

Community Water Fluoridation and Dental Health Outcomes

A review of the Division of Public Health *Taking Action with Data* project findings



Overview



- Brief history on Community Water Fluoridation
- Background on the project
- Review of the findings
- Questions

History of Fluoride in Drinking Water

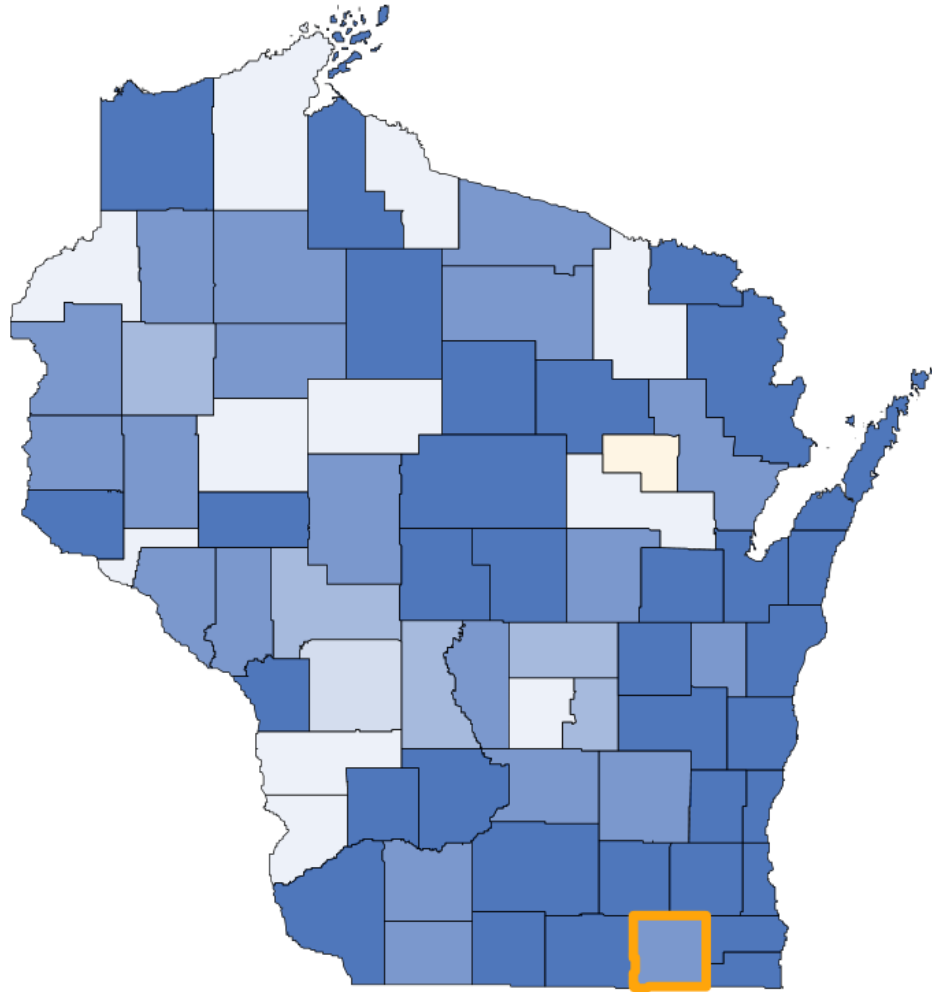


- Community Water Fluoridation (CWF) has been around for more than 70 years
- Proven effective at reducing decay in children and adults
- Fluoride ingested in drinking water impacts teeth differently than topical application
- The recommended optimal fluoridation level is currently 0.7ppm
- The return on investment: For every \$1 spent, \$38 in dental treatment is saved
- Oral health is a current Walworth County Community Health Improvement Plan priority



