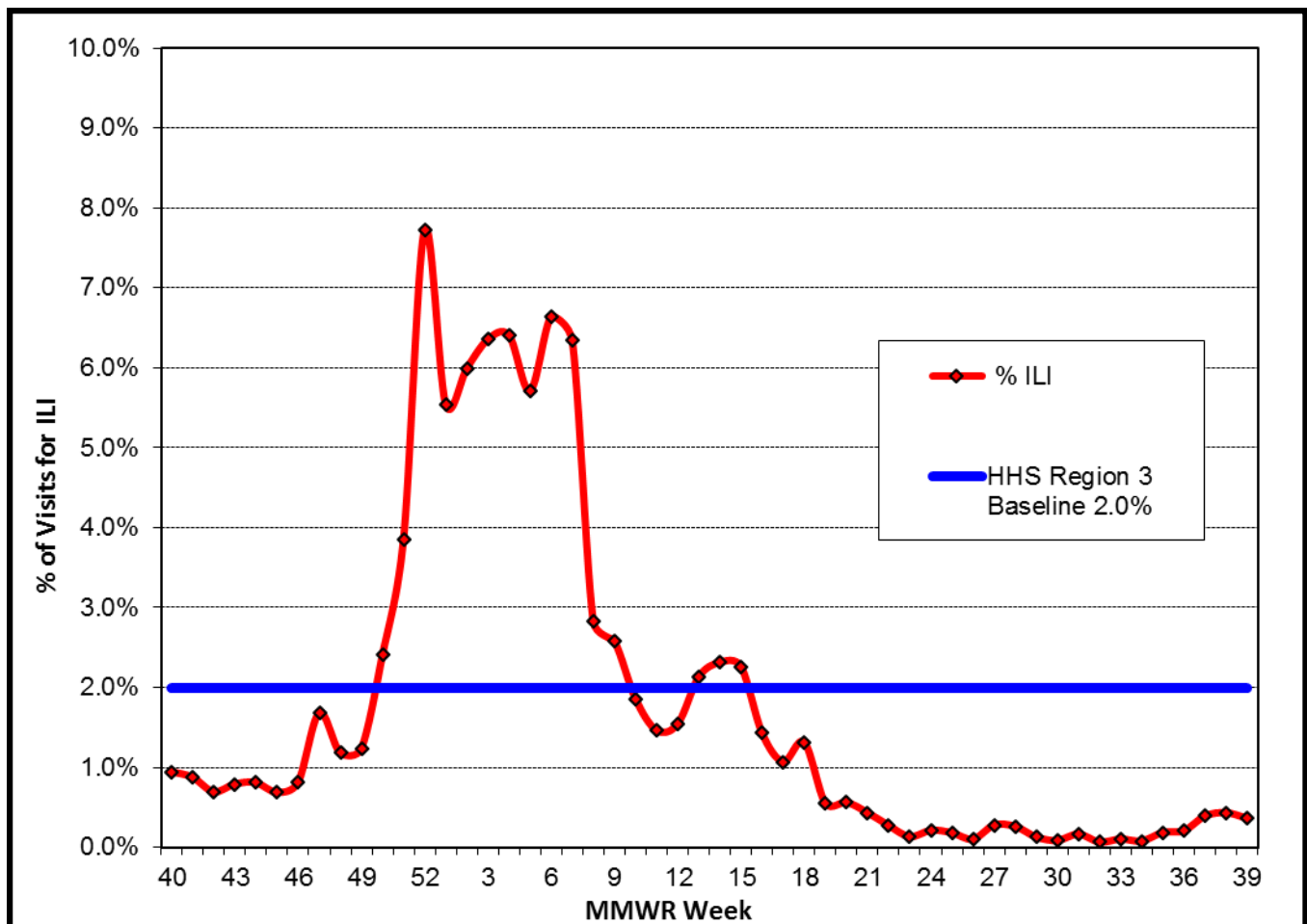


Influenza Surveillance

(Current as October 6, 2018)

