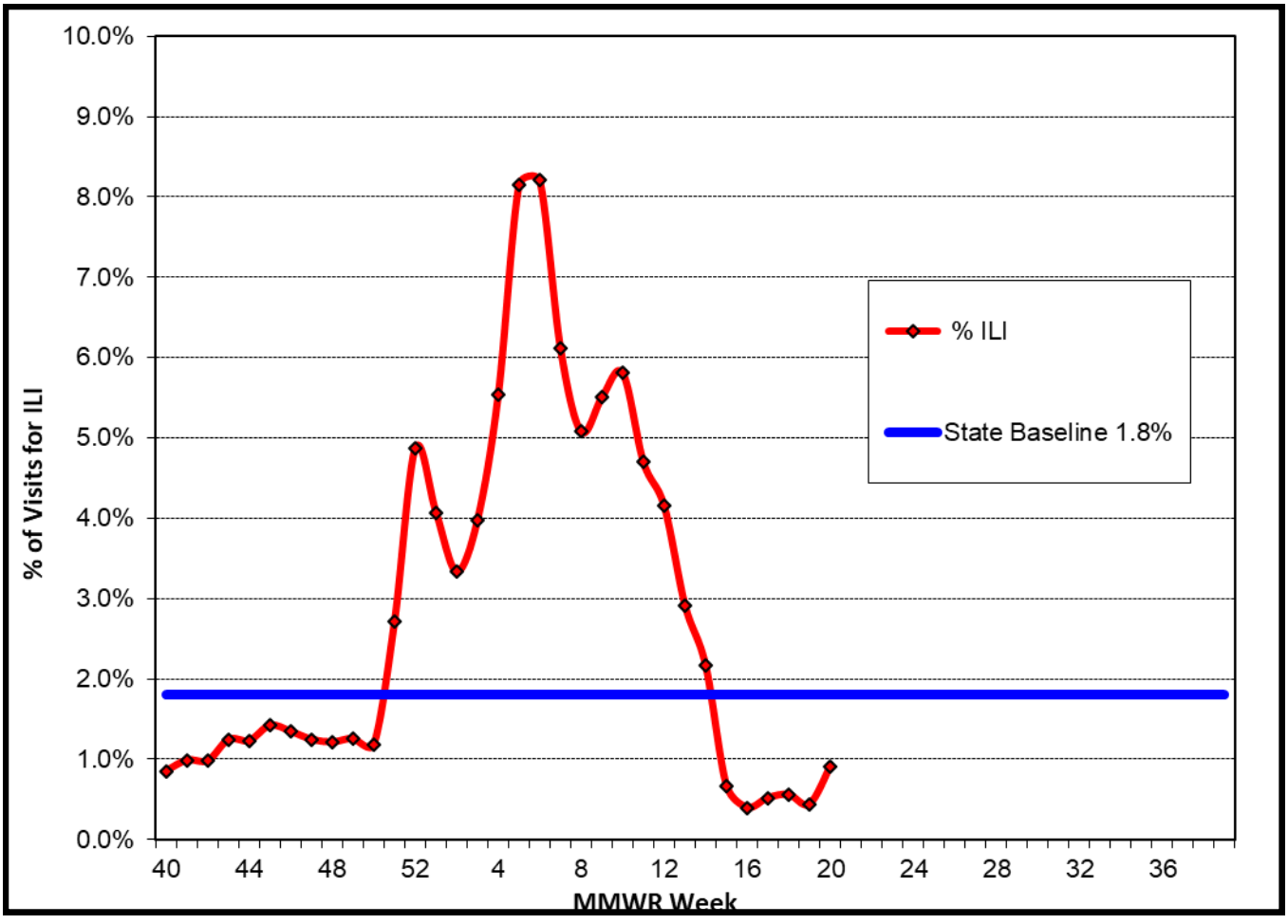
Influenza Surveillance

Current as May 16, 2020

West Virginia Sentinel Provider Data, 2019-20 Season

Sentinel providers are healthcare providers who voluntarily report cases of influenza-like illness (ILI) as a proportion of total patients seen on a weekly basis. ILI is defined as fever > 100˚ F AND cough and/ or sore throat without another identified cause. The figure below demonstrates the percent of visits for influenza-like illness (ILI) reported by West Virginia sentinel providers throughout the influenza season. If the percentage of visits due to ILI is higher than 1.8%, then high rates of influenza transmission are likely. ILI can be caused by a variety of respiratory viruses, so data should always be interpreted in the context of laboratory data.