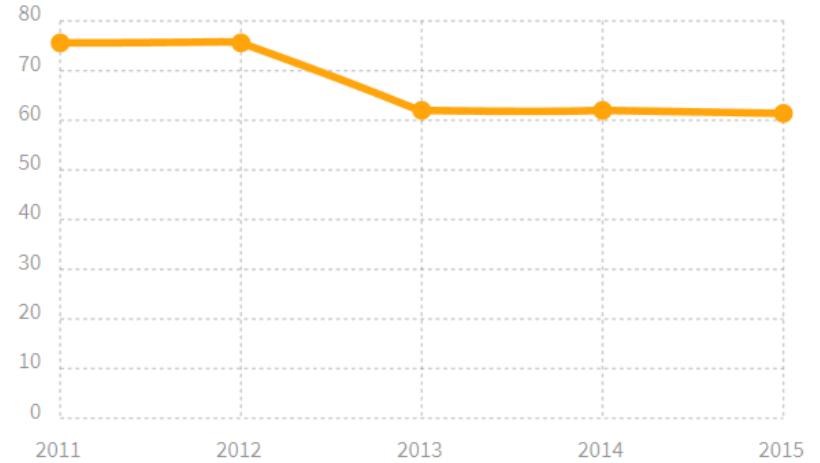
DATASET: Oral Health - Population on Fluoridated Public Water System - Percent of Population 2015 ~ County ~ Percent of Population **Current selection: Walworth**

+ ADD TO COMPARE



Walworth County - Percent of Population

Click on the graph points to filter the data to that year.



Legend - Percent of Population

- 80 to 100
- 60 to < 80
- 40 to < 60
- 20 to < 40
- 0 to < 20
- Current selection
- Data not available
- Data suppressed
- Confidence intervals

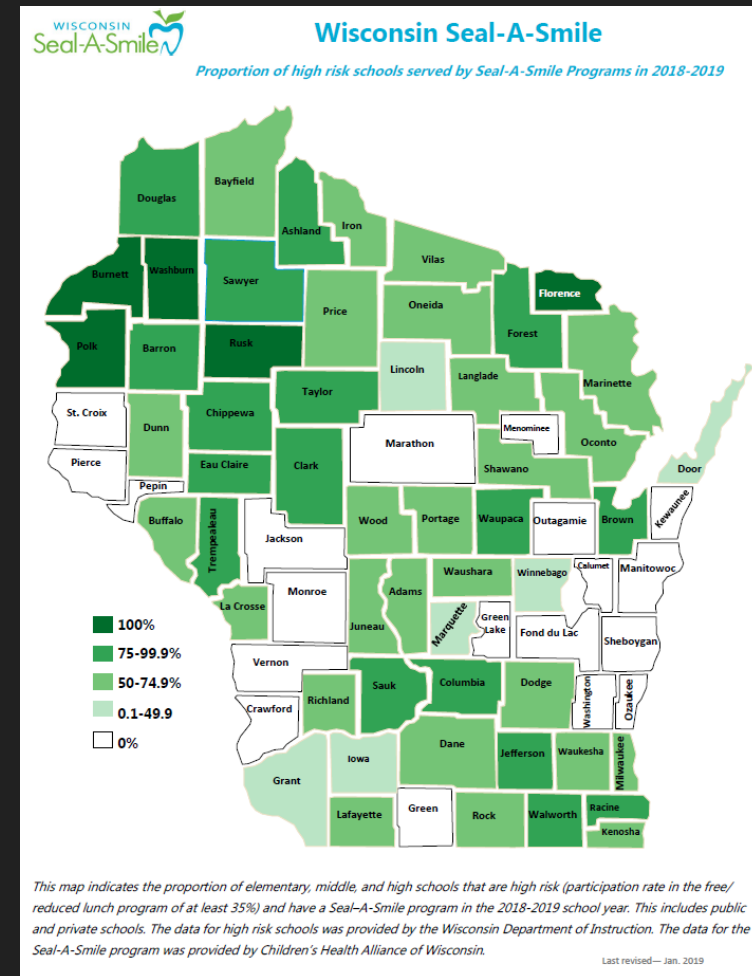
[Find out more information on the dataset.](#)