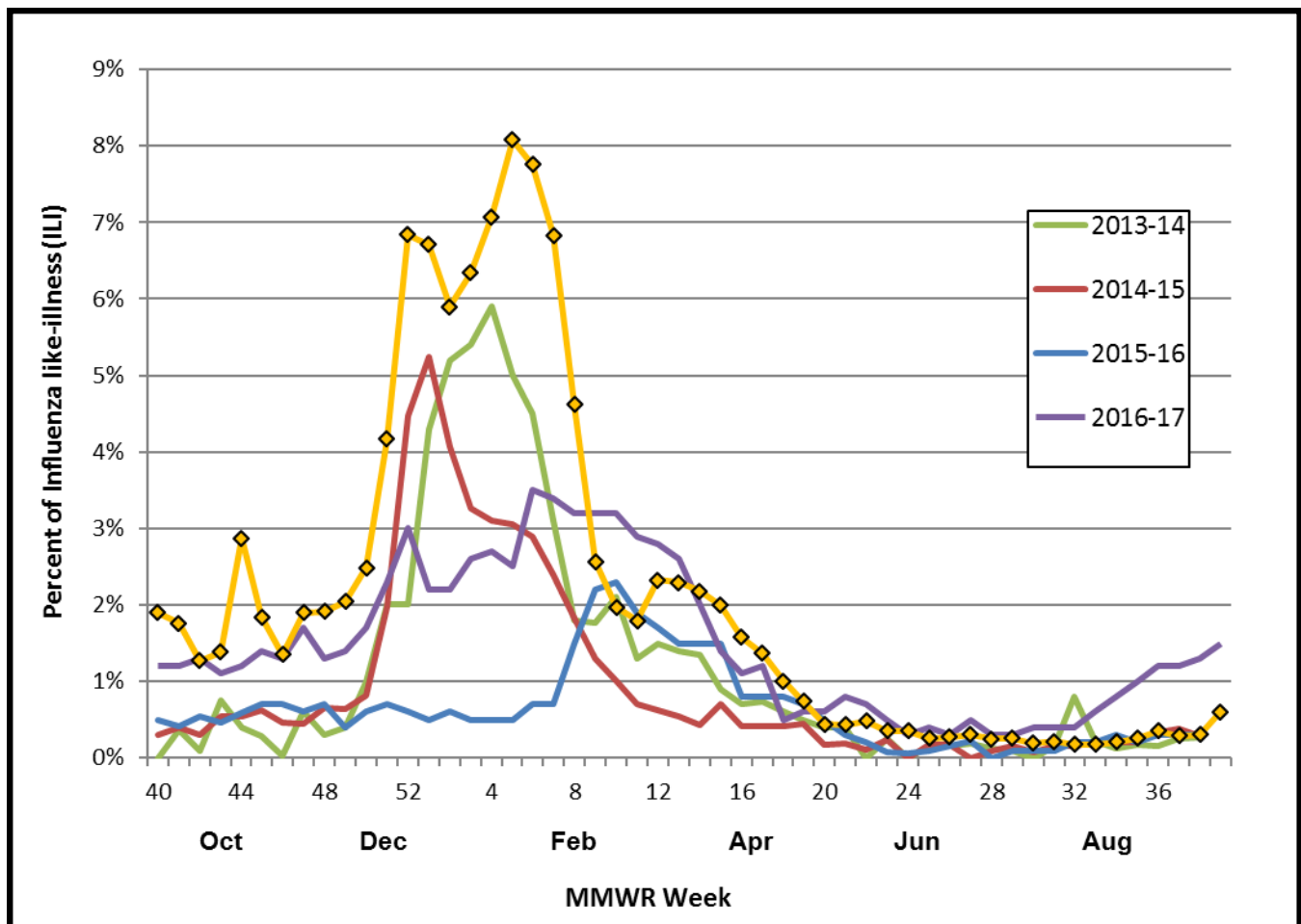
West Virginia Sentinel Provider Data, 2017-18 Season

The figure below demonstrates the percent of visits for influenza-like illness (ILI) reported by West Virginia sentinel providers during the 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 2.0% 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.