"MMWR Week" refers to the number assigned to each week of the year by the CDC, with January 1st falling either in Week 1 or Week 52/53. MMWR Week 40 is usually the first week of October.

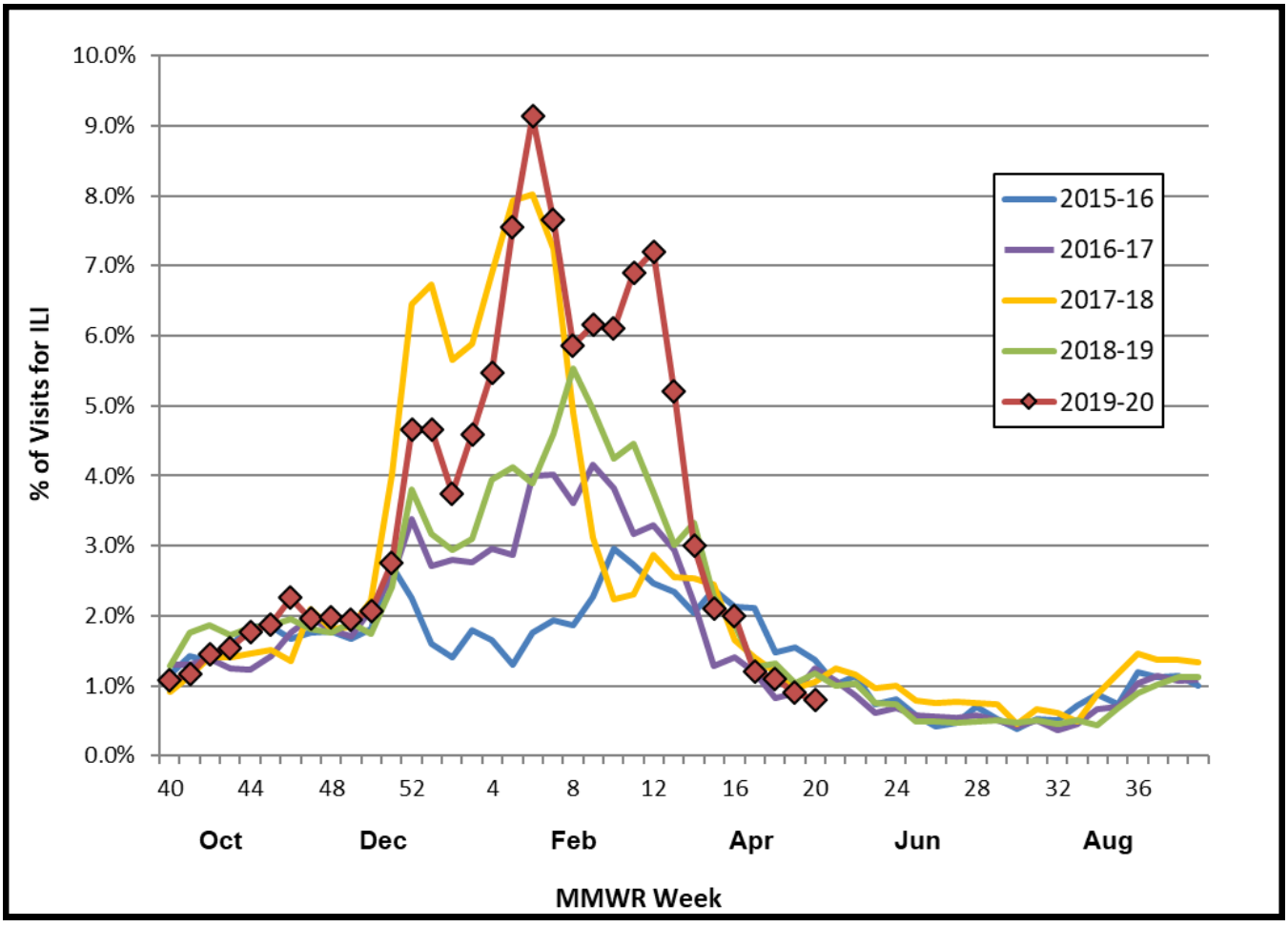


West Virginia Hospital Data, 2019-20 Season

Most West Virginia hospitals and some urgent care facilities report ILI in the ESSENCE surveillance system. ESSENCE pulls data by ICD-10 and chief complaints. Like the sentinel provider data, this data can show the duration and severity of the current influenza season.

