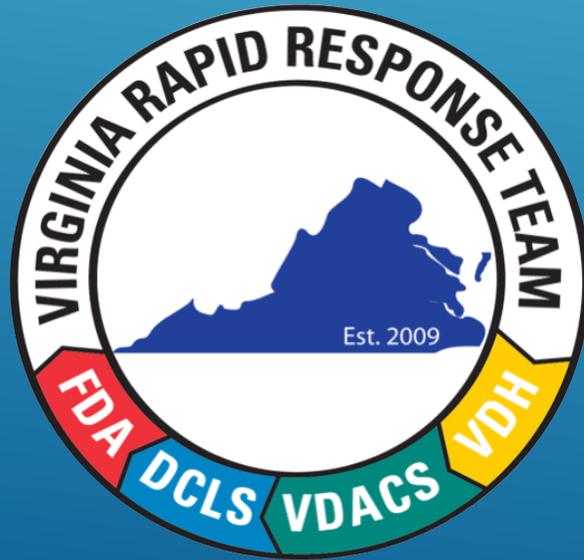


Virginia Rapid Response Team Traceback and Recalls

Christy Brennan, VA RRT Coordinator

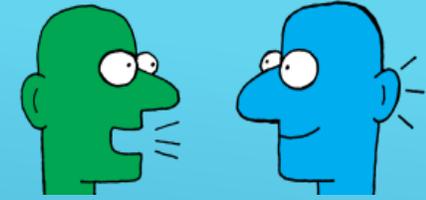




VIRGINIA RAPID RESPONSE TEAM

- ▶ In October 2009, the VDACS Food Safety Program was one of three states awarded a 3-year cooperative agreement from FDA to develop and sustain an all Food Hazards Rapid Response Team (RRT), encompassing both food and feed protection programs, through a process to further enhance and build the infrastructure of the State's food protection program.
- ▶ The Virginia RRT's mission is to provide a rapid unified multiagency all hazards response to food/feed emergencies in order to minimize the social, economic and public health impact.
- ▶ The RRT maintains constant communication through weekly conference calls to discuss ongoing and emerging threats or issues to food and feed safety.

VA RRT is Communication



- Weekly conference calls led by the RRT coordinator to discuss ongoing and emerging threats or issues to food and feed safety
- VA RRT facilitates communication between all agencies and partners
- Minutes from all weekly calls are distributed to the RRT core group and their designated backups
- Group members disseminate information within their respective agencies/divisions based on the details of each incident
- Participates in quarterly FDA Baltimore District (HAF 2E) meetings and conference calls
- Working on a regional product sampling assignment involving the FDA Baltimore (HAF 2E) District

Response vs. Activation

Response

- Voted on by VA RRT Core Team

Purpose:

- Coordinate response with members from the core team
- Coordinate resources from core team
- Quickly respond and mitigate the event and risk to public health

Process:

- Expansion of conference calls and Face-to-Face Meetings as needed
- Determinate level of field response

Activation

- Voted on by VA RRT Core Team

Purpose:

- Coordinate response with members from the core team
- Coordinate resources from core team
- Quickly respond and mitigate the event and risk to public health

Process:

- Starts with Incident Command Structure (ICS) to facilitate coordination and communication between all agencies.
- Use of ICS Forms and Documentation
- Expansion of conference calls and Face-to-Face Meetings as needed.
- Determine level of field response

Field Site Visits

VA RRT RESPONSE

- Inspections/visits targeting potential cause
- Traceback Investigations - collection of invoices
- Traceforward investigations - collection of invoices
- Recall Effectiveness Checks - collection of invoices/documentation

VA RRT ACTIVATION

- Inspections (Joint Investigations, possible Preventive Control Inspections).
- Environmental sampling and assessment of sanitation, food safety and quality programs.
- Traceback Investigations
- Traceforward investigations

Traceback Investigation

- Conducted to identify the source(s) and distribution of food(s) suspected of being adulterated, misbranded, or linked with human illness
 - Helps gather information to ensure prompt removal of contaminated product from the marketplace
 - Aids in determination of how product became contaminated by evaluating involved retailers, wholesalers, distributors, processors/manufacturers, and growers
- 