Percent of Walworth County Population with Fluoridated Water 2011-2015

Taking Action with Data



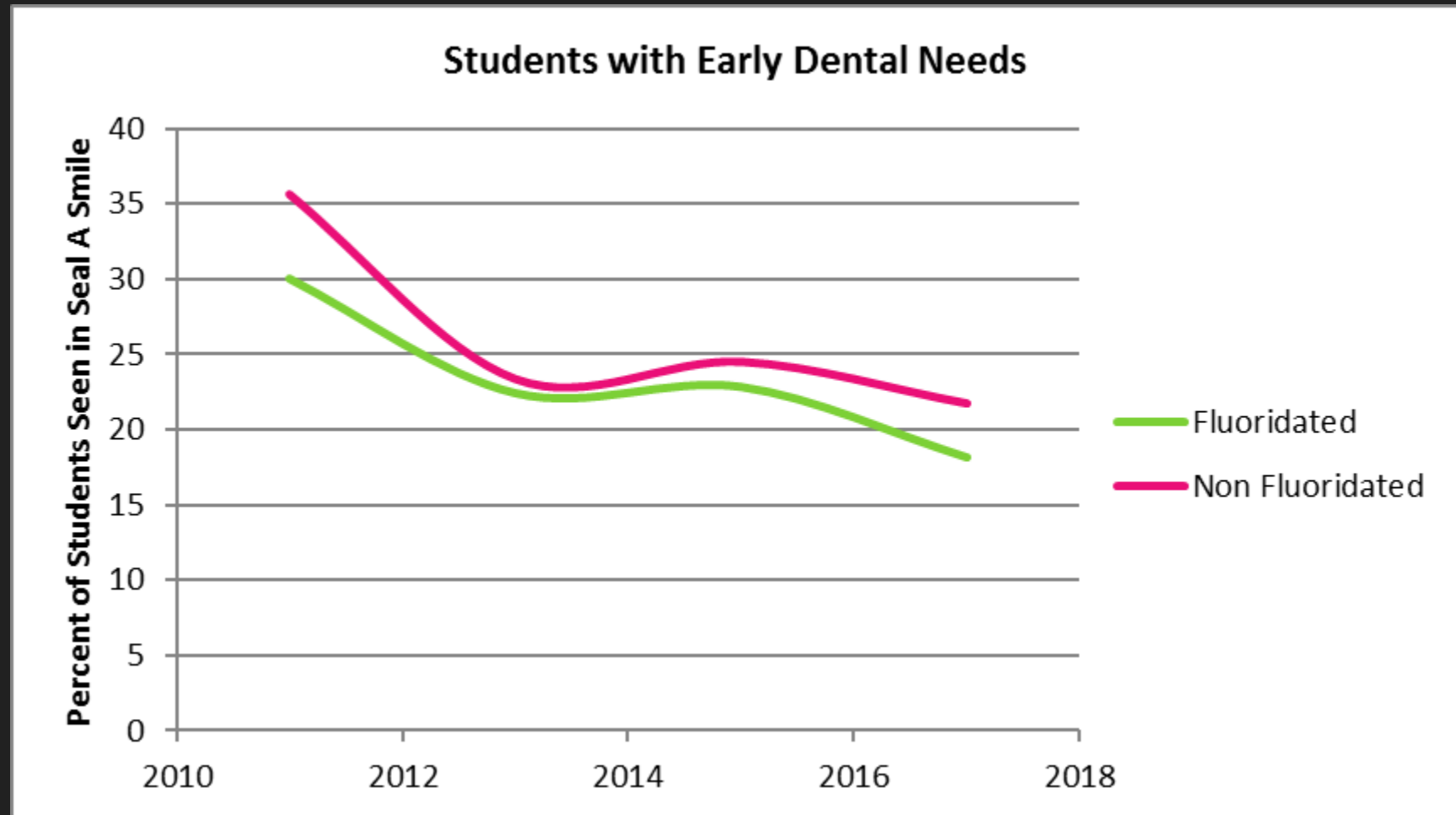
- Environmental Public Health Tracking Network
- Examined Seal-A-Smile data from 2010-2018
- Analyzed records for over 11,000 students
- Data included:
 - 6 school districts that were continuously fluoridated
 - 2 districts that removed fluoride during study years
 - 2 school districts that never had fluoride
 - Grades Pre-Kindergarten through 6th