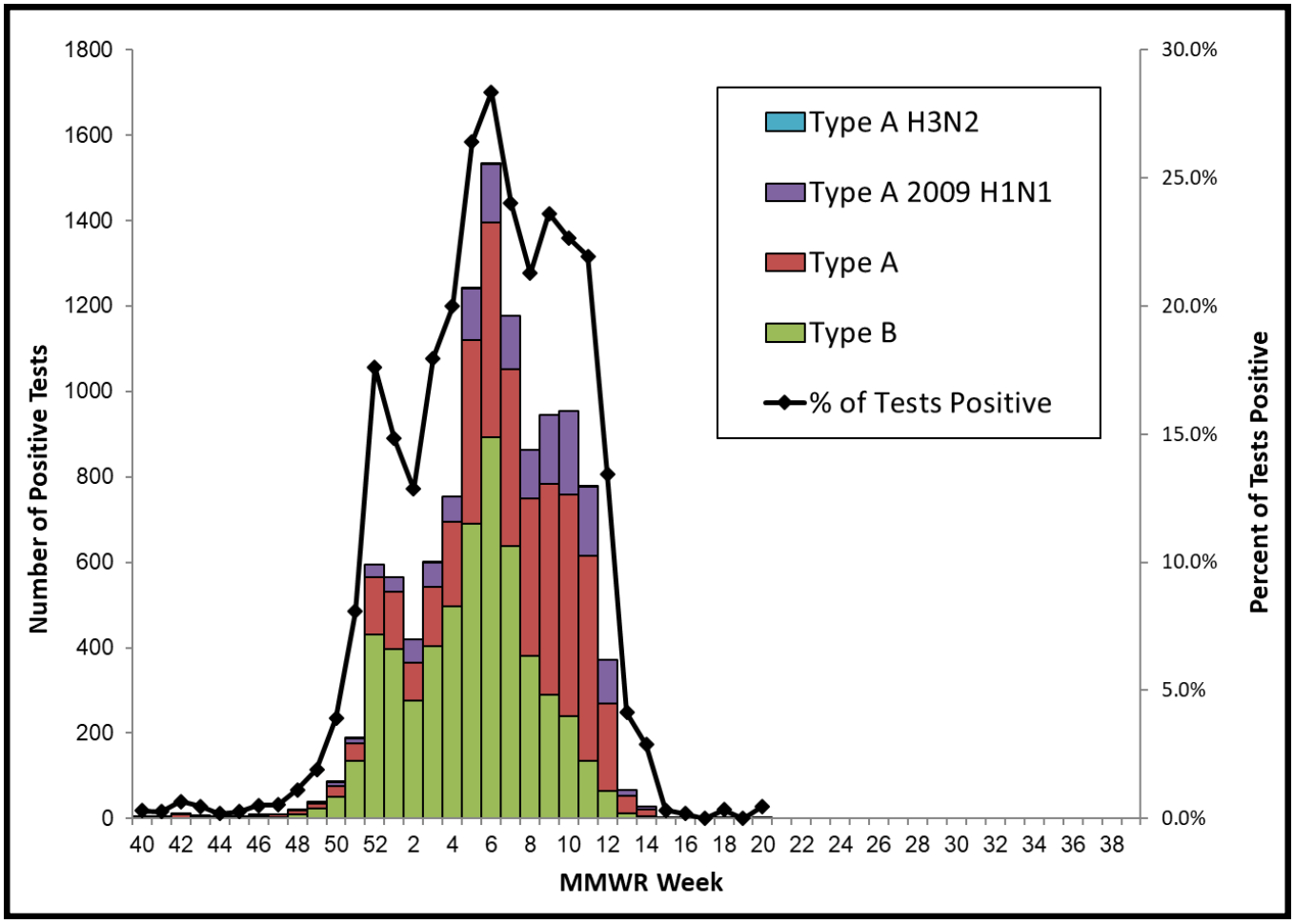
The figure below displays the percentage of emergency visits* that were for influenza-like illness and that were reported during the current influenza season and the four preceding seasons (2015-2016, 2016-2017, 2017-2018, 2018-2019, and 2019-2020). As demonstrated in this graph, influenza seasons vary in severity and duration. When peak influenza activity will occur and how severe it will be can not be predicted.

