

ARKANSAS PRODUCE SAFETY

Produce Safety Concerns Due to Hurricane Laura

Hurricane Laura, a dangerous Category 4 storm, hit the Southeast and Gulf Coast of the United States early Thursday morning 08/27/2020, bringing strong winds and heavy rain. Flash flooding is expected in Texas, Louisiana, and Arkansas. Produce growers located in these regions are likely to have their fields flooded and their produce contaminated, rendering the produce unsafe for human consumption.

Two types of flood waters can be distinguished. **The more common type** occurs after a heavy downpour, **submerging fields and creating water pools on the soil surface**. This type of flood waters can damage and reduce produce yields but **rarely contaminates produce with human pathogens**.



Pooled waters are not considered a risk for microbial contamination of produce.



Flood waters originated from overflowed surface waters (e.g., rivers, lakes, or streams) are at high risk of containing microbial or chemical contaminants.

The second type of flood waters occurs after **severe flooding** events and originates from **surface waters (such as rivers, lakes, or streams) that overflowed and infiltrated fields**. These flood waters **may be exposed to microbial and chemical contaminants, such as sewage, chemicals, and pathogenic microorganisms**. Therefore, when they reach produce fields, they **can contaminate produce**.

The long exposure to water can also promote mold growth and toxin production after the flood waters recede.

WHAT TO DO WITH PRODUCE THAT WAS IN CONTACT WITH CONTAMINATED FLOOD WATERS?

If the edible portion of the produce was exposed to contaminated flood waters, it is considered “adulterated” under the Federal, Food, Drug and Cosmetic Act and should not enter the human food supply.

Do not sell produce that was exposed to contaminated flood waters, and keep it separate from produce that has not been flood damaged to avoid cross-contamination. Click here for more information on [How to Dispose of Contaminated or Spoiled Food](#).

WHAT TO DO WITH PRODUCE THAT WAS IN OR NEAR FLOODED AREAS BUT WAS NOT IN CONTACT WITH CONTAMINATED FLOOD WATERS?

If produce was in or near flooded areas where **flood waters did not contact the edible portions of the produce**, the **safety of the crops for human consumption should be evaluated on a case-by-case basis** for possible food safety concerns.

According to the [FDA Guidance for Industry](#), the following parameters need to be evaluated:

- Sources of flood waters and any possible upstream contributors of human pathogens and/or chemical contaminants.
- Type of produce and stage of growth.
- Likelihood for crops to absorb potential contaminants from flood waters and/or flooded soil.
- Degree and duration of crop exposure to flood waters and related conditions.
- The volume of flood waters (vertical depth) and/or submersion time in the field before receding.
- Time period until the field is dry after flood waters receded, taking into consideration soil type, topography, and drainage.
- Conditions that may have exposed the crop to prolonged periods of moisture and stress which could foster fungal growth, and possibly, development of mycotoxins.

Below you can find **resources that will help you evaluate the safety of your produce** if you are located in flood-affected areas.

- For more information about hurricane Laura, follow the [National Hurricane Center](#).
- For more information on how to assess potential damage of food crops, consult [FDA's Guidance for Industry: Evaluating the Safety of Flood-affected Food Crops for Human Consumption](#).
- For more information on this topic, view the Produce Safety Alliance document on [Food Safety for Flooded Farms](#).
- For produce reconditioning requests for contamination events that occur in Alabama, Louisiana, Mississippi or Tennessee, contact Ruth Dixon, 615-366-7803, Thomas Clarida, 615-366-7827, or Lindsay Bertling, 615-366-7815. For contamination events that occur in Arkansas, Oklahoma and Texas, contact Edmundo Garcia, 214-253-5201, Karen Daugherty, 214-253-5228, or Jane Broussard, 214-253-4925.

For additional questions or concerns, contact Dr. Amanda Philyaw Perez, Assistant Professor, Food Systems and Safety Extension Specialist, aperez@uaex.edu or Dr. Natacha Cureau, Postdoctoral Associate Food Systems and Safety, ncureau@uaex.edu.



**LOCAL, REGIONAL
& SAFE FOODS**

