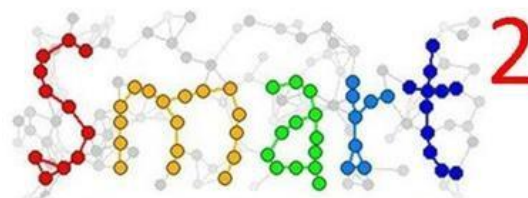


# SURVEILLANCE, MONITORING ABSENTEEISM and RESPIRATORY TRANSMISSION IN SCHOOLS UNIVERSITY OF PITTSBURGH

The SMART<sup>2</sup> research team is sending this report to thank the students, parents, administration and faculty of Fox Chapel Area schools 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?

- Three schools participated in the 2015-2016 school year: O'Hara elementary, Fox Chapel Area High School. Student participation rate was 95%.
  - 7,226 absence events were identified during our study.
  - 183 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

Fox Chapel	Students	ILI	% ILI**	Flu A	Flu B	Total Flu	% Flu**
O'Hara Elem	702	130	19%	19	23	42	6.0%
FCA High School	1360	92	7%	2	3	5	0.4%
Dorseyville Middle*				1	0	1	
Total**	2062	222	11%	22	26	48	2.3%

\* Found through our Cohort Study \*\* %-age does not include students from Dorseyville Middle

## 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 planning to return for the 2016-17 school year to continue this study.

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