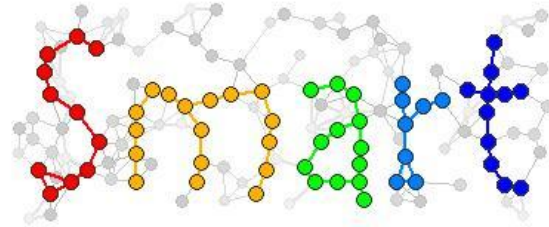


SOCIAL MIXING AND RESPIRATORY TRANSMISSION IN SCHOOLS

UNIVERSITY OF PITTSBURGH

Canon-McMillan School District has completed the second year of the SMART study. Parents and students - **thank you** for being part of this important project. Substantial progress has been made in gathering contact data on how children mix in and out of school. The data from SMART will be further analyzed to better

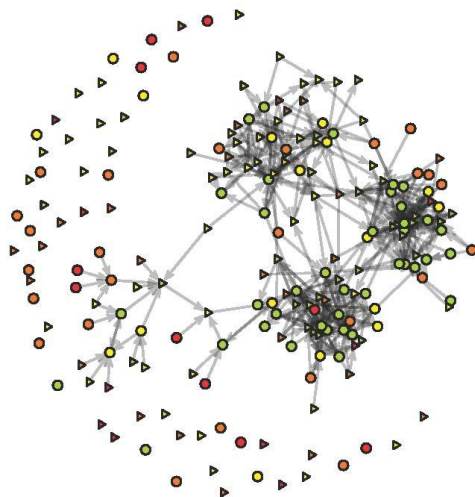


understand how respiratory infectious disease is spread in schools. It is hoped that SMART results will be useful to inform future guidance and policy on school response to seasonal and pandemic influenza. For more information go to www.smart.pitt.edu

WHAT WAS ACCOMPLISHED?

- 1,843 Students in 7 schools participated: Muse, First Street, Borland Manor, and Wylandville Elementary, and Cecil and North Strabane Intermediate.
- Absentee/influenza surveillance was done from December to April. 395 students had Influenza-like Illness and 349 were tested for the flu. Flu A was found in 45 (13%) and flu B in 119 (29%); 123 (35%) other respiratory viral infections were found.
- Students in Borland Manor Elementary and North Strabane Intermediate made national news by wearing motes over Election Day, 2012. Wylandville students wore motes over a snow day (never done before!) and completed contact diaries on their return to school. Muse and Cecil Intermediate students wore motes overnight.

SMART staff will use contact data and disease data to create realistic influenza simulations.



Network of Wylandville Elementary School This model, created from student interviews, shows the contact between students who both knew each other and came in contact during the day. Unconnected dots indicate students who were known, but not met.

SMART Schools is analyzing data, and writing reports and articles for publication. SMART presented findings at a national conference in June.

WHAT WAS FOUND SO FAR?

- Grade and classroom membership are the most important factors in determining social mixing in grade K-8 school children, but is less important with high school students.
- Mote and interview data reported contacts show similar patterns of social mixing.
- Data we collected is helping to create better models of disease transmission in schools.
- Both influenza A and B circulated widely in participating schools during the 2012-13 school year.
- 62.2% of children reporting influenza-like illness were found to be infected with a respiratory virus.