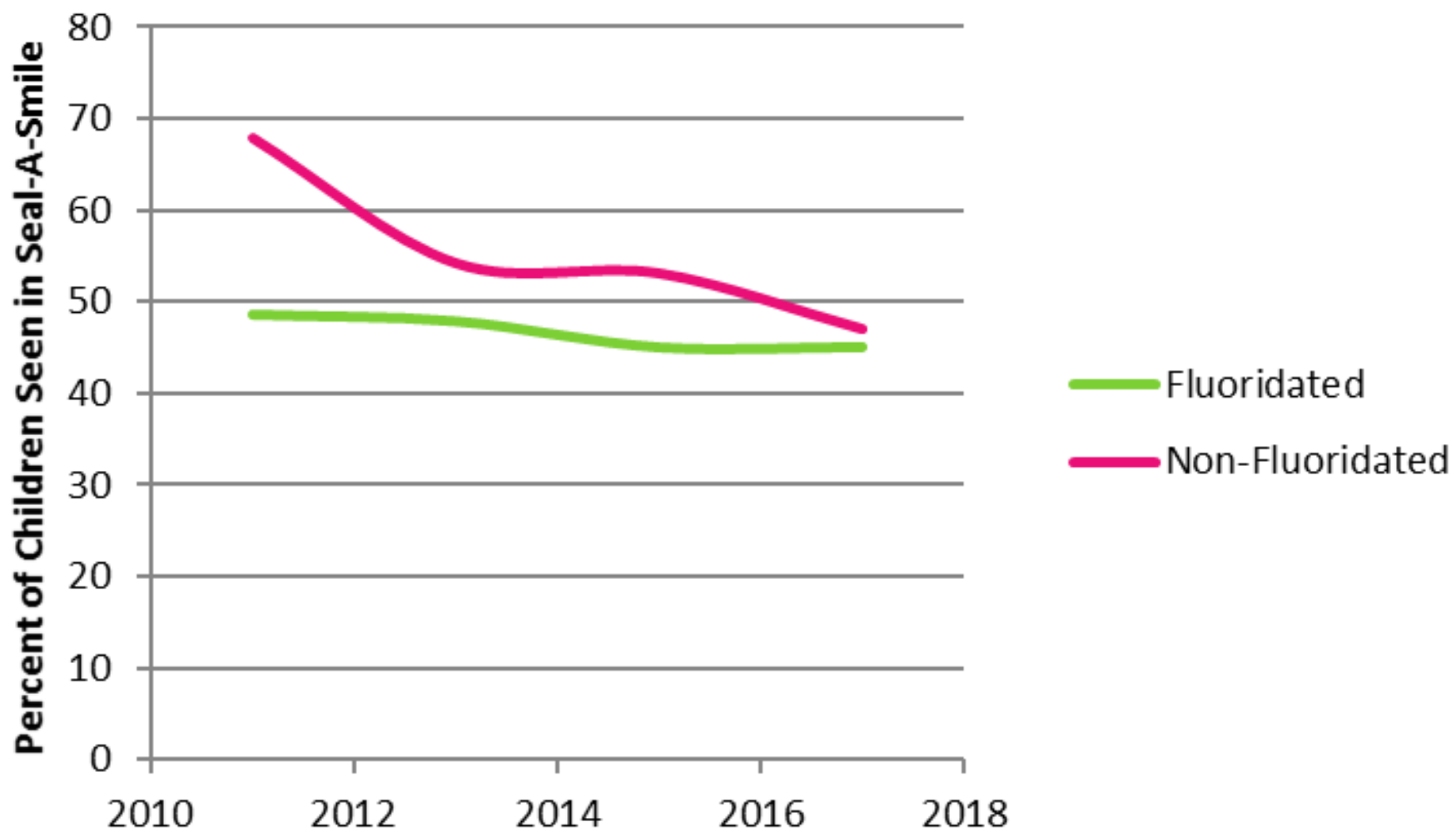
Seal-A-Smile WORKS!