Two Types of Traceback Investigations

- Regulatory – official process used when products are proven to be adulterated or associated with human illness. Firm visits required and extensive paperwork collected
- Investigational/epidemiological – Informal process used to link illness distribution with distribution of a specific product. May involve calls and verbal communication of product numbers
 - Epidemiological investigation may progress to regulatory tracebacks

Outbreak Of Hepatitis A In Virginia

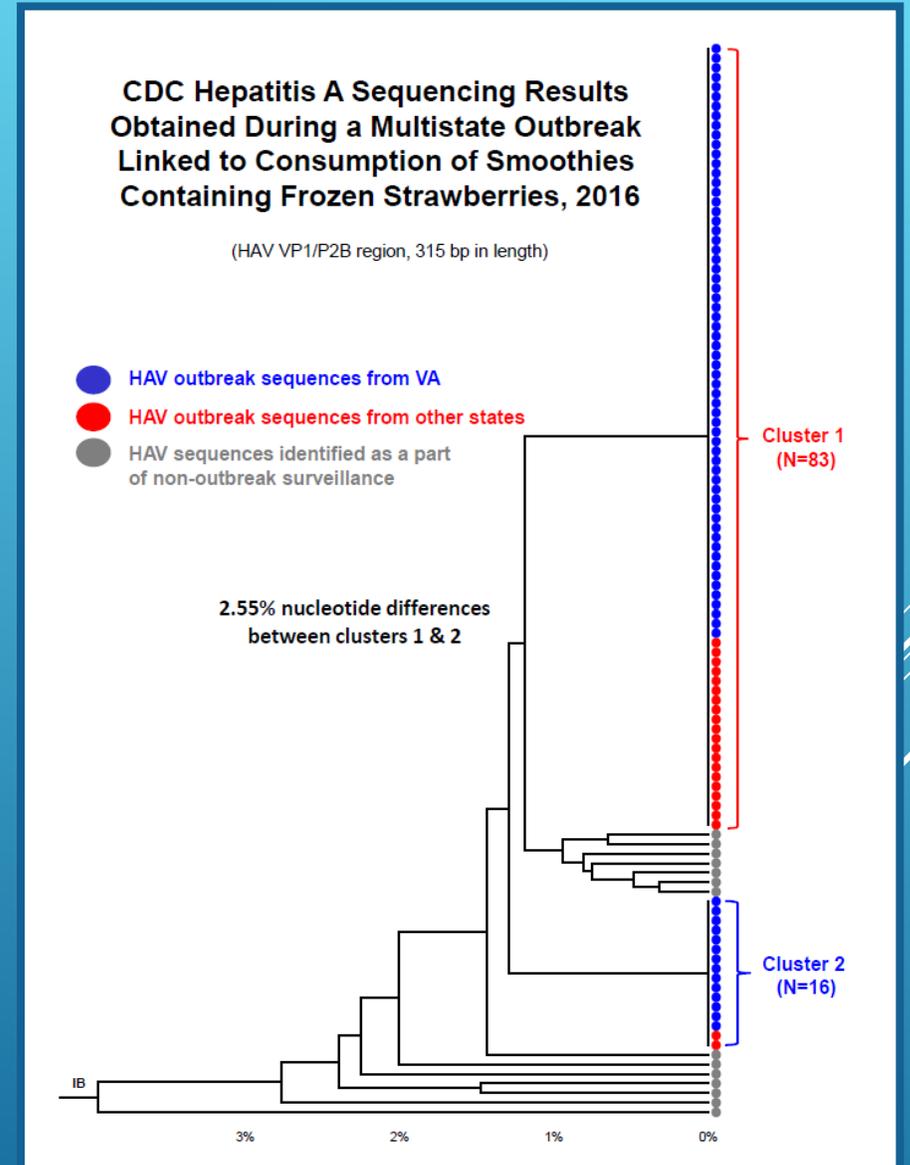
Background

In June and July 2016, epidemiologists at the Virginia Department of Health (VDH) identified an increased number of hepatitis A virus (HAV) cases.

An epidemiologic investigation was initiated to identify possible commonalities between cases, including use of a standardized questionnaire to collect general information about potential exposures (e.g., travel history, restaurants visited, known contact with a case, etc.).

