



Kentucky Department for Public Health

KY17-089 - Acute Hepatitis A Outbreak Weekly Report

Morbidity and Mortality Weekly Report (MMWR) Week 17

April 22, 2018 – April 28, 2018

Brief Description of Outbreak: In November 2017, the Kentucky Department for Public Health (DPH) identified an outbreak of acute hepatitis A. The increase in cases observed in Kentucky was well over the 10-year average of reported hepatitis A cases, and several cases have been infected with hepatitis A virus (HAV) strains genetically linked to outbreaks in both California and Utah. Similar to hepatitis A outbreaks in other states, the primary risk factors have been homelessness and illicit drug use. A contaminated food source has not been identified, and HAV transmission is believed to have occurred through person-to-person contact. Below is a weekly and cumulative update on the outbreak.

In accordance with 902 KAR 2:020, cases of acute hepatitis A should be reported within 24 hours.

The case definition used for outbreak-associated acute hepatitis A cases is available upon request.

Table 1: Summary of Outbreak-Associated Acute Hepatitis A Cases

Update for Week 17:		Update Total for Weeks 35-17:	
Number of new cases:	Confirmed - 0 Probable - 31 Suspect - 12	Total number of cases (n=448):	Confirmed - 111 Probable - 240 Suspected - 97
Number of counties with new cases:	9	Total number of counties with cases:	32
Number of cases with specimens submitted for genotyping where results are available:	9	Number of cases with specimens submitted for genotyping where results are available:	121
Number of cases with genotype IB among those with genotype testing:	8	Total number of cases with genotype IB among those with genotype testing:	105
Number of Hospitalizations:	30	Total Number of Hospitalizations:	315
Number of deaths Reported:	1	Total number of deaths reported:	4

Table 2: Cumulative Distribution of Cases by County

KY17-089 Distribution Of Outbreak-Associated Acute Hepatitis A Cases, by County, August 1, 2017 – April 28, 2018*^#				
County	Total number of cases reported	Number of confirmed cases	Number of probable cases	Number of suspected cases
Anderson	1	0	0	1
Ballard	2	0	2	0
Bourbon	1	0	1	0
Boyd	40	15	17	8
Bullitt	22	7	11	4
Carter	9	1	4	4
Casey	1	0	1	0
Fayette	1	0	0	1
Grant	1	0	1	0
Grayson	2	0	1	1
Greenup	18	2	10	6
Hardin	10	0	6	4
Hopkins	1	0	0	1
Jefferson	304	83	170	51
Kenton	1	0	1	0
Laurel^	1	0	0	1
Lawrence	1	0	0	1
Leslie	1	0	0	1
Lincoln^	1	0	1	0
Madison	1	0	0	1
Marion	2	1	0	1

KY17-089 Distribution Of Outbreak-Associated Acute Hepatitis A Cases, by County, August 1, 2017 – April 28, 2018*^#				
County	Total number of cases reported	Number of confirmed cases	Number of probable cases	Number of suspected cases
Marshall	1	0	1	0
McCracken	4	0	1	3
Meade	4	1	1	2
Montgomery	2	0	2	0
Nelson	3	0	2	1
Oldham	1	0	0	1
Russell	1	0	0	1
Spencer	1	1	0	0
Taylor	2	0	1	1
Warren	6	0	6	0
Whitley	2	0	0	2
Total Number of Cases:	448	111	240	97

