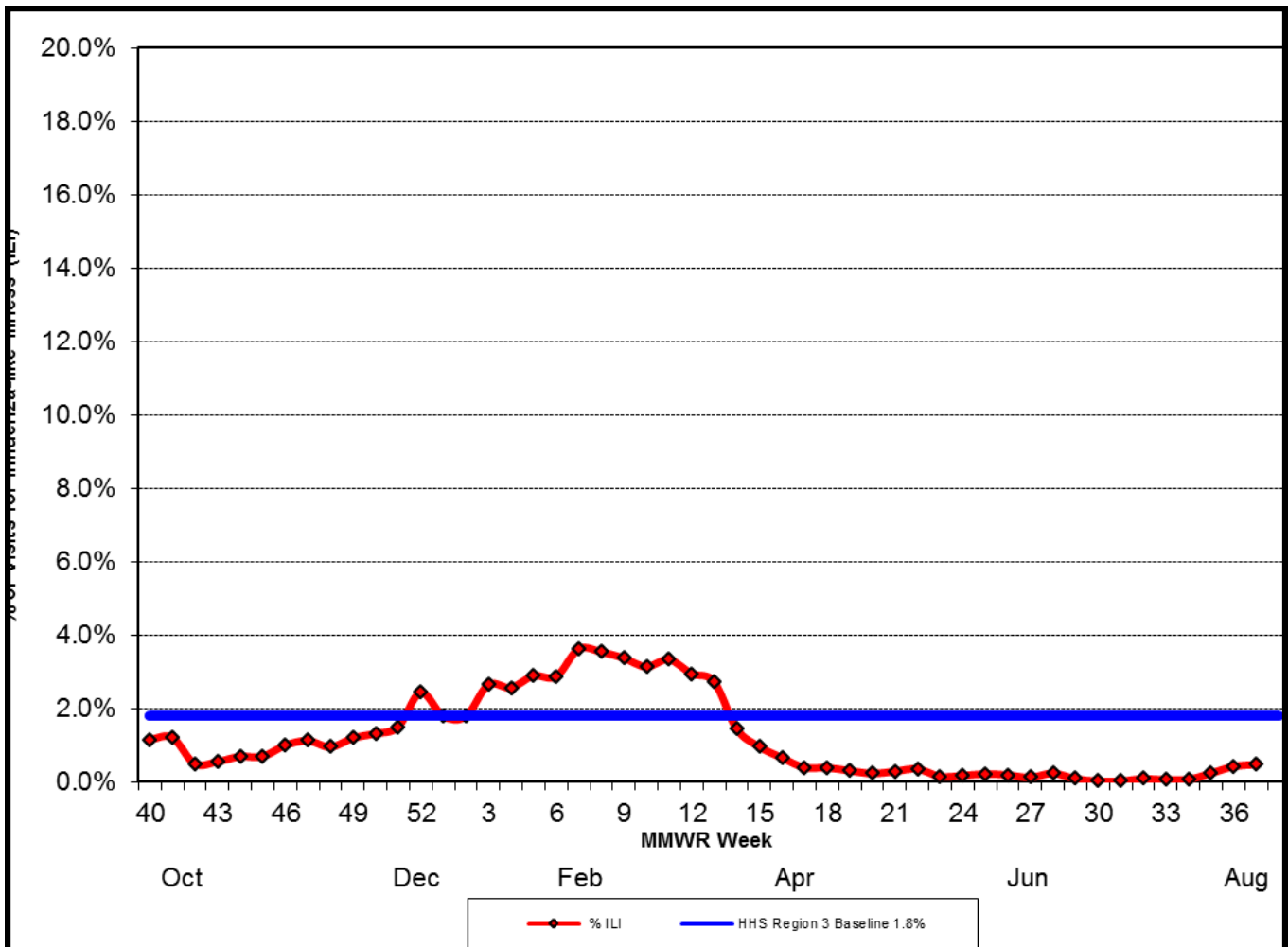


Influenza Surveillance

(Current as of September 22, 2017)

