



# LAB RESOURCE: Food Safety Modernization Act (FSMA) water testing expectations for farmers who grow produce that is commonly eaten raw

## Production Water for Produce (excluding sprouts)

- Water in contact with the harvestable portion of produce during growth
- Testing:
  - Municipal water: copies of municipal testing
  - Ground water: 4 quantitative tests in the first year, and 1 test per year after to create a rolling 4-year data set of at least 4 samples.
  - Surface water: 20 quantitative tests in the first 2-4 years, and 5 tests per year after to create a rolling 4-year data set of at least 20 samples.
  - Approved quantitative methods must be tested within 6 hours of sampling: <http://bit.ly/FSMAagwatermethods>
- Thresholds:
  - $\leq 126$  CFU or MPN/100 mL geometric mean (GM)
  - $\leq 410$  CFU or MPN/100 mL statistical threshold value (STV)
  - Calculator: <http://agwater.arizona.edu/onlinecalc/>

## Postharvest Water for Produce (excluding sprouts)

- Water used during or after harvest
- Testing:
  - Municipal water: copies of municipal testing
  - Ground water: 4 quantitative or presence/absence tests in first year, and 1 test per year after.
  - No untreated surface water allowed for postharvest use.
  - Approved quantitative methods must be tested within 6 hours of sampling, and approved presence/absence methods must be tested within 30 hours of sampling: <http://bit.ly/FSMAagwatermethods>
- Threshold:
  - No detectable generic *E. coli* per 100 mL. If generic *E. coli* is detected, use a Corrective Measure and conduct 4 more quantitative or presence/absence tests in the first year of use after the Corrective Measure.

## Corrective Measures:

1. Delay harvest after last use of Production Water on the harvestable portion of the crop.
2. Re-inspect the Production or Postharvest Water source and distribution system, fix any problems, document, and confirm that the fix was effective with another test.
3. Treat Production or Postharvest water with a sanitizer labeled for use on fruits and vegetables and/or food contact surfaces as applicable.

Geometric Mean (GM) CFU or MPN/100 mL	Statistical Threshold Value (STV) CFU or MPN/100 mL	Time to delay harvest if water touches harvestable part of produce
Up to 126	Up to 410	0 days (unrestricted)
Up to 398	Up to 1,297	1 day
Up to 1,260	Up to 4,100	2 days
Up to 3,984	Up to 12,965	3 days
Up to 12,600	Up to 41,000	4 days
Over 12,600	Over 41,000	Not allowed

**Don't do these tests yourselves?** Find a lab that does: <http://bit.ly/Mlagwaterlabmap>

**Want your lab on this map?** Fill out this form: <http://bit.ly/Mlagwaterlabsurvey>