Molecular Sequencing

- Serum or stool samples from potential outbreak-related cases were collected within 28 days of symptom onset, frozen at -20°C as soon as possible after collection, and shipped overnight on dry ice to the CDC Division of Viral Hepatitis (DVH) laboratory for genetic sequencing.
- Hepatitis A virus RNA was extracted from serum samples and used to amplify and sequence a 315 bp fragment of the VP1/P2B region.¹ DVH laboratory constructed a phylogenetic tree based on maximum likelihood algorithms.²



OUTBREAK INVESTIGATION

- ▶ No common foods were discovered during the surveys
- ▶ Shopper card and credit card information from patients was requested.
- ▶ This information revealed that several ill patients consumed a variety of smoothies each week. Patients neglected to report smoothies on the first interview, each responded that smoothies were a drink and not food.
- ▶ A supplemental questionnaire was developed to collect detailed information from ill persons about potential exposures, including consumption of frozen berries and smoothies and patronage of restaurants specializing in smoothies

OUTBREAK INVESTIGATION

August 5, 2016, environmental health inspectors visited chain locations and sought information on ingredients used in each smoothie and sources for those ingredients.

Found that frozen strawberries were a common ingredient of smoothies sold at

Inspectors provide education of firms on prevention of cross contamination, cleaning and sanitizing to prevent secondary infections while performing traceback investigations.

VA RRT activates: notifies Chain A about the outbreak. Chain A determines that the frozen a common source of strawberries for all retail locations.

Chain A immediately stops using Egyptian strawberries in all stores in VA.



OUTBREAK INVESTIGATION

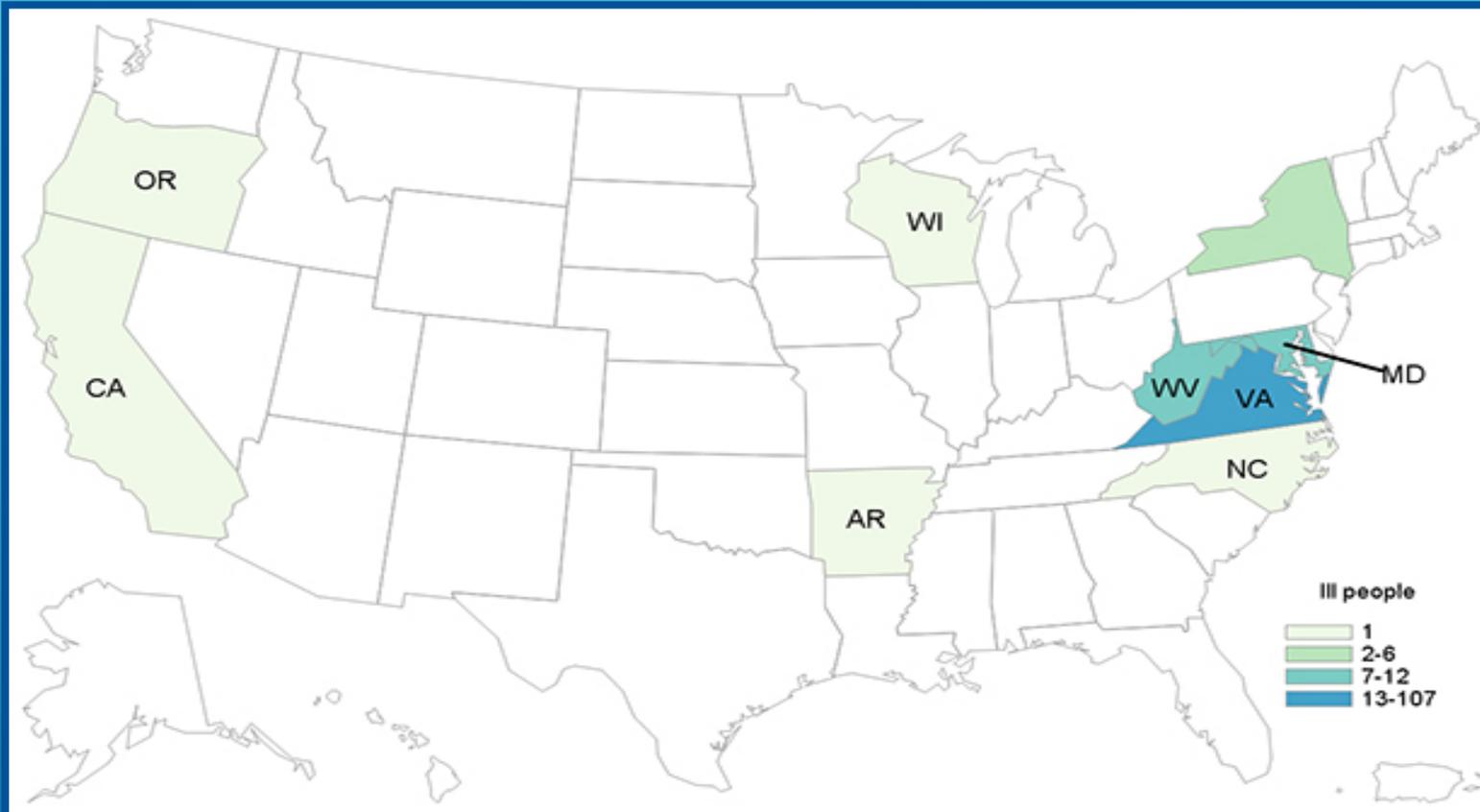
- The Virginia Department of Agriculture and Consumer Services (VDACS), VDH, and FDA collaborated to conduct regulatory traceback investigations.
- Traceback analysis identified a single Egyptian firm as the manufacturer of the frozen strawberries linked to the outbreak. Several different distribution channels of the product were identified.
- VA RRT requested FDA Coordinated Outbreak Response and Evaluation (CORE) network to help coordinate investigational tracebacks in other states and countries.



