

# Foodborne Outbreaks Associated with Produce

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# Burden of Foodborne Illness in US

## Foodborne Illnesses in the US and World



In the United States, **1 in 6** Americans contract a foodborne illness each year.



That's **48 million** annually. Resulting in...



**128,000** hospitalizations

**3,000** deaths

Source: US Centers for Disease Control and Prevention

**600M** around the globe contract a foodborne illness each year.

**420,000** cases end in death.

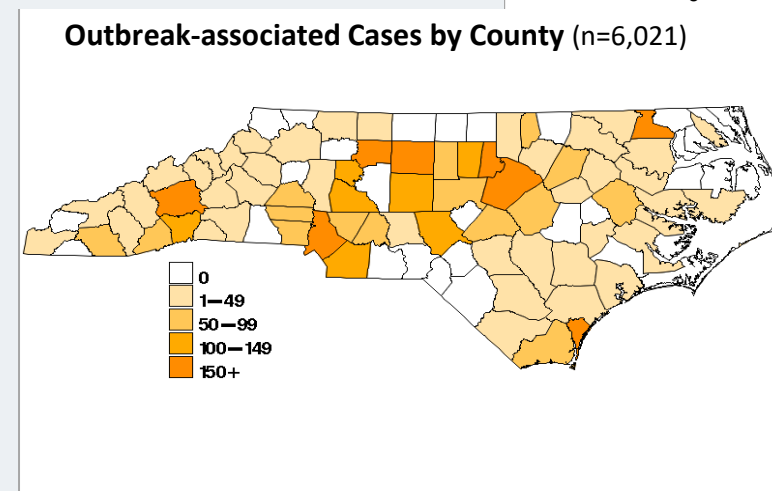
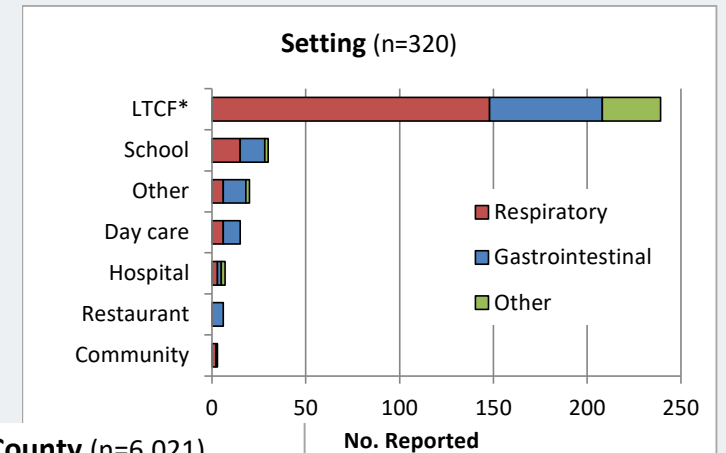


**Children under 5** are only **9%** of the world population, but **30%** of foodborne illness deaths. They bear **3x** their share of the burden.

Source: World Health Organization, Foodborne Disease Burden Epidemiology Reference Group

# Burden of Foodborne Illness in NC

- In 2017, 103 GI outbreaks reported in NC
- 3,126 individual cases from the 103 outbreaks
- Most GI outbreaks in NC occur between November and March



# Trends in Fresh Produce Outbreaks

- Less than 1% of outbreaks in 1970's
- 6% of outbreaks in 1990's
- 130+ *E. coli* illnesses from leafy greens in 2018



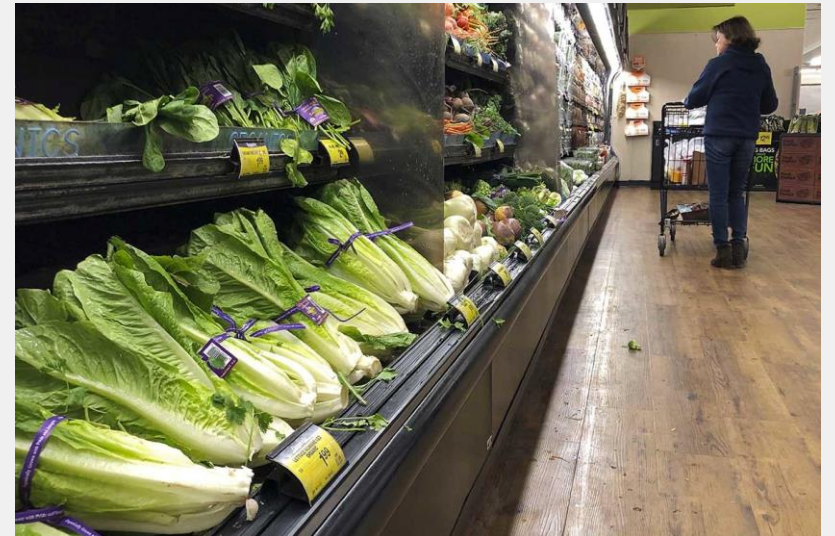
# From the Headlines

Romaine calm: Lettuce warning looms over Thanksgiving dinner Associated Press, Nov 21, 2018

