



Flood Recovery **ANSWERS**

SDSU Cooperative Extension Service

FLOODED GARDENS

Soil from gardens, including unplanted, that were recently flooded may not be safe for fruit and vegetables production. South Dakota State University specialists said.

SDSU Extension Horticulture Specialist Rhoda Burrows said depending on the location, flood waters may contain contaminants such as agricultural or other chemicals, as well as disease-causing organisms from fresh manure, septic systems, and even lagoons.

“Any leafy greens that are eaten fresh, such as lettuce or cabbage, should be destroyed,” Burrows said. They are at risk of contamination for 90 days following a flood.

Leafy greens that will be cooked, such as spinach, should be cut back completely and allowed to regrow before using, Burrows advised. Cook them thoroughly before using.

Remove the blossom or set fruit from strawberry plants exposed to flood waters. Any strawberries that are consumed within in the next 90 days from these plants should be cooked before consuming.

Root crops should be peeled and cooked thoroughly.

“The floods were early enough that few gardeners had peas, beans, squash, or tomatoes present on their plants, but any of these present should also be picked and discarded,” Burrows said. She added that any of these vegetables that contact the ground during the three months following the flood should be either discarded, or peeled and thoroughly cooked. Underground vegetables such as carrots and potatoes, should also be peeled and thoroughly cooked. Thoroughly wash produce with thick outer rinds, such as melons and squash, before cutting open.

Always wash fresh fruits and vegetables before eating. SDSU Extension Food Safety Specialist Joan Hegerfeld recommends washing with running water and using friction. The use of detergents or chlorine bleach is not recommended. Fruits and vegetables are porous and will absorb these chemicals.

Some sprays approved for use on fruits and vegetables are available and may be helpful in removing debris, dirt and surface microorganisms. If the garden produce was flooded, follow Burrows’ recommendations, Hegerfeld said. Don’t attempt to make an unsafe flooded garden product safe by using a fruit and vegetable spray, chlorine bleach or other product.

Hegerfeld said foodborne illness has been associated with garden vegetables contaminated with flood waters containing pathogenic bacteria, parasites and viruses. The more common pathogens involved in these outbreaks include E. coli 0157:H7, Cryptosporidium parvum, Cyclospora, Giardia, Campylobacter and Hepatitis A. All of these diseases make people very ill and in some instances have long-term complications or may be fatal.

Burrows and Hegerfeld strongly emphasized that gardeners should not attempt to make an unsafe, flooded garden product safe by using chlorine bleach or a similar product. The level of contamination on a flooded garden can be at very dangerous levels.

Gardeners should keep in mind that although pathogens will eventually die out, they can remain present in the soil for several months. If the homeowner knows the area was contaminated with feedlot or septic overflow, it is recommended that no produce be used from the garden for 90 days. Soil or produce samples can also be submitted to a commercial testing laboratory to verify the presence or absence of pathogens, Burrows added.

Hegerfeld and Burrows strongly encourage gardeners to use good personal hygiene practices. Wash your hands before and after gardening. Leave your garden shoes at the door, and change clothing after working in a flooded garden. Avoid direct contact with flood waters, including the soil, as much as possible. Young children can be at a high risk for some foodborne illnesses. If a garden plot has been flooded, consider either not having young children in the garden with you, or take precautions to utilize good personal hygienic practices.

Call your county Extension office for more information.