Assessment of State-Level Influenza Season Severity — Utah, 2017–18

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• Seasonal influenza severity had not yet been assessed at the state level in the United States (US)
• US implemented World Health Organization’s Pandemic Influenza Severity Assessment (PISA) framework nationally starting in 2017–18 season (1)
• Given variability in influenza activity from season to season and geographically, real-time state-specific estimates of seasonal influenza severity may help states tailor their public health communications and resource allocation during influenza seasons
• We developed disease severity thresholds to characterize the severity of the influenza season in Utah

We categorized the 2017–18 season (through February 10, 2018) and the 2014–15 season, as high severity because ≥2 priority indicators peaked above their IT90 (Figure 2)
All other seasons in Utah were categorized as moderate severity because ≥2 indicators peaked between IT50 and IT90
Utah’s severity assessments matched those at the national level for all seasons, including the interim 2017–18 season

• During February 2018 we met with stakeholders at the national, state, and local levels to identify appropriate and available indicator sources to assess the severity of the influenza season in Utah
• Applied the Moving Epidemic Method (MEM) for a rapid mid-season assessment of weekly influenza season severity to 3 Utah influenza indicators with at least 5 seasons of data
• MEM calculates intensity thresholds (ITs) using the geometric mean and standard deviation of the 30 highest weekly values, distributed evenly across seasons to find one-sided confidence intervals
• We established 3 ITs that corresponded to a 50% (IT50), 10% (IT90) and 2% (IT98) chance of exceedance during a given influenza season
• For each surveillance indicator, we graphed weekly data against the calculated severity thresholds
• We made an overall seasonal severity assessment based on where the majority of indicators peaked

References