

Partners Respond to PHAST Call for Data

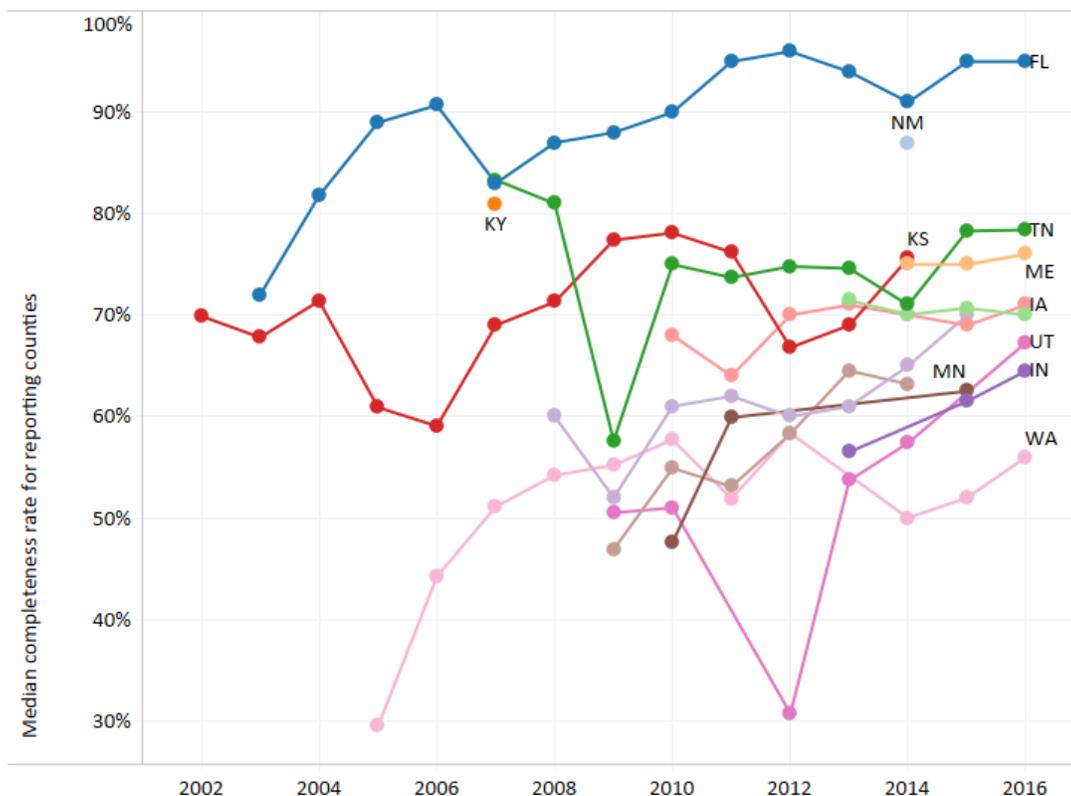
In the face of increasing outbreaks of vaccine-preventable diseases, public health decision makers urgently need reliable, standardized, and comparable data on immunization completeness for 19-to-35-month-old toddlers, who lack the school immunization requirements of older children. States measure toddler immunization rates differently, making it hard to compare and learn from trends across states. By adopting [PHAST’s standardized measures](#), states are investing in improving data and child health for the future. But we also need information now.

With this in mind, PHAST [sent out a call for data](#) on childhood immunization completeness rates, and made a case for standardizing such data. **The response was encouraging.** Public health partners in twenty-two states shared data: six states provided data directly, and others made data publicly available online. PHAST’s interactive visual dashboard, available in fall 2017, will feature initial results from fourteen states with the most comparable data.

What the Data Can Tell Us—and What They Can’t (Yet)

The dashboard shows trends over time for median childhood immunization rates of counties within each state. There is great variation across states in their median childhood immunization rate, ranging from 52% to 95% in 2015 (Figure 1). Overall, immunization completeness rates seem to be gradually increasing and converging, but some states’ county-level rates appear to have plateaued in recent years.

Figure 1 County Medians of Childhood Immunization Completeness by State over Time



However, these data must be interpreted cautiously, because definitions of “childhood” differ across states (e.g. 0–60 months, 24–35 months, 19–35 months, etc.). Additionally, the sampling method, years sampled, and sample population for each state differ, with many states drawing completeness rates from non-mandatory immunization registries that provide non-randomized samples of the target population.