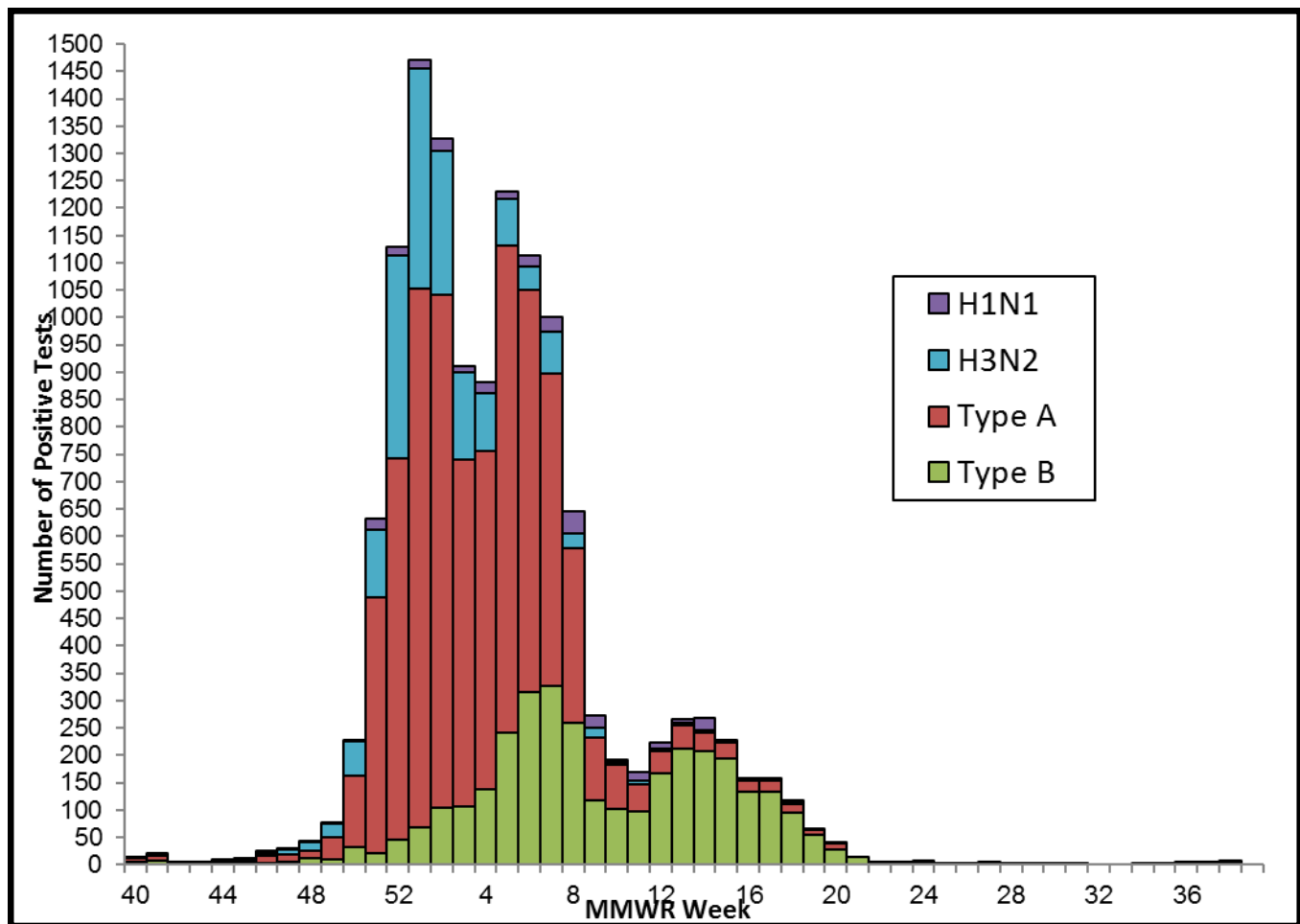
Temporal Trend of Influenza-like Illness (ILI) Reported by WV Hospitals

The figure below displays the number of influenza-like illness (ILI) cases reported during the 2013-14, 2014-2015, 2015-2016, 2016-2017, and 2017-2018 influenza seasons. ILI is defined as fever > 100° F AND cough and/ or sore throat without another identified cause. ILI can be caused by a variety of respiratory viruses, so data should always be interpreted in the context of laboratory data. ILI cases are reported by physicians to local health departments. Local health departments report the data weekly to the state. The Centers for Disease Control and Prevention compiles weekly data and reports the data by "MMWR week." Usually, there are 52 MMWR weeks per year. Some years, there are 53 MMWR weeks.