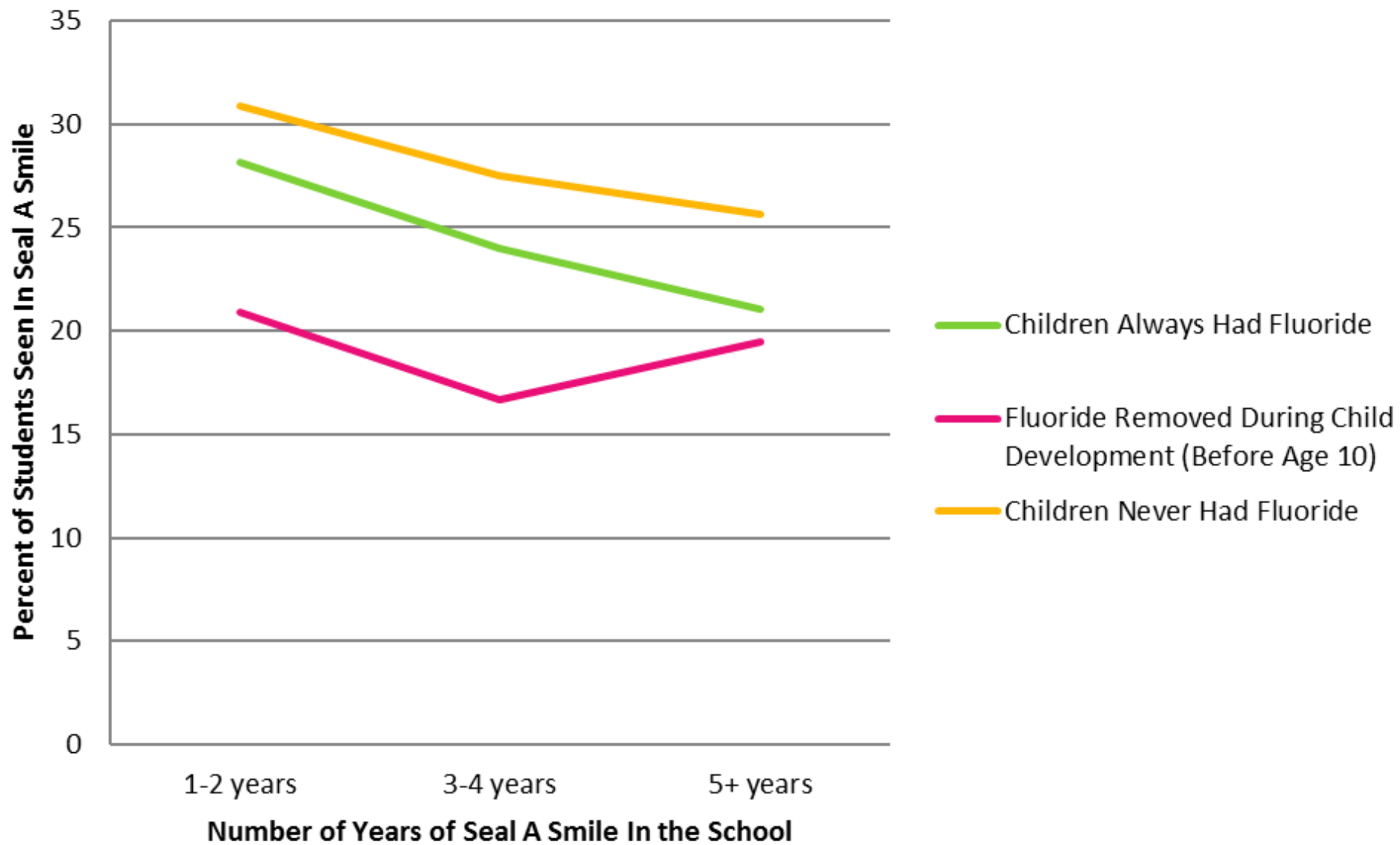
- Regardless of community water fluoridation, we saw a decrease in the percent of students with early dental needs.