Childhood immunization rate variations within individual states are also noteworthy (Figure 2). For example, in Washington State, these rates vary widely across counties, from less than 30% to almost 80%. Those variations also differ considerably across states.

Implications and Questions Raised

Toddlers are at risk for vaccine-preventable diseases [for several reasons](#). Toddlers may be exposed in childcare settings, for which immunization requirements are inconsistent across states. Those not in formal childcare may be exposed to infection through older siblings who are in school. Unimmunized toddlers may put others at risk, such as grandparents, infant siblings, and others who may be immunosuppressed. It is imperative to track toddler immunization rates, due to this group's high risk and inconsistent immunization.

Broadly, **the dashboard data confirm that many toddlers are not receiving complete immunizations**. There may also be immunization inequities within states, as suggested by the wide distribution of completeness rates across counties within single states.

In addition to comparing immunization rates within and across states, and highlighting some trends across states and time, the dashboard data show gaps and limitations. These inconsistencies make starkly clear why we need standardized, comparable immunization data, and provide motivation to generate such data.

The dashboard data raise important questions. For example, why have some states' improvements in immunization rates leveled off in recent years? Are there demographic inequities? Such questions give states and researchers a starting place to plan next steps, such as using other resources to determine localized factors that may impede immunization rates from improving beyond a particular threshold.

The dashboard also shows gaps in available data, strengthening the case for improving data collection of early-childhood immunization completeness. Such data are more readily available and comparable for kindergarten-age children, largely because of school requirements. Kindergarten-age children [generally have higher, more consistent rates](#) of completeness, due in part to these policies.

PHAST's creation of an interactive dashboard is a step in the right direction, pulling together data from many states to compare immunization completeness rates. If all states measured immunization completeness the same way, using the [PHAST Measures](#) definitions, public health officials and researchers would have access to a wealth of meaningful data to understand and improve barriers to childhood immunization completeness.

Recommendations and Next Steps

PHAST created a set of [recommended standardized measures](#) for public health activities and services to improve the quality of public health data on immunization and other topics. Get involved by sharing ideas, giving feedback on the measures and visualizations, or explaining how and why you would use these data for your practice or research. You can also share your data with our new data capture tool, advocate for your state to share data on immunizations and vaccine-preventable diseases, or standardize your agency's childhood immunization data.

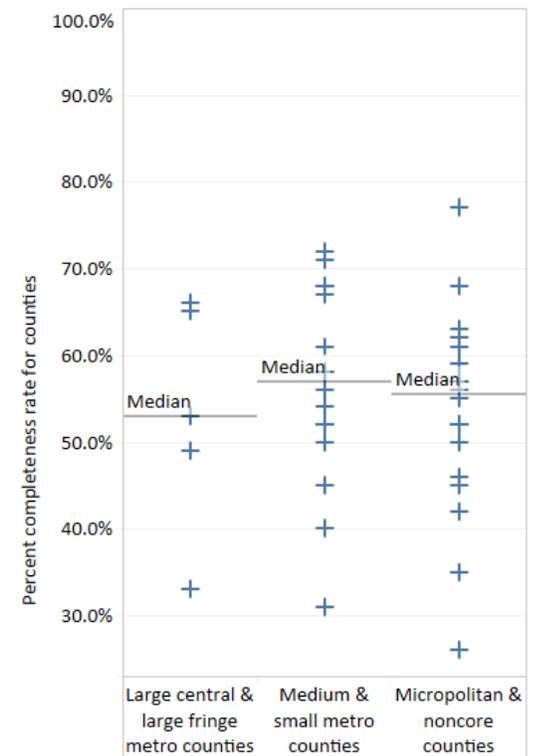
For a complete list of standardized PHAST Measures, visit phastdata.org/measures

To view the complete dashboard, visit phastdata.org/viz/immunizations

For questions or to share data, test the data capture tool, or join PHAST's mailing list, contact Melinda Schultz at schulm5@uw.edu

Figure 2

Washington State Counties' Percent of Children with Complete Immunizations by County Population Group (2016)



Note: Population groups derived from the [NCHS](#)