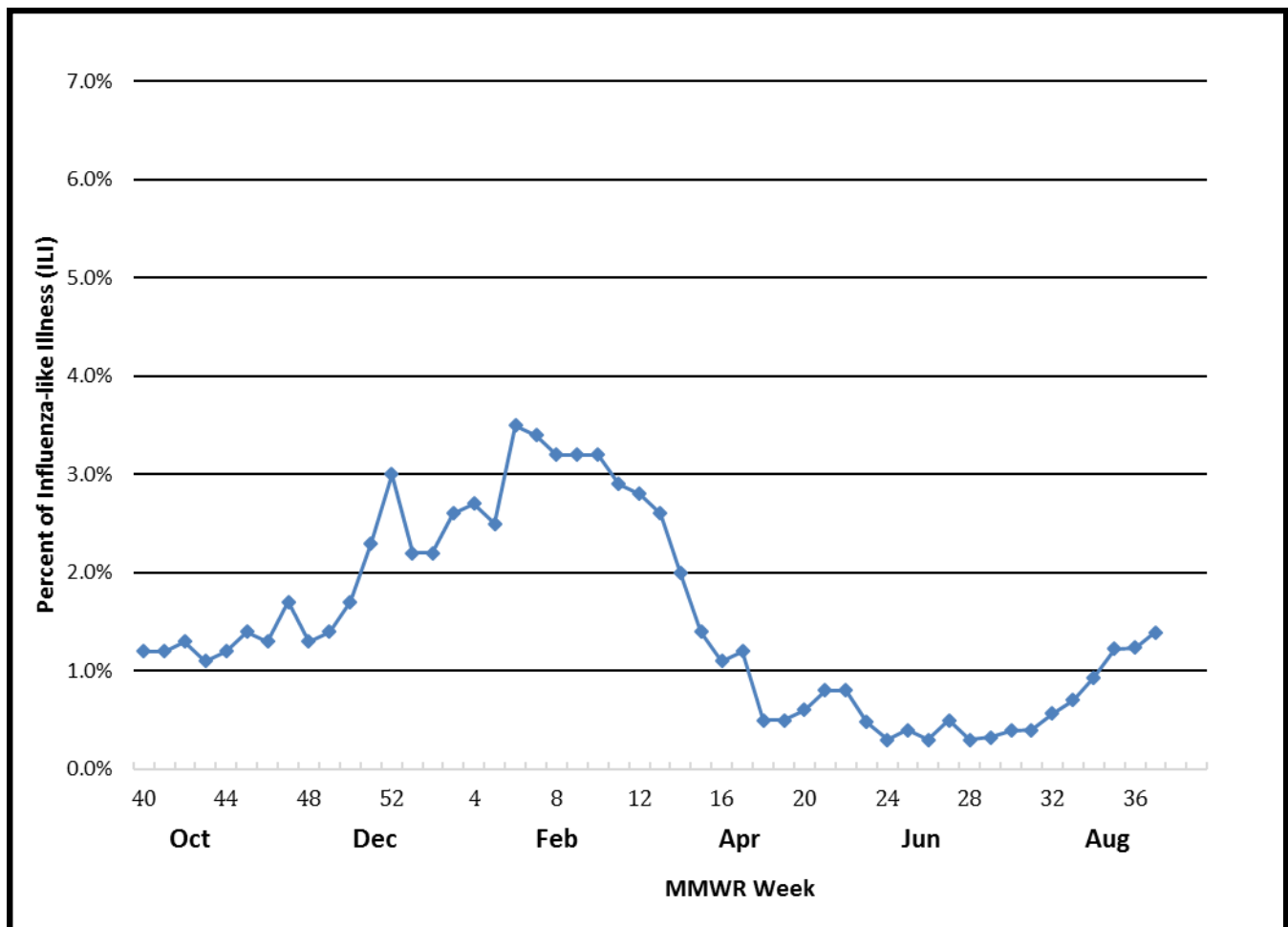
West Virginia Sentinel Provider Data, 2016-17 Season

The figure below demonstrates the percent of visits for influenza-like illness (ILI) reported by West Virginia sentinel providers during the 2016-17 influenza season. Sentinel providers are volunteer physicians who report cases of ILI as a proportion of total patients seen. If the resulting percentage of visits due to ILI is higher than 2.2% then high rates of influenza transmission are likely. Reports of ILI should always be viewed within the context of laboratory data and other indicators of influenza activity.



