 (5.3)	4 (3.2)	9 (2.1)	9 (5.8)	3 (8.3)	0 (0.0)	-	-	28 (3.4)
History of Hepatitis C, n (%)	10 (17.5)	39 (31.5)	125 (28.5)	33 (21.4)	10 (20.0)	1 (33.3)	-	-	219 (26.5)
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 (2.0)	1 (33.3)	-	-	78 (13.9)
Correctional Facility Inmates, n (%)	1 (1.8)	8 (6.5)	40 (9.1)	14 (9.1)	3 (6.0)	0 (0.0)	-	-	66 (8.0)
Healthcare Worker, n (%)	1 (1.8)	1 (0.8)	15 (3.4)	6 (3.9)	1 (2.0)	0 (0.0)	-	-	24 (2.9)
Food Worker, n (%)	2 (3.5)	4 (3.2)	22 (5.0)	9 (5.8)	3 (6.0)	0 (0.0)	-	-	40 (4.8)
Cases Lost to Follow-up, n (%)	14 (24.6)	41 (33.1)	85 (19.4)	16 (10.4)	6 (12.0)	0 (0.0)	-	-	162 (19.6)

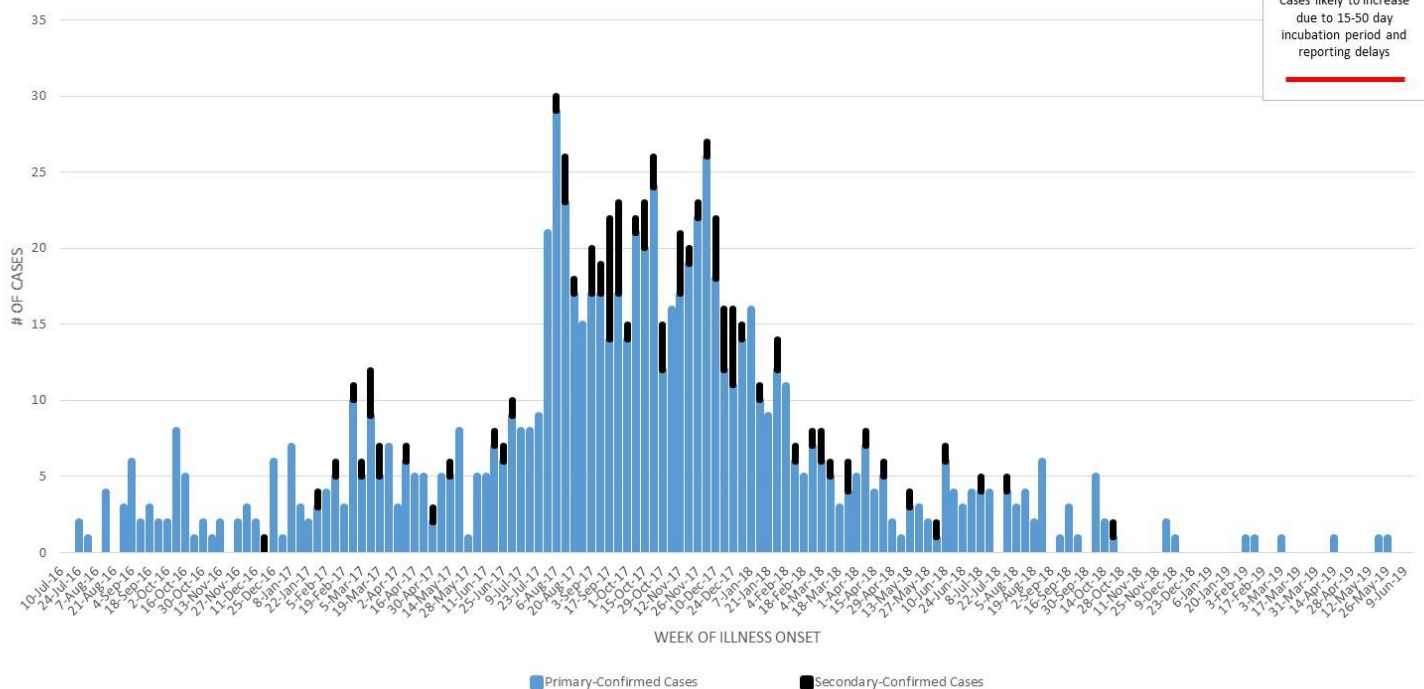
*Also includes cases from Allegan, Bay, Charlevoix, Clare, Hillsdale, Huron, Ionia, Leelanau, Lenawee, Missaukee, Newaygo, Schoolcraft, St. Joseph, & Van Buren Counties and a MDCC Facility (Jackson County) that were found to have the outbreak strain when sequenced but do not meet the criteria to be an 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), City of Detroit (173 cases), Clinton (6 cases), Eaton (5 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 (4 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 June 12, 2019



*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.

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Confirmed Hepatitis A Cases Meeting the Michigan Hep A Outbreak Case Definition		
County (or City)	Total # of Cases as of June 5, 2019	Total # of Cases as of June 12, 2019
City of Detroit	173	173
Allegan	2	2
Bay	1	1
Calhoun	10	10
Clare	1	1
Charlevoix	1	1
Clinton	6	6
Eaton	5	5
Genesee	28	28
Grand Traverse	4	4
Gratiot	3	3
Hillsdale	1	1
Huron	1	1
Ingham	29	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	4	4
Sanilac	6	6
Schoolcraft	1	1
Shiawassee	22	22
St. Clair	33	33
St. Joseph	0	1
Van Buren	1	1
Washtenaw	20	20
Wayne	164	164
Other*	2	2
Total	914	916
*Jackson MDOC		