OUTBREAK INVESTIGATION

- ▶ In October 2016, FDA's analysis detected HAV in six of the frozen strawberry samples.
- ▶ On October 25, 2016, the Egyptian manufacturer recalled all frozen strawberries and frozen strawberry products it imported into the U.S. since January 1, 2016.
- ▶ 143 people with hepatitis A were reported from nine states: Arkansas (1), California (1), Maryland (12), New York (5), North Carolina (4), Oregon (1), Virginia (109), West Virginia (7), and Wisconsin (3). 129 of these cases reported eating a smoothie from Chain A.

OUTBREAK INVESTIGATION



State	Case Count
Arkansas	1
California	1
Maryland	12
New York	3
North Carolina	1
Oregon	1
Virginia	107
West Virginia	7
Wisconsin	1
Grand Total	134

Multistate outbreak of hepatitis A linked to frozen strawberries - current case count map and table¹

LESSONS LEARNED FROM THE TRACEBACK



- ▶ Distribution can get complicated
- ▶ Verify the correct product name
- ▶ Lot codes are very different for imported products. They may not be in English, or include the information typically found on product and lot codes.
- ▶ Not all field staff are familiar with Lot Codes. Request field staff take pictures of all sides (including top and bottom) of the product container or case when gathering invoices and documentation
- ▶ Retail firms typically do not track product lot codes as they are used. Pull invoices and hi-light amount of product, dates received, name and location of shipper /distributor.

LESSONS LEARNED FROM THE TRACEBACK

- ▶ Large distributors may eliminate the original lot code and product id to assign an internal lot code for tracking in their system. When starting the traceback, get clarification on what each code means from each of the firms handling the product.
- ▶ You may need help! Distribution firms in Virginia were receptive to the request for traceback information. Headquarters in another states were not so receptive and required on site visits.
- ▶ Move quickly to seize, hold, and isolate implicated products. If the firm determines they will no longer use the product, see if they can isolate and hold for testing.
- ▶ Check back with the implicated firms as they stop using one product source to another – distributors can send the same product from the same source to the firm when replacing stock.



RECALLS AND PROTECTING PUBLIC HEALTH

- Recalls are based on information collected during the investigation, reason complete tracebacks and traceforward assignments are important
 - Emphasis on issuing the recall as quickly as possible
 - Best to release specific recall information rather than rolling recalls with multiple code dates and time frames
 - Share recall notifications with staff so that they are able to answer questions
- 



Questions?