Children with Treated/Untreated Decay



Early Dental Needs

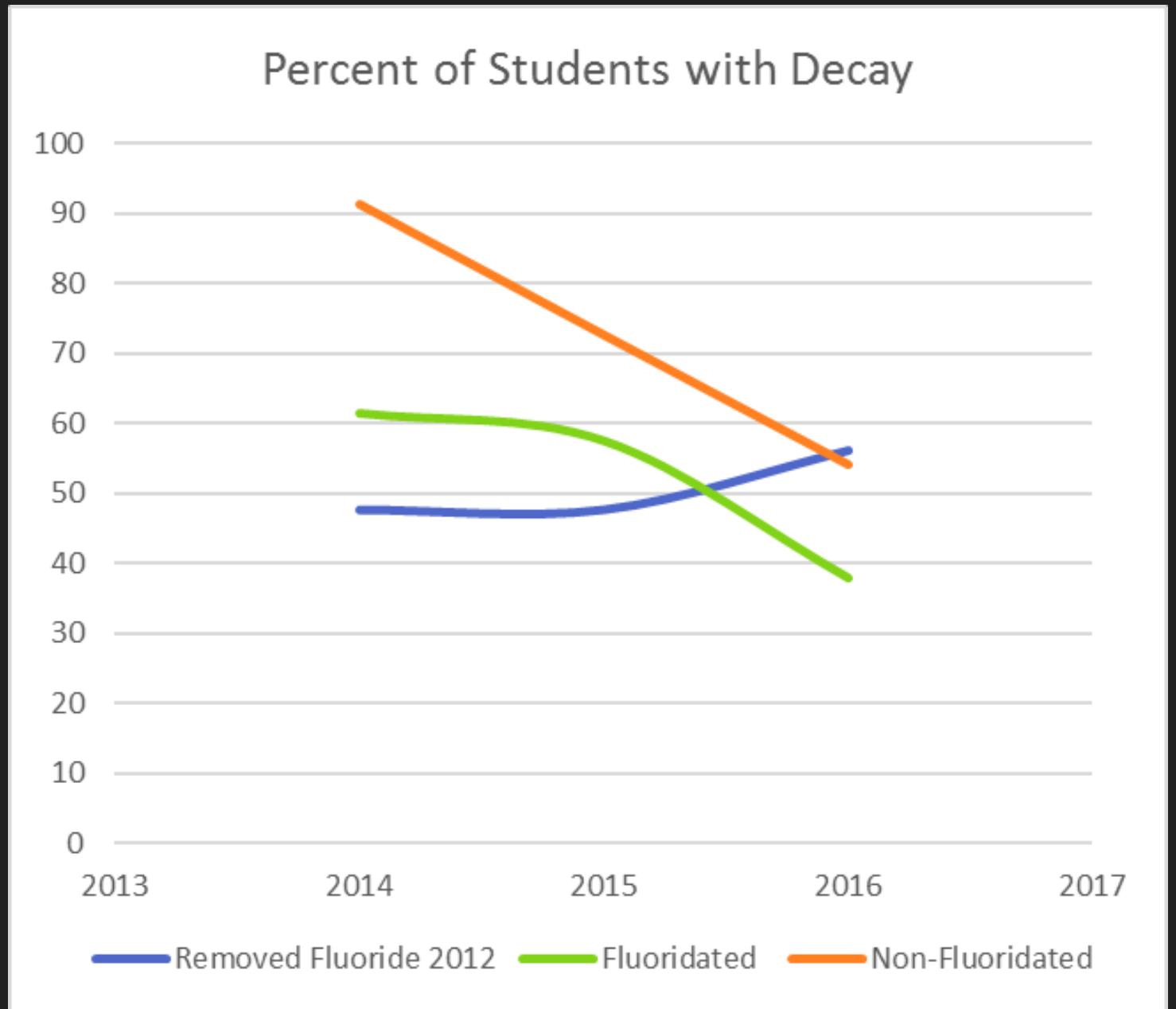


Similar Schools

Three school districts were compared based on:

