

MVP Business Fundamentals

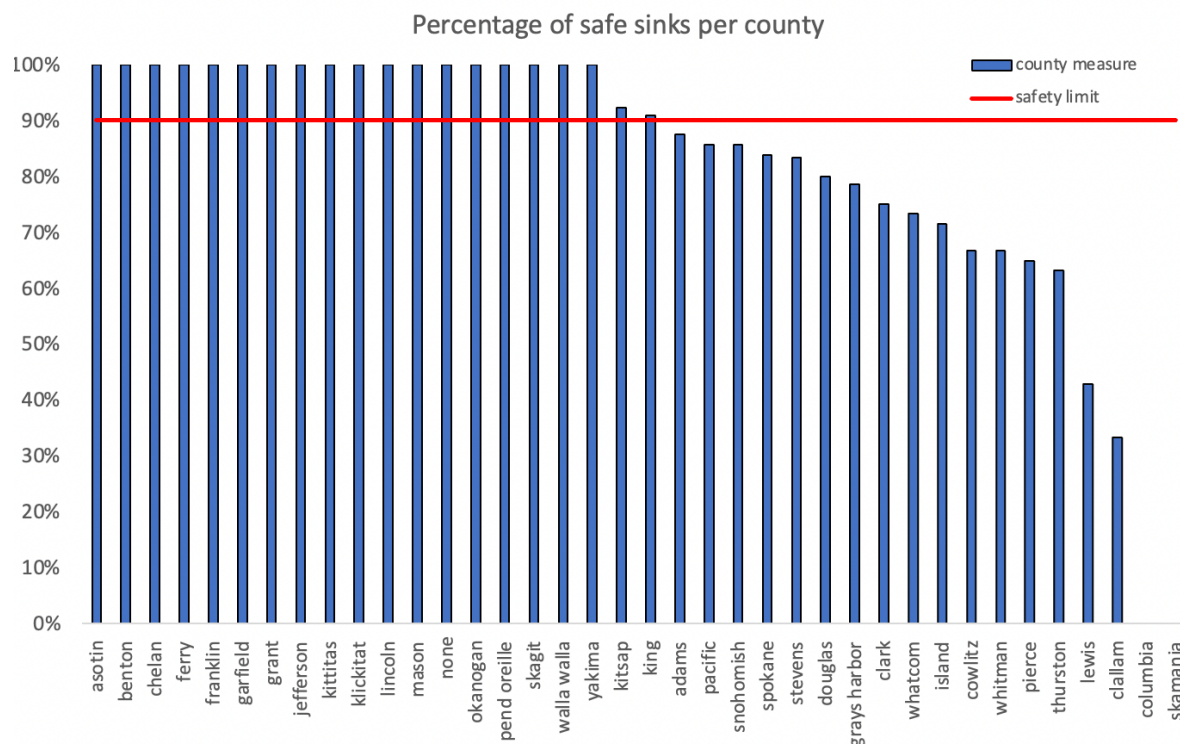
Lead contamination in drinking water in schools

Opportunity & Desired Impact

Lead is a contaminant that can be found in drinking water that can affect children's growth, behavior and learning problems. Cities are currently required to test their water for lead every 3 years to maintain a safe level of lead, but schools are not tested. The Washington State Department of Health initiated the lead testing in drinking water at schools although not all schools were analyzed due to lack of funding. Of the schools that were analyzed, several schools had a level of lead that was far below the safe level. The goal of this proposal would be to have the ability to predict which schools are likely to have high lead levels in their drinking water to better allocate water testing based on funding.

Solution Path

A data set of lead testing analysis was made available to the public. This dataset contains the result of the lead levels. Not all schools of the state were included in the report, but samples of each county in the state were present. Below are the results of lead contamination in drinking water in schools by counties. A safe lead limit is when 90% of homes have less than 15 ppb lead present in their drinking water.



About half of the counties in Washington state have schools where their drinking water did not exceed the lead limit.

Impact Hypothesis

By identifying the factors in schools with high lead levels, one can predict the risk levels of other schools that were not tested before.