

Tennessee One Health Meeting

7/25/19

What is TDEC doing about PFAS? TDEC's Approach to Understanding PFAS in Tennessee.

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- PFAS – Group of chemicals – thousands: foam, food wrappers (popcorn).
 - a) Gore-Tex, carpet-Stain Master brand
 - b) Air, water, landfills – soil – manufacturing - use – disposal.
 - c) TDEC established multi – agency to work on this – congress.
 - d) Researching NPDED. Discharging, leachate, ground water, Drinking water intakes and wells.
 - e) Monitoring, Maintaining websites.
 - f) Unregulated contaminant monitoring Rule 3 in 2013-2015.
 1. 144 public water, 110 surfaces, 23 ground water 652 samples collected.
 2. Website shows samples and 6 contaminants found.
 3. Consolidated Utility (Murfreesboro/ (Savannah). Below detection limit and advisory levels.
 4. Dept. of defense investigating.
 5. PFAS in fish in TN (TN rivers-Cumberland River).
 6. Deer-Michigan – don't eat meat, seafood, leafy greens, dairy products, sweet pot. Pineapples
(Cleveland, TN – 20yrs, ago in meat and milk)
(Dairy – sludge fertilizer on fields for hay and feeds his cows) – high contaminant in milk.
 - g) PFOA and PFA research – health effect – animal studies (c8) 1. Oral exposure – esp. long chain – greater risk EPA – Cancer – OPPT in water.
 - h) Action Plan – broad actions.

Shiga toxin E-Coli Outbreak 0103 Multi – state outbreak

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- Timeline
 - March 25, Knox CHO – STEC in Children.
 - March 29, KY cluster – 5 STEC 0103 +0103 cases.
 - March 30-31, TDH interviews cases at NH6Qs.
 - April 1, First multi-state outbreak call at CDC.
 - April 3, Outbreak 72 cases nationally 21 in TN.
- Response
 - Interview – Standard case report form
 - National hypothesis generating questionnaires
 - Supplemental questionnaire (Beef, Chicken, Dairy)
 - ID outbreak source
 - Analyze interview data.

- Sub clusters
 - Environment assessments – collect food and environment samples and match by lab testing to clinical data.
 - Conducts trace back activities.
 - Ground beef collected from homes, grocery stores, restaurants 7 sites total, 14 samples, all beef testing negative except Restaurant F.
- Continuous analysis of interview data
- Cases who report only single ground beef exposure
- Sub clusters Details
 - Knox Co. restaurant F
 - 4 cases dined
 - Unopened beef collected
 - STEC 0103 outbreak strain identified
 - West TN daycare
 - 2 cases attending same daycare
 - Menu had ground beef
 - No specimen's collected suspicion of person to person transmission.
 - Long term care facility resident – no visitors
 - New cases – following up on every ground beef exposure.
 - 113, 000lbs of ground beef recalled
 - Represents beef supplied to rest. F
 - Less than 5% cases nationally ate at rest F
 - KY identified beef – 53, 200lbs beef recalled
 - Traced beef from 50-60 cases
 - Each pack of beef traced to 6-12 facilities
 - 5 “plants of interest”
 - 93 samples collected
 - All negative
 - No convergence contaminated beef likely still in commerce 60 cases
 - 23 in East TN, 15 in Knox, 6 in Hamilton Co. 6, minor counties.
 - TN Epicurus – June 25, 2019,
 - n=60 went to n=209.
 - 2nd largest next to “Jack in the Box” case.
 - Also national perspective – followed 1-75
- Results
 - CDC released public news releases
 - Cook beef fully 165 degrees
 - No message to dispose of ground beef or not eating beef.