- Similar demographics
- Similar number of years of Seal A Smile participation

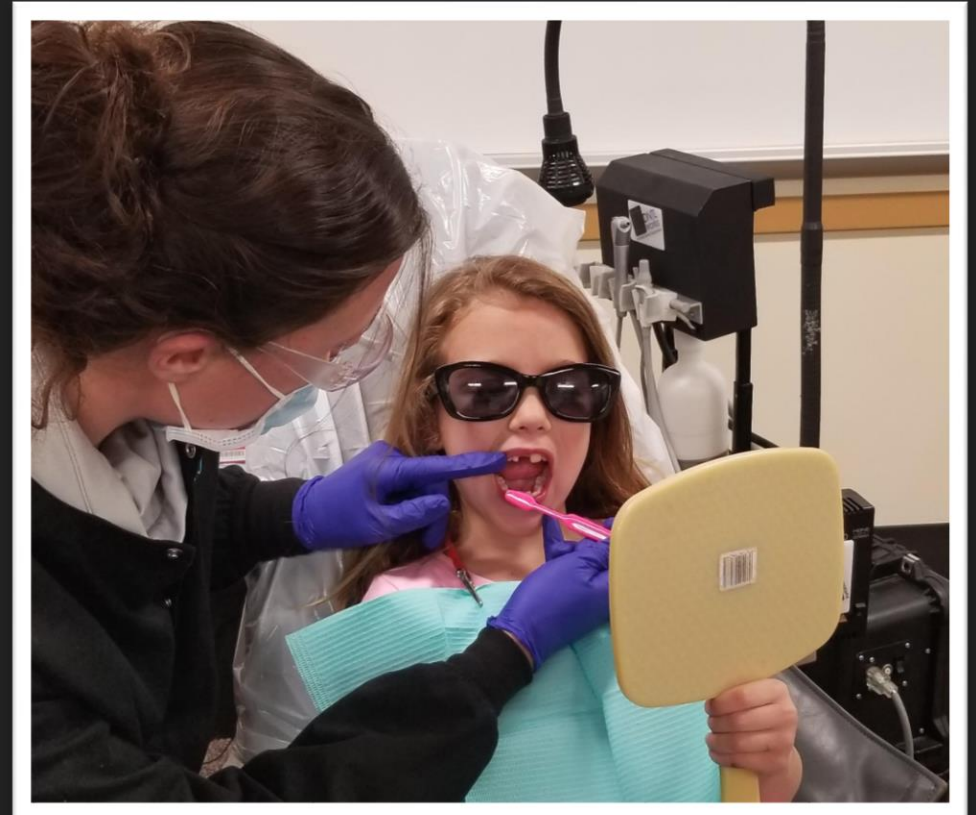
Focus on years after fluoride was removed.



Conclusions: Impacts Our Oral Health Outcomes



- Data indicates that children in schools with fluoride have better dental outcomes
- Communities that removed fluoride will likely continue to see increases in decay
- Beyond physical health, children with untreated decay are more likely to:
 - Be behind in school
 - Experience poor self-esteem and social isolation



Conclusion: Policy Impacts Health



- Policy can have wide spread health impacts
- Community Water Fluoridation protects all individuals in a community

The HI-5 logo features the text 'HI-5' in large blue letters, with 'HEALTH IMPACT IN 5 YEARS' in smaller red and black text below it. The background of the logo includes small icons of a building, a person, a bicycle, and a house.

Improve dental health across a whole community

A large teal teardrop shape containing a white tooth icon with three small white stars around it, symbolizing dental health.

CDC Centers for Disease Control and Prevention