Four More People Die From Tainted Romaine Lettuce  
New York Times, July 1, 2018

The Science Is Clear: Dirty Farm Water Is Making Us Sick Wired, Sept 27, 2018

Thousands of pounds of prepackaged salad mixes may have been tainted with E. coli, officials say  
Washington Post, April 16, 2018





# Even This Month...

## Pre-Cut Melon Sold In 16 States **Recalled** Amid Salmonella Outbreak

Fresh-cut melon recalled for salmonella risk; retailers including Target, Walmart impacted

100 people sick in salmonella outbreak linked to pre-cut melon sold at Target, Walmart, elsewhere



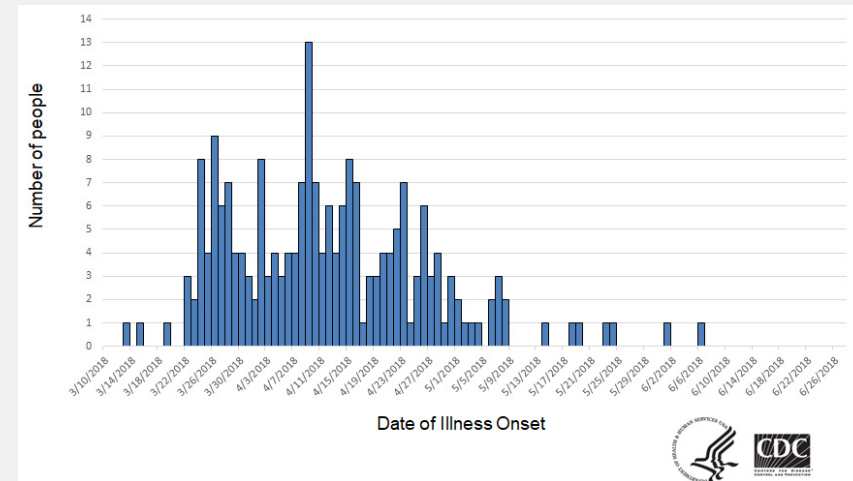
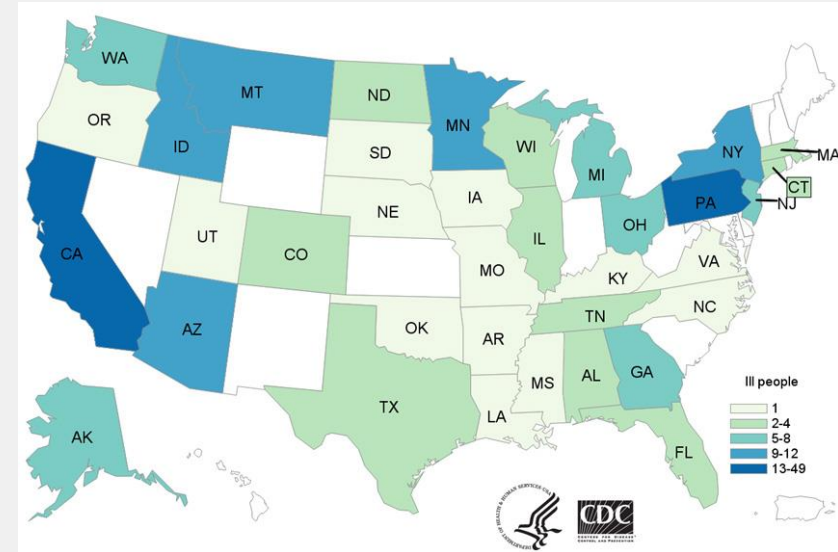
# Why is Fresh Produce So Risky?