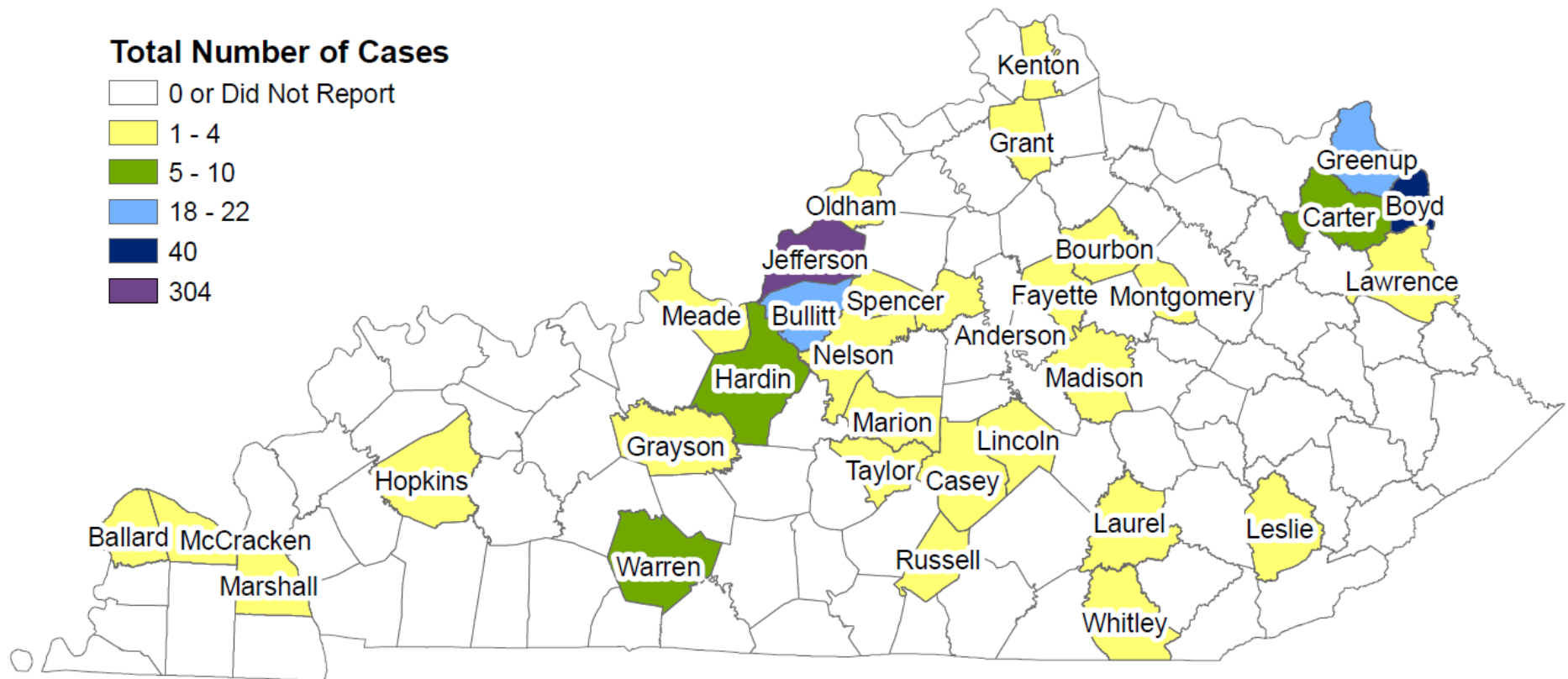
* Cases are reported based on date of specimen collection.

^ Denotes a county where cases have not been previously identified.

As genotyping results become available, cases may be excluded if they do not meet the outbreak case definition. Cases in the following counties have been excluded from the outbreak case count this week: None.

Figure 1: Geographic Distribution of Outbreak-Associated Cases by County

KY17-089 Distribution of Outbreak-Associated Acute
Hepatitis A Cases by County, August 1, 2017 - April 28, 2018