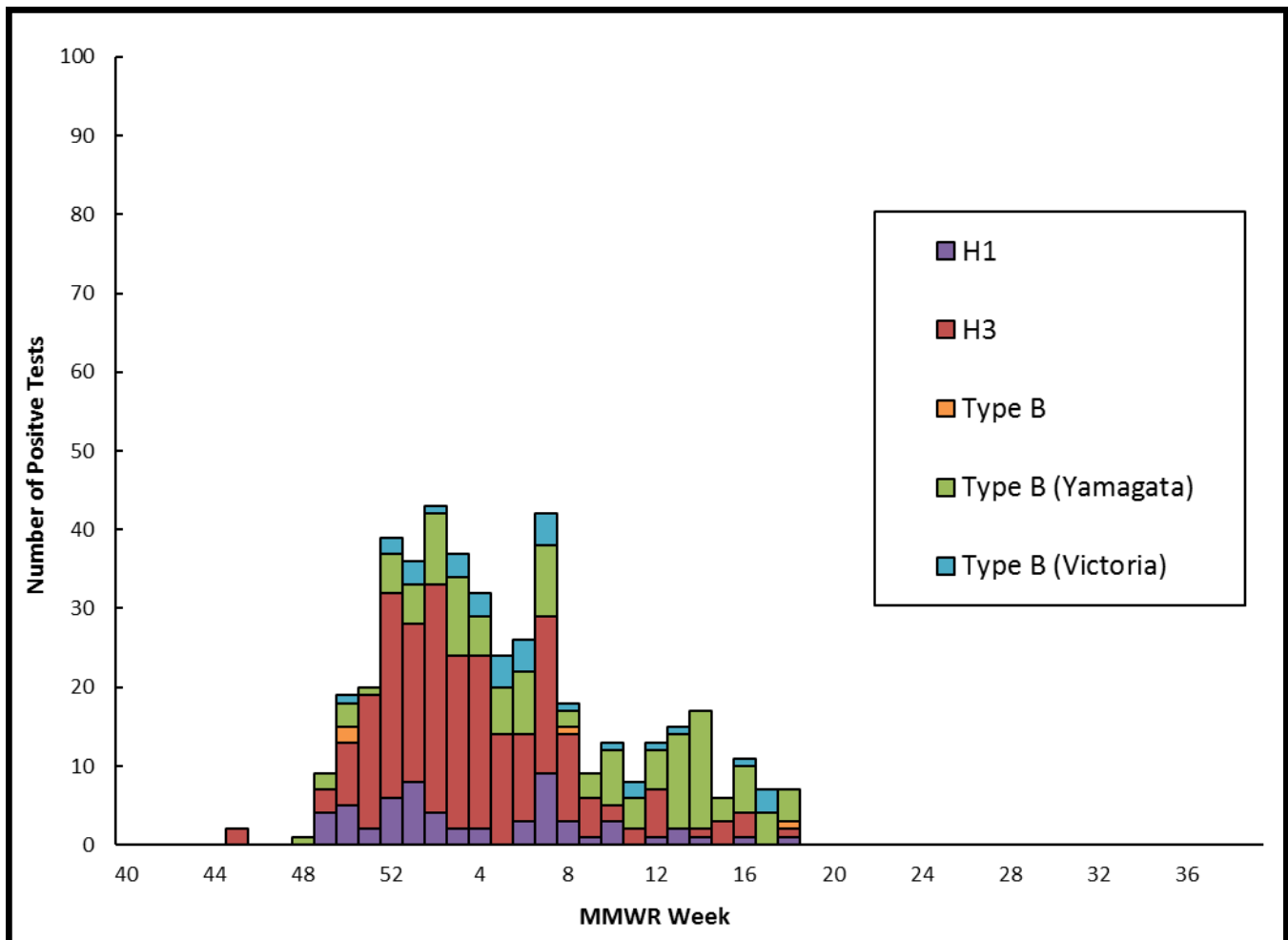
West Virginia Hospital and Referral Laboratory Data 2017-18 Season

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.