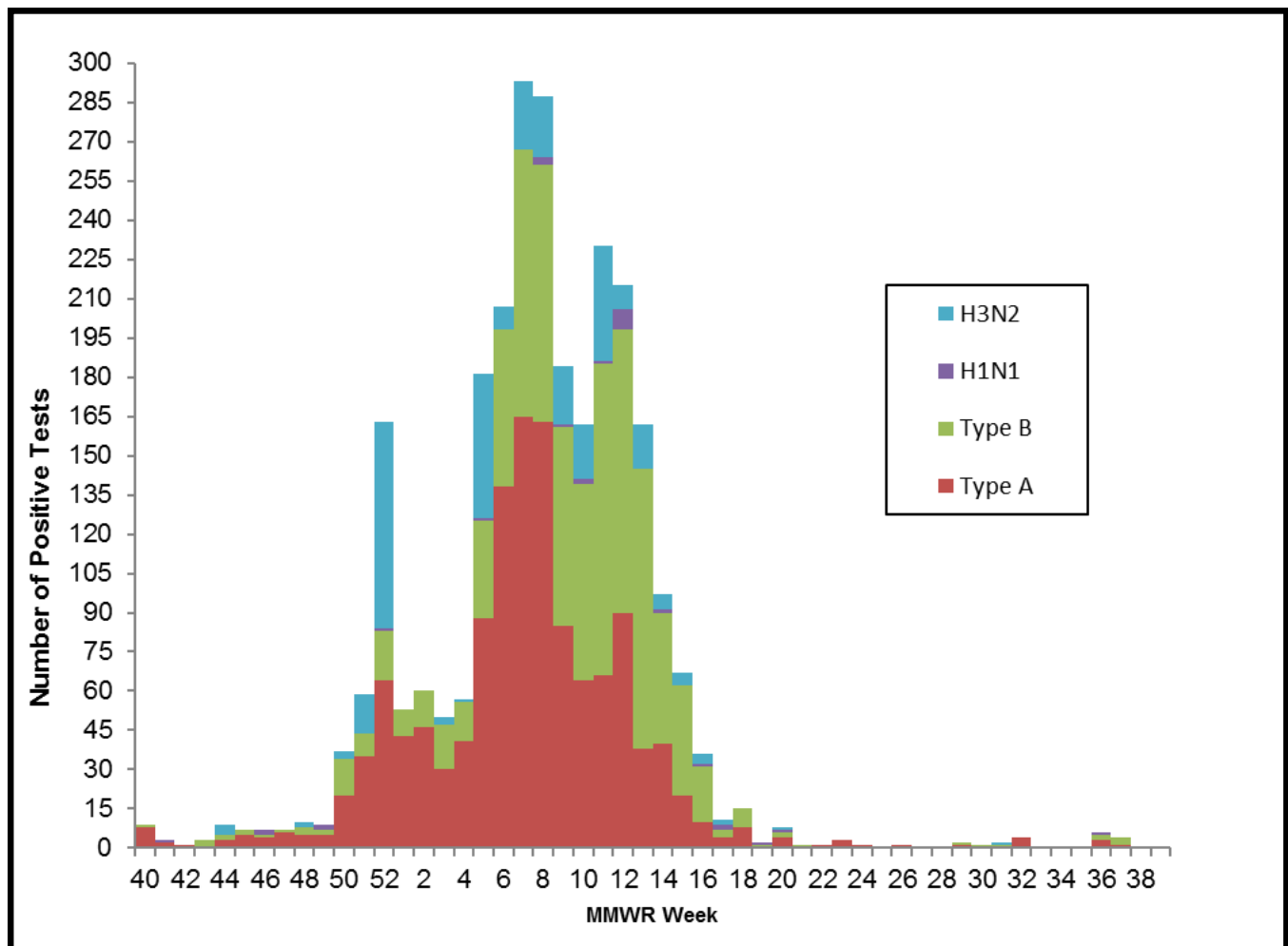
Syndromic Surveillance

The figure above demonstrates the percent of emergency department visits for influenza-like illness (ILI) reported by West Virginia hospitals during 2016-2017. Syndromic surveillance in West Virginia (Called Electronic Surveillance System for Early Notification of Community-Based Epidemics or ESSENSE) provides real-time data for public health and hospitals to monitor what is happening in emergency departments across the state. Hospitals report chief complaint and final diagnosis (ILI=Influenza or (Fever and (Cough or Sorethroat) and not NonILI=Fevers) emergency room visits of ILI as a total proportion of total patients seen. Reports of ILI should always be viewed within the context of laboratory data and other indicators of influenza activity.