- Increased popularity
- Minimal regulations (prior to FSMA)
- Eaten with no kill step
- Grown outside
- Increased surveillance



# Yuma, Arizona Outbreak

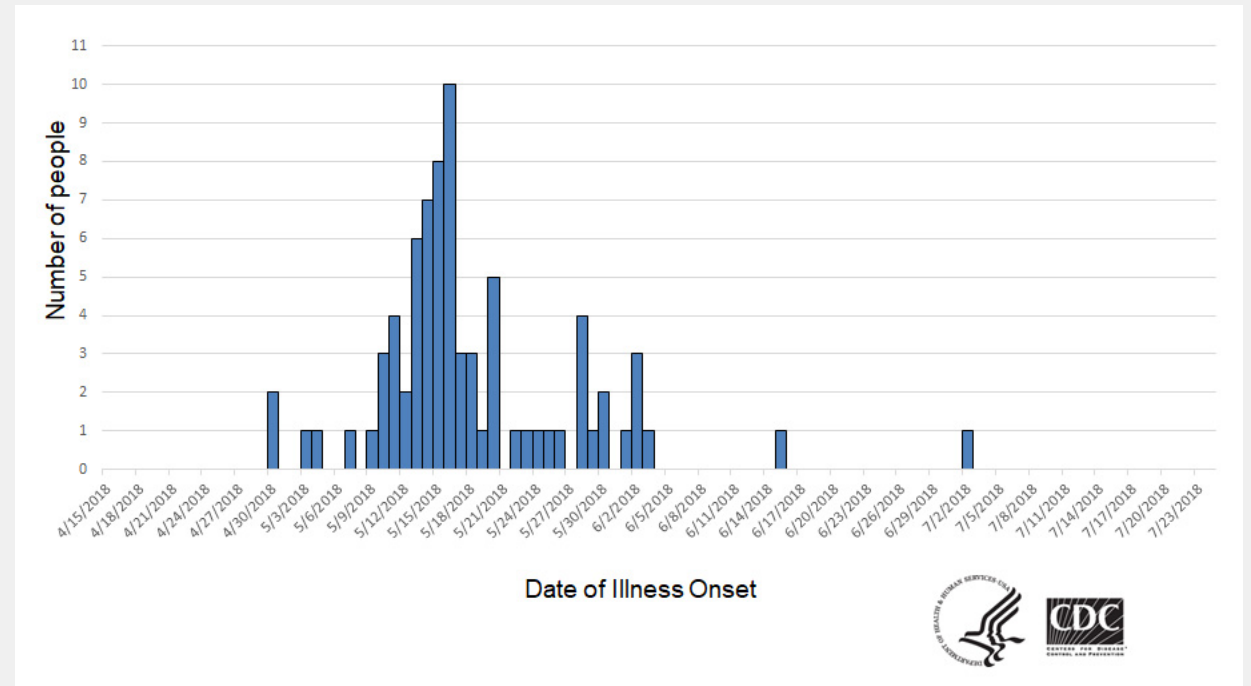
- *E. coli* associated with 210 illnesses in 36 states
- 96 hospitalizations, 5 deaths
- Illnesses from March until June, 2018
- Associated with contaminated water canal





# Salmonella in Pre-Cut Melon

- 77 people ill from 9 states
- 36 hospitalizations, no deaths
- *Salmonella* Adelaide was outbreak strain, found by whole genome sequencing



# What Can the Local Health Department Do?

# Provide Information



## What is a Recall?



### A food recall happens when:

A problem is discovered with a food product by a regulatory agency, food manufacturer, or distributor

or

There is reason to believe that a food may cause someone to become sick or injured, such as the discovery of a pathogen or toxin, potential allergens in a product and/or mislabeling or misbranding.

### What's the Difference Between Different Recall Messaging?

**Public Health Alert:**  
Issued by FDA or CDC with information from investigations, that could include product that has been recalled.

**Do Not Eat Advisory:**  
Issued by FDA or CDC with strong language for the public regarding a product that has not been involved in a recall.

**Class I – Recall:**  
Issued by either a regulatory agency, food manufacturer or distributor that involves a health hazard situation in which there is a reasonable probability that eating the food will cause health problems or death.

### What do to if you hear about a recall?

Confirm information with federal partners, use the CDC, USDA and FDA webpages for recall notifications.

Contact local health department or NCDA&CS for advice or information concerning specific recalls

Hold product, do not serve or sell if there are questions about whether it was involved in a recall

# Accurate Sources

Don't know where to look for recall info?



Confirm information with federal sources:

<https://www.fda.gov/safety/recalls>

<https://www.fsis.usda.gov/recall>

<https://cdc.gov/foodsafety/index.html>





# What Can EHS Do?

- Know Partners:
  - NCDA Food and Drug- packaged foods, desserts
  - NCDA Meat and Poultry- more than 2% meat or poultry
  - <https://ehs.ncpublichealth.com/faf/docs/foodprot/JurisdictionChart-April2019.pdf>
- Know Roles:
  - Be aware of who issued recall
  - Learn how to read recall notices, UPC codes, harvest info

# During a Nationwide Outbreak

- Check federal partner sources often
- Ask questions when complaints are received
- Educate operators and public with up-to-date information
- Focus education on small regulated facilities (small child care, adult care homes, institutions, etc)

# Questions?

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