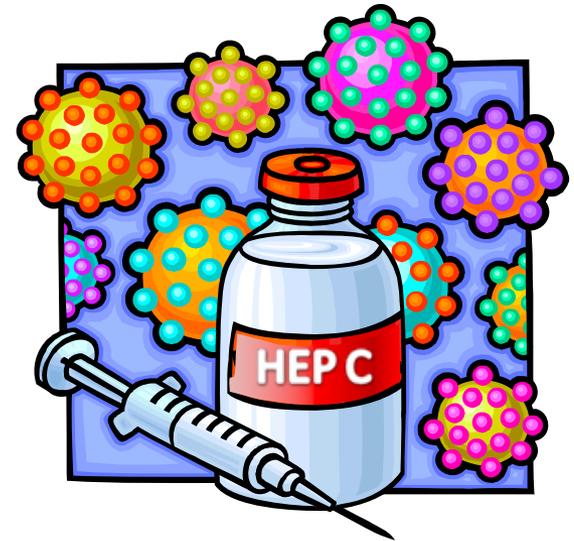
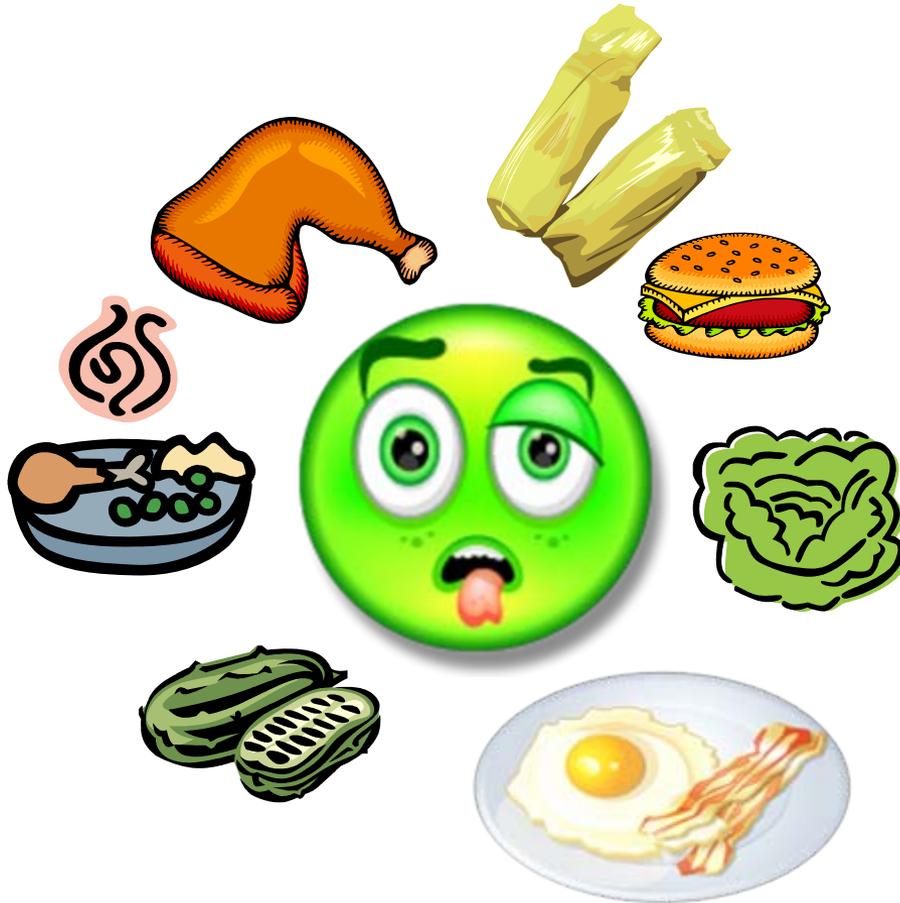