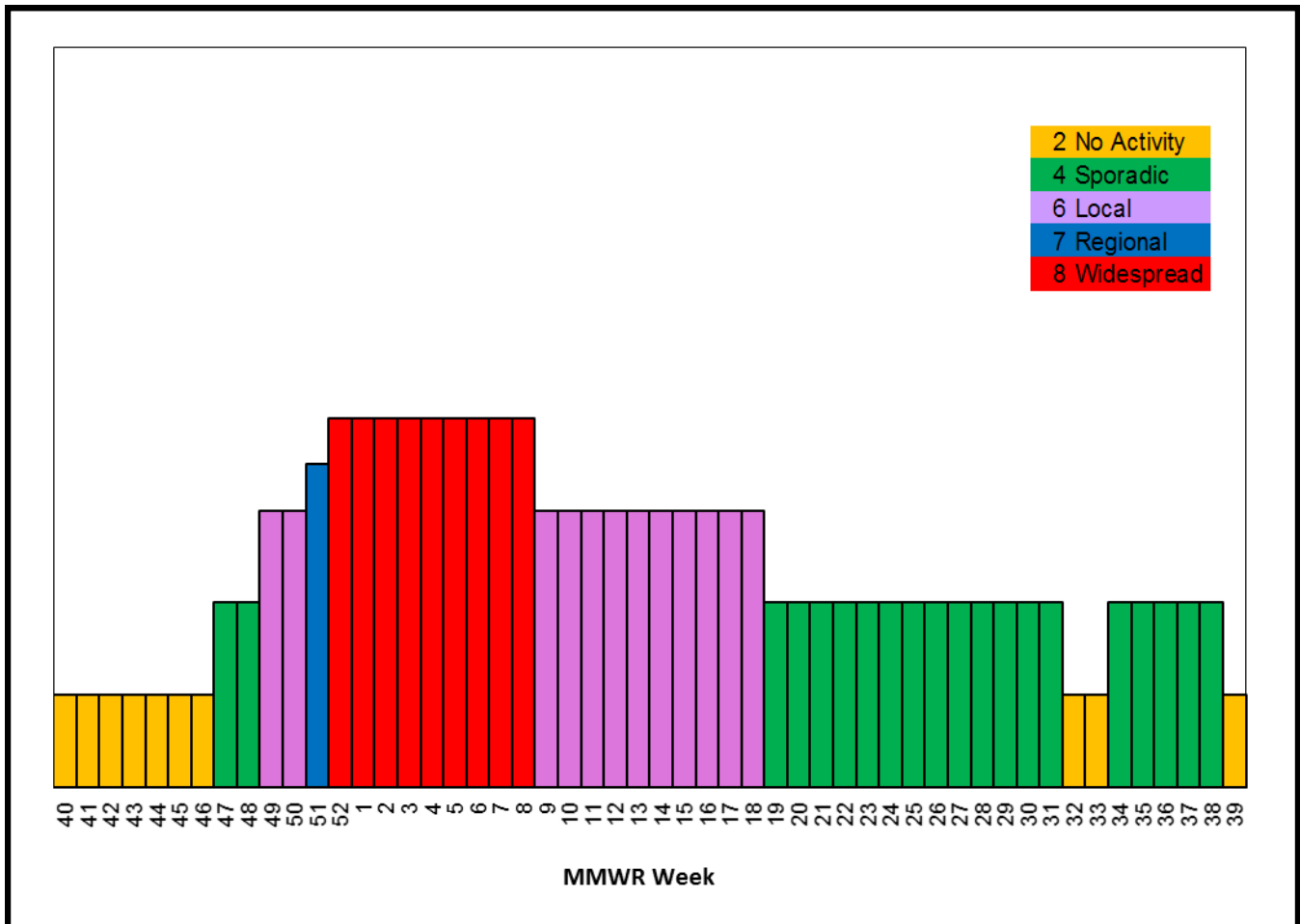


Office of Laboratory Services Data 2017-2018

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, 2017-2018 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.