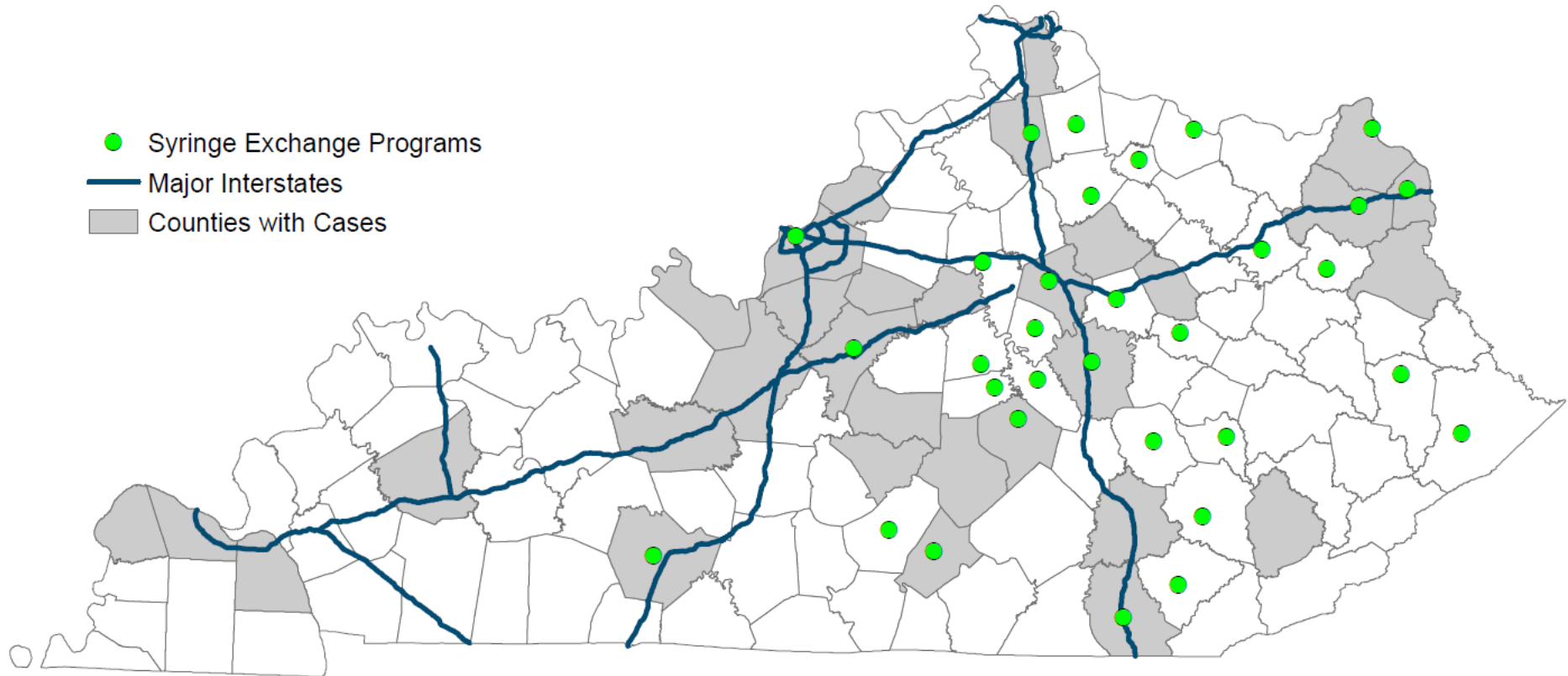


n = 32 counties with outbreak-associated cases

Counties where cases have not previously been identified: Lincoln, Laurel.