# Recent Investigations



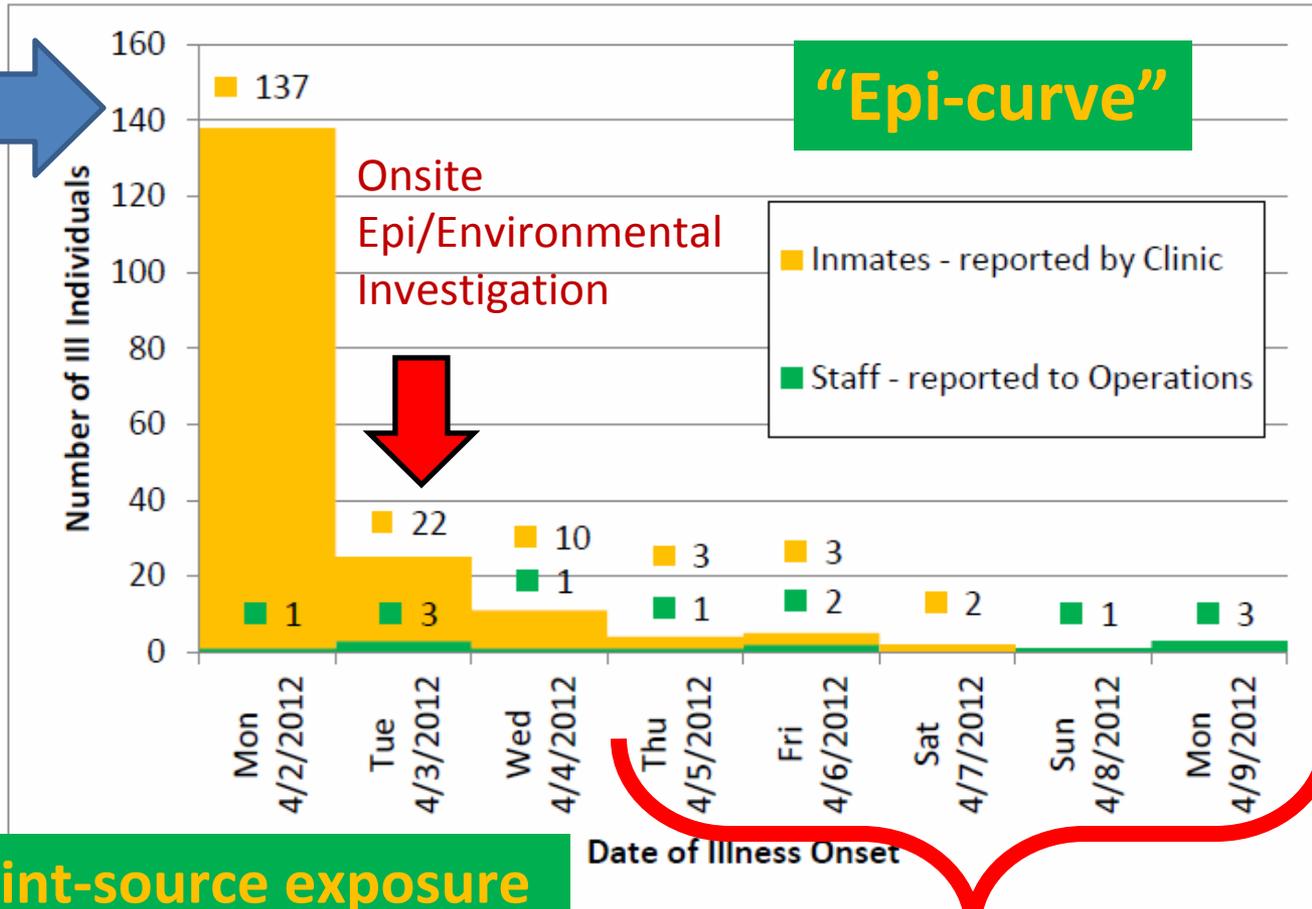
# Unknown Gastrointestinal Illness

Monday – ADHS notified of:

- ~130 inmates and 1-2 ASPC staff with acute gastrointestinal illness (GI): **nausea, vomiting, diarrhea**
- Symptoms began previous Saturday/Sunday night
- Inmates developed symptoms while on work-release = community exposure
- Inmates sick facility-wide: each building affected

Total 177 inmates and 12 ASPC staff affected over 1 week.

# Unknown Gastrointestinal Illness



Person-to-person prolonged transmission?  
 Low-level ongoing contamination?  
 Natural distribution of delayed illness onset?

# Unknown Gastrointestinal Illness

Public Health Epidemiologists...

- Conducted symptom and food history interview
- Compare range of illness onset to known bugs and toxins
- Statistical analysis of foods eaten by cases (sick) and controls (not sick)



2 – 10 Days

*Campylobacter jejuni*

6 – 48 Hours

*Escherichia coli*

30 mn – 8 Hours

*Staphylococcus aureus*

12 – 48 Hours

Norovirus

5 mn – 8

Hours

Heavy Metal

Poisoning

azdhs.gov



Health and Wellness for all Arizonans



# Norovirus Foodborne Contamination

