



## Contaminated Water Caution

Washing fresh produce after harvest has several benefits, including removing soil and cooling produce. The [Produce Safety Rule](#) does not require growers to wash fresh produce. If growers choose to wash fresh produce, then the water used must meet the no detectable Generic *E. coli* per 100 mL microbial quality.

Contaminated water will spread foodborne pathogens to fresh produce and, in some cases, these pathogens [infiltrate](#) into the plant tissues from where they cannot be removed easily.

## Research Takeaways

A [2021 study](#) looked at survival rates of *E. coli* on freshly harvested romaine lettuce heads and strawberries washed with contaminated water then stored in a refrigerated display case. Findings were as follows:

- Foodborne pathogens can be transferred from contaminated wash water to fresh produce during the washing process.
- Foodborne pathogens can remain on fresh produce for more than a week after washing with contaminated water.
- Storing fresh produce under cold temperatures does not remove all foodborne pathogens introduced by contaminated wash water.

## Best Practices

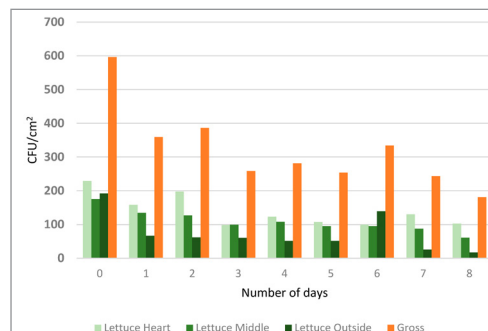
Producers who wash fresh produce should always use water that meets the NO detectable Generic *E. coli* per 100mL microbial quality criteria and change the wash water often.

Treating water with an [EPA-labeled sanitizer](#) may help meet the required microbial quality of wash water and maintain this quality during the washing process.

## Author

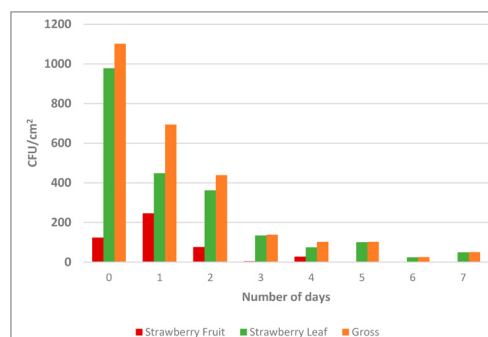
[Lillian Nabwiire](#), Food Safety Educator, University of Illinois Extension.

## *E. coli* Survival on Romaine Lettuce



Study shows survival of *E. coli* on all parts of Romaine lettuce for eight days.

## *E. coli* Survival on Strawberries



Study over seven days shows survival of *E. coli* on strawberry fruit through day four and survival on the leaves through day seven.

## References

Bhullar, M., Perry, B., Monge, A., Nabwiire, L., & Shaw, A. (2021, June 16). *Escherichia coli* Survival on Strawberries and Unpacked Romaine Lettuce Washed Using Contaminated Water. MDPI. [bit.ly/PostHarvestWashing](https://bit.ly/PostHarvestWashing)

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