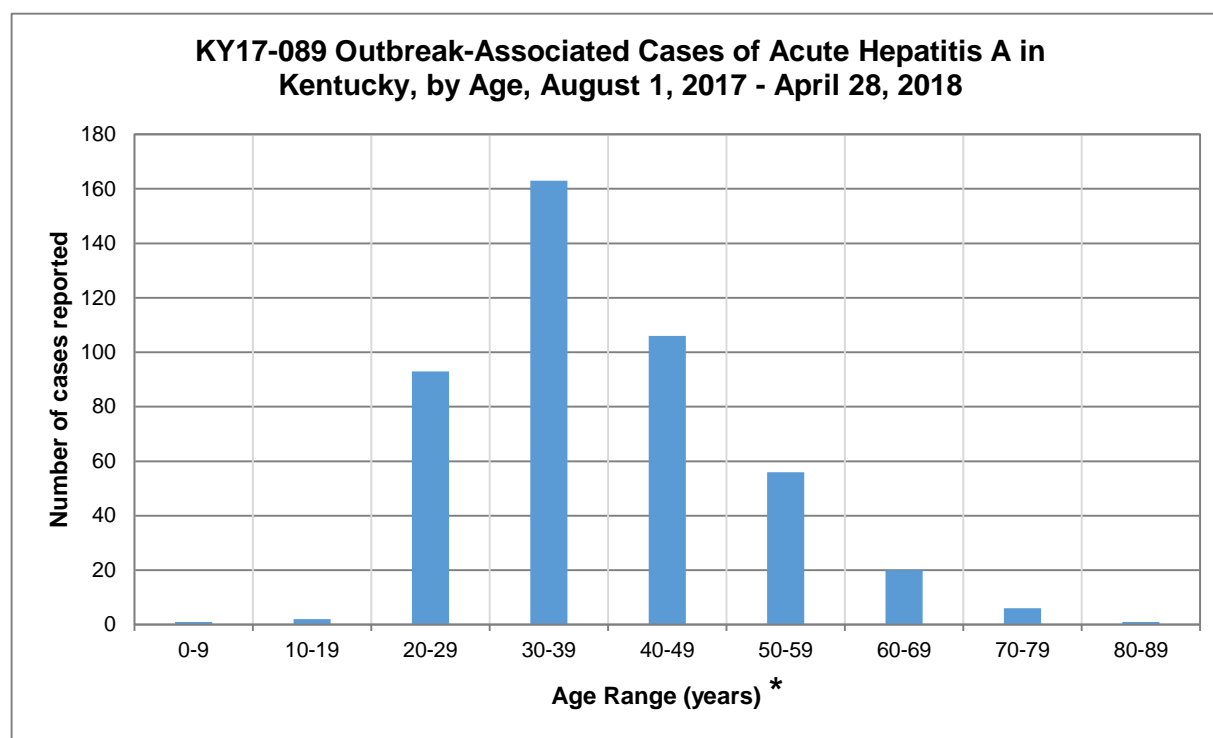
Figure 2: Major Interstates and Syringe Exchange Programs in Counties Reporting Outbreak-Associated Cases

KY17-089 Major Interstates and Syringe Exchange Programs In
Counties Reporting Outbreak-Associated Acute Hepatitis A Cases,
August 1, 2017 - April 28, 2018



Major Interstates include I-24, I-264, I-265, I-275, I-471, I-64, I-65, I-69, I-71, I-75, Martha Lane Collins Bluegrass Parkway, and Wendell H Ford Western KY Parkway