*Updated data query only pulls visits considered emergency at any point during the visit, including those in which the patient was ultimately admitted to a hospital.



West Virginia Hospital and Reference Laboratory Data, 2019-20 Season

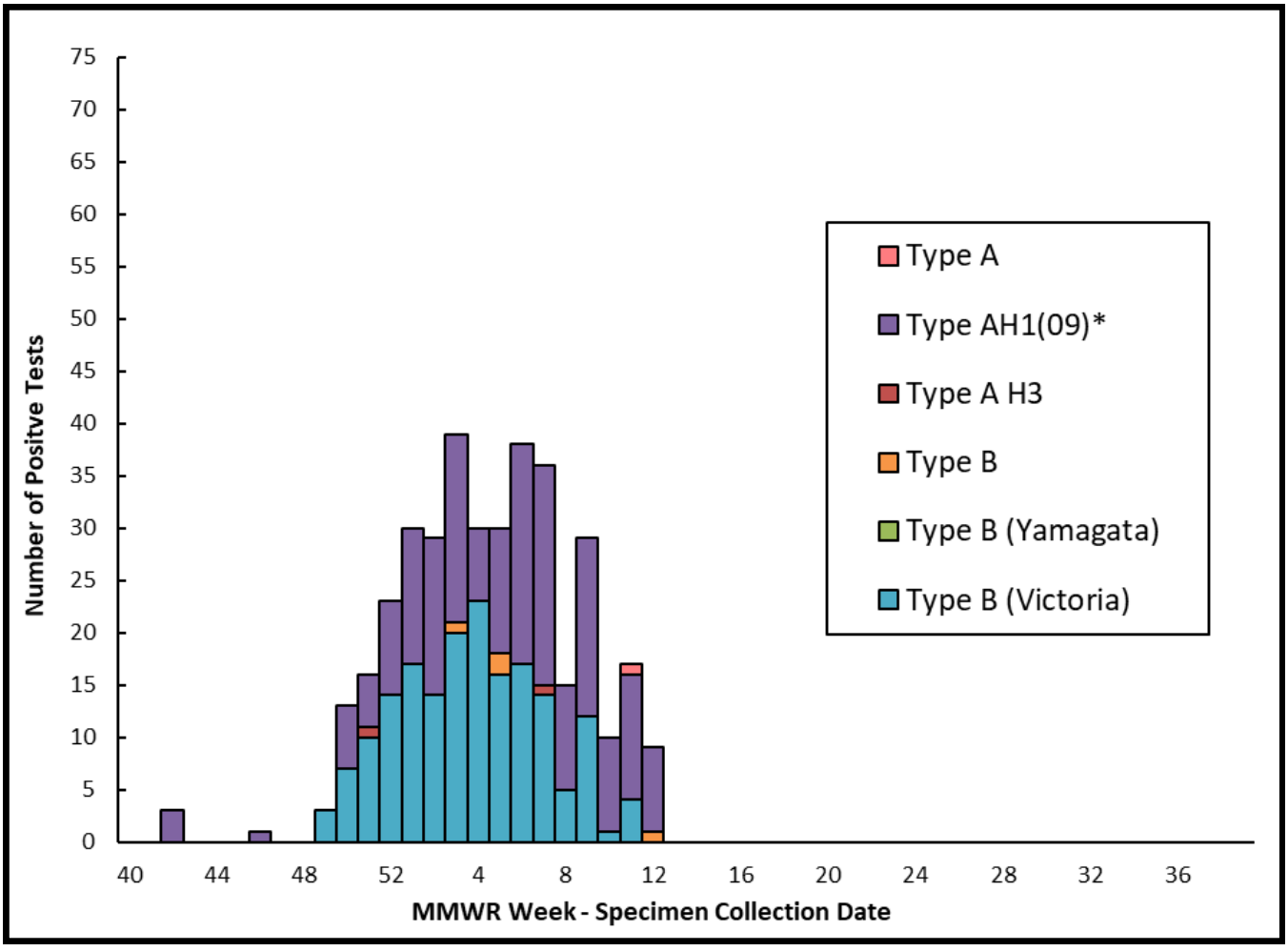
The figure below displays the number of positive tests for influenza by type (A or B) and by subtype as available (A H3N2 and A 2009 H1N1), as reported by hospital and reference laboratories that test by any of the following methods: polymerase chain reaction (PCR), immunofluorescence (IFA or DFA), or culture. Rapid antigen detection tests are not included in the totals because of the low positive predictive value during times of low influenza activity. This figure is useful for determining what influenza viruses are circulating and when they begin to do so. This information, together with information on influenza A subtype, can be useful in guiding empiric therapy for influenza-like illness. During a typical influenza season, positive identifications by laboratories usually precede the seasonal increase in influenza-like illness by many weeks.