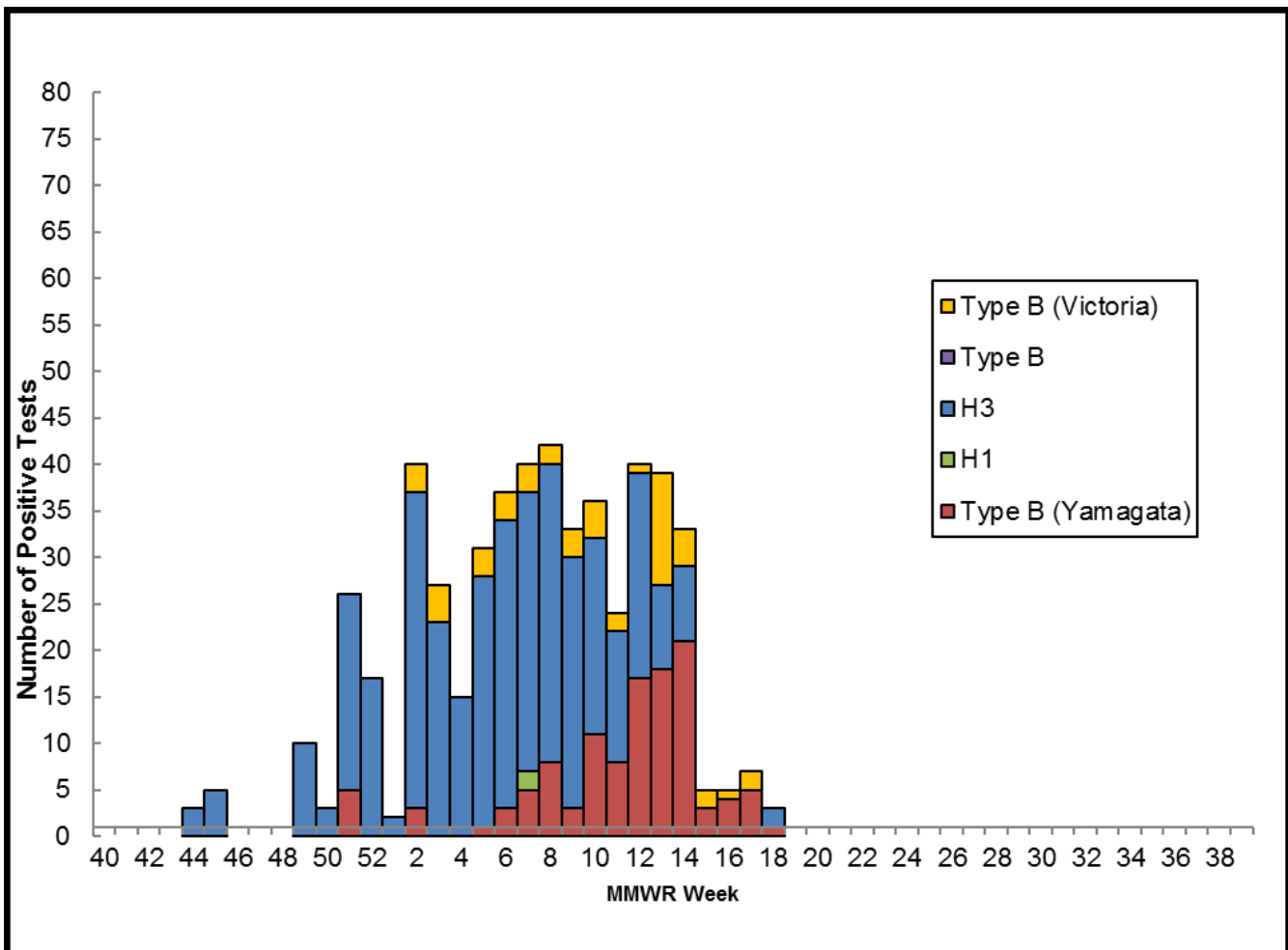
West Virginia Hospital and Referral Laboratory Data 2016-17 Season

The figure below displays the number of positive tests for influenza by type (A or B) as reported by hospital and referral laboratories that test by any of the following methods: polymerase chain reaction (PCR), immunofluorescence (IFA or DFA), or culture. Rapid test results are not included in the totals because of the low positive predictive value during times of low influenza activity. This figure is useful for assessing changes in influenza activity and type of circulating viruses. This information, together with information on influenza A subtype can be useful in guiding empiric therapy for influenza-like illness. This figure is also useful for pinpointing the first identification of influenza in the state of West Virginia. During a typical influenza season, positive identifications by laboratories usually precede the seasonal increase in influenza-like illness by many weeks. The left-hand Y-axis gives the total specimens isolated by these laboratories; and the right-hand Y axis gives the reported cases of influenza-like illness.