Figure 3: Outbreak-Associated Cases by Age

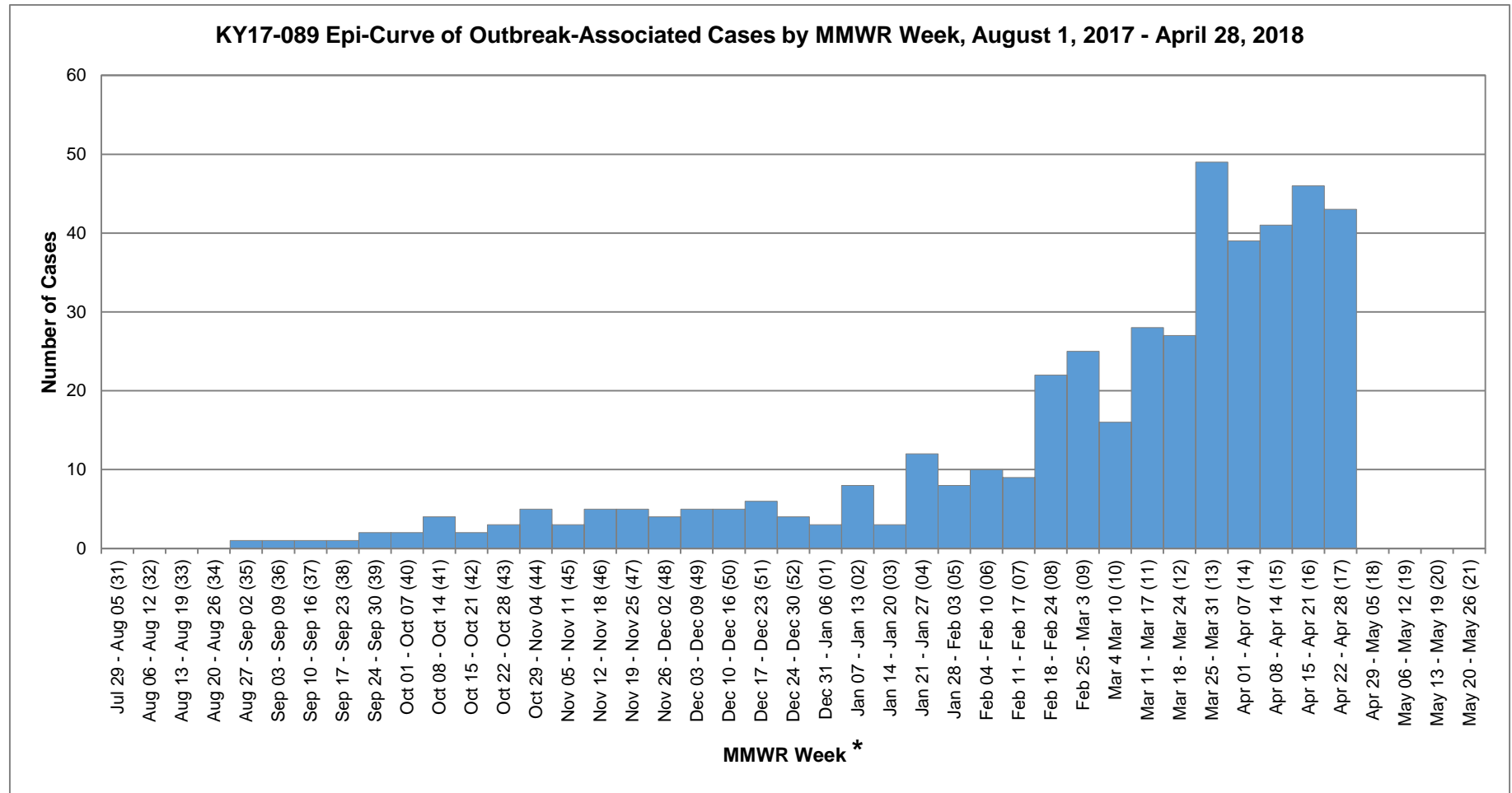


* The mean age of cases is 39.0 years, and the median age is 37.0 years.

