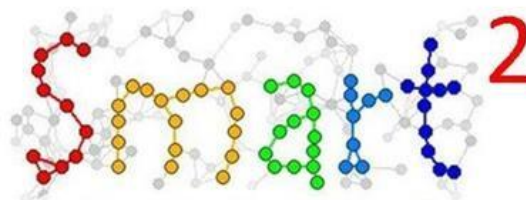


# SURVEILLANCE, MONITORING ABSENTEEISM and RESPIRATORY TRANSMISSION IN SCHOOLS UNIVERSITY OF PITTSBURGH

The SMART<sup>2</sup> research team is sending this report to thank the students, parents, administration and faculty of Washington School District for participating this year. Substantial progress has been made to understand the connection between absences in K-12 schools and the spread of influenza in the community. This will help improve our public health response to pandemic influenza and other respiratory diseases. For more information, please visit <http://www.smart.pitt.edu>



## WHAT WAS ACCOMPLISHED?

- The entire Washington School District participated in the 2015-2016 school year. Student participation rate was 98%.
  - 6,986 absence events were identified during our study.
  - 189 students were found with Influenza-like Illness (ILI), which is defined as fever > 100°F coupled with a cough or sore throat.
- SMART2 enrolled 165 families from all participating school districts in a family cohort study. Families reported symptoms every week via an electronic reporting system. We found 200 ILI and 31 cases of flu through our cohort families.

## Laboratory Confirmed Influenza

Washington	Students	ILI	% ILI	Flu A	Flu B	Total Flu	% Flu
Park Elementary	502	91	18%	5	8	13	2.6%
Park Intermediate	351	38	11%	1	2	3	0.9%
Washington Junior High	335	34	10%	0	0	0	0.0%
Washington Senior High	293	26	9%	0	2	2	0.7%
Total	1481	189	13%	6	12	18	1.2%

## WHAT WAS FOUND?

- SMART<sup>2</sup> has taken the first steps in creating a predictive model for influenza based on surveillance of school absenteeism. This can be used in school health planning, and in response to seasonal and pandemic influenza.
- Increased absenteeism in elementary schools or specific grades may reflect early increases influenza circulation. This could initiate school-based vaccination programs to reduce school and community influenza transmission.
- A preliminary look at data from the Family Cohort Study suggests that there may be statistically verifiable connections between absences at school and influenza at home.
- We continue to recommend annual influenza vaccination for all students, especially elementary students, unless they cannot receive the vaccine for a medical reason.

SMART<sup>2</sup> staff is currently in the process of analyzing this data, and writing reports for the school community and for scholarly publication. SMART<sup>2</sup> is continuing in 2016-17 school year, but with reduced funding; we will not be returning to Washington SD.

SMART Schools is a partnership of the University of Pittsburgh, Johns Hopkins University, the University of Florida, US Centers for Disease Control and Prevention with Canon-McMillan SD, Washington SD and Fox Chapel Area SD