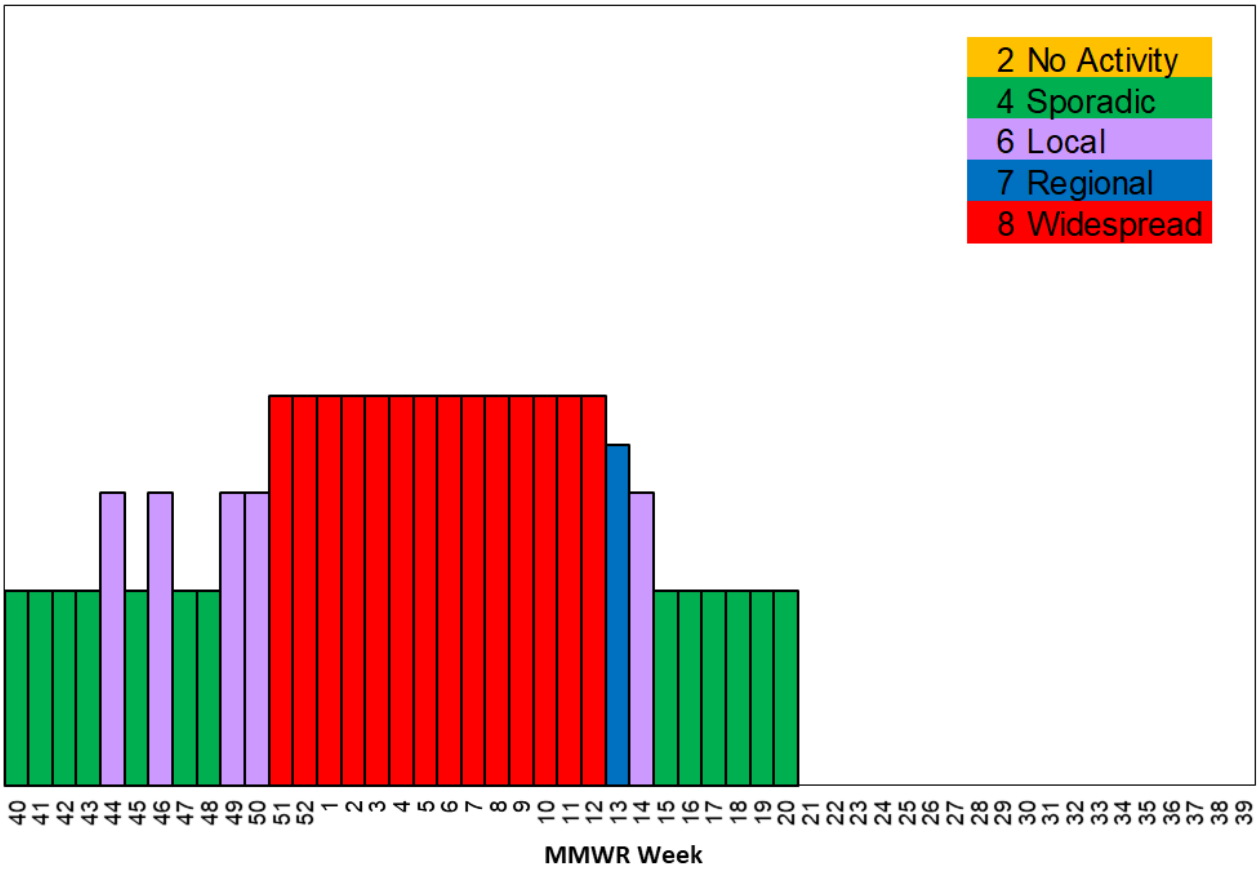
Office of Laboratory Services Data, 2019-2020 Season

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.

*“Type AH1(09)” is the Influenza A H1N1 virus that emerged in the 2009 pandemic and has been in seasonal circulation ever since. It is labeled on the previous page as Type A H1N1 2009.



Influenza Activity in West Virginia, 2019-2020 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.