Table 3: Frequent Risk Factors of Outbreak-associated Cases

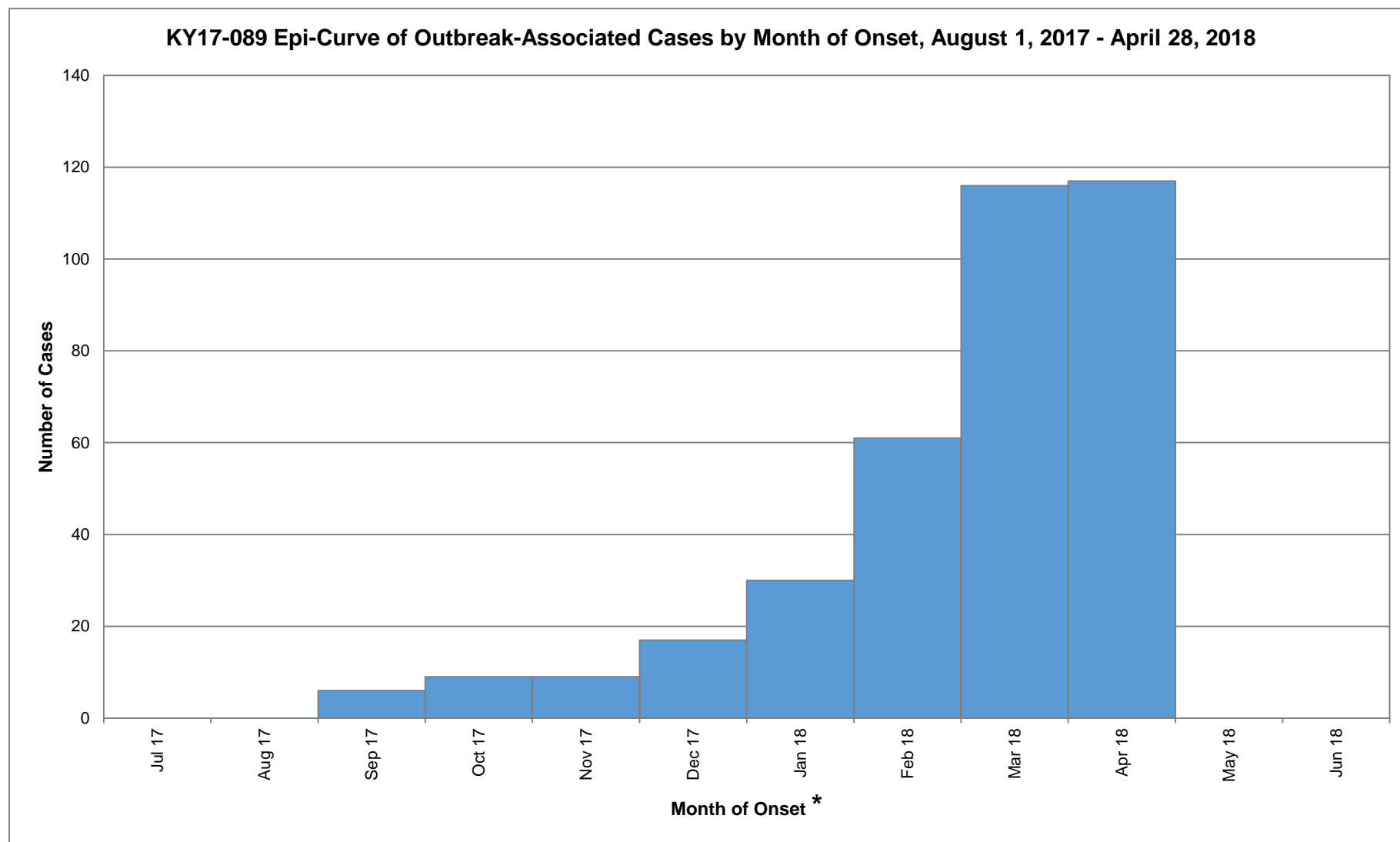
KY17-089 Risk Factors of Outbreak-Associated Acute Hepatitis A Cases, August 1, 2017 – April 28, 2018	
Risk Factor	Number of Cases Reporting Risk Factor
Homelessness only	12
Illicit drug use only	197
Homelessness + illicit drug use	59
MSM only	3
No Risk Factors	56
Unknown Risk	135

Figure 4: Epidemic-curve (Epi-Curve) of Outbreak-Associated Cases



* MMWR weeks are based on date of specimen collection.

Figure 5: Epidemic-curve (Epi-Curve) of Outbreak-Associated Cases by Month of Onset



* Date of onset has been reported for 81.5% (or 365/448) of cases.