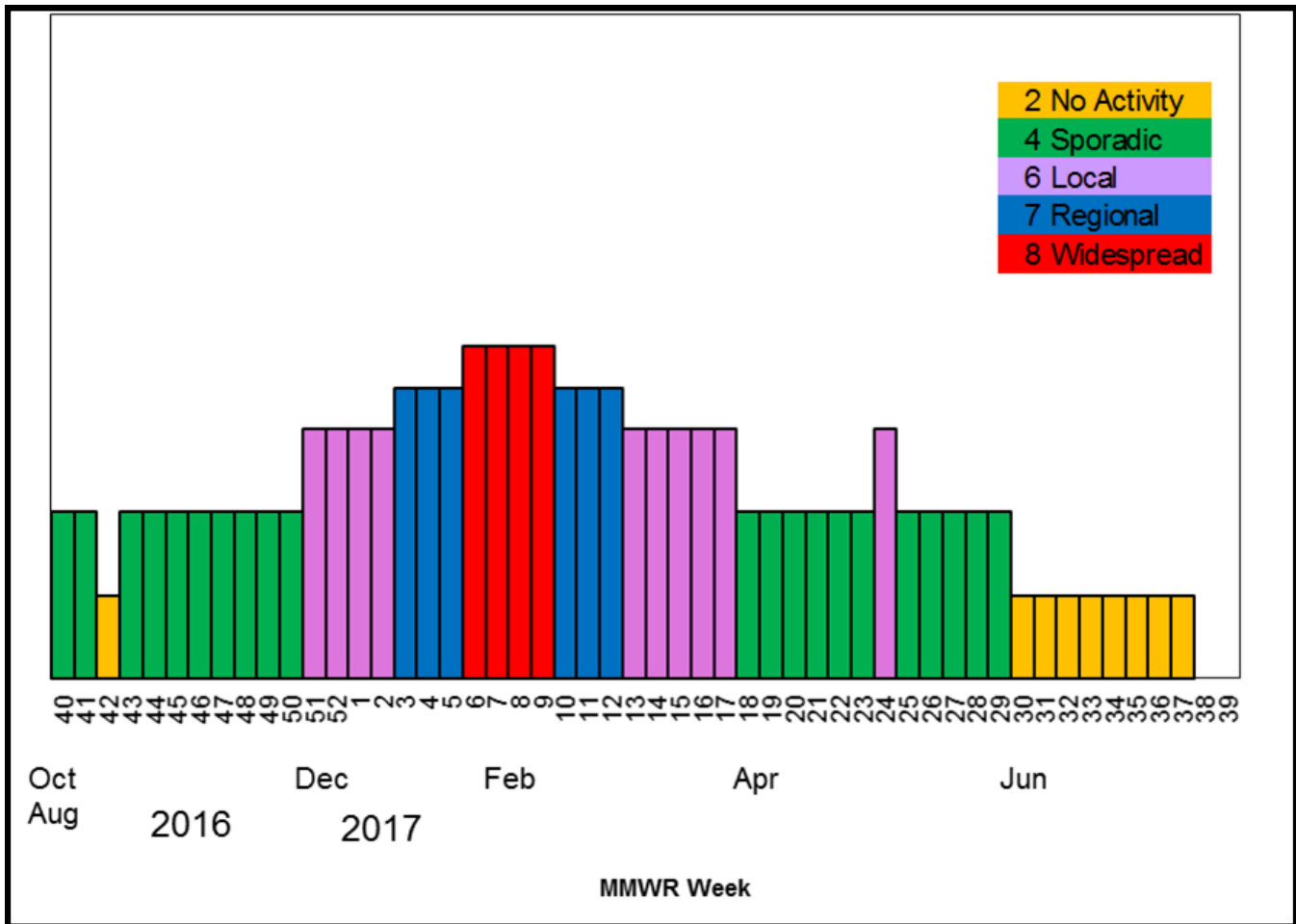


Office of Laboratory Services Data 2016-2017

The Office of Laboratory Services accepts influenza surveillance specimens from the following sources: respiratory outbreaks; up to five influenza A isolates per week from hospitals; and up to five specimens per week from sentinel providers. The Office of Laboratory Services can type and subtype influenza isolates; thus this data is useful for identifying which influenza strains are currently circulating in West Virginia. This data can also be used by physicians to guide empiric antiviral therapy.



Influenza Activity in West Virginia, 2016-2017 Flu Season



Influenza Activity - West Virginia reports the level of “Influenza Activity” to the Centers for Disease Control and Prevention every week, using this national definition:

No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.

Sporadic: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.

Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.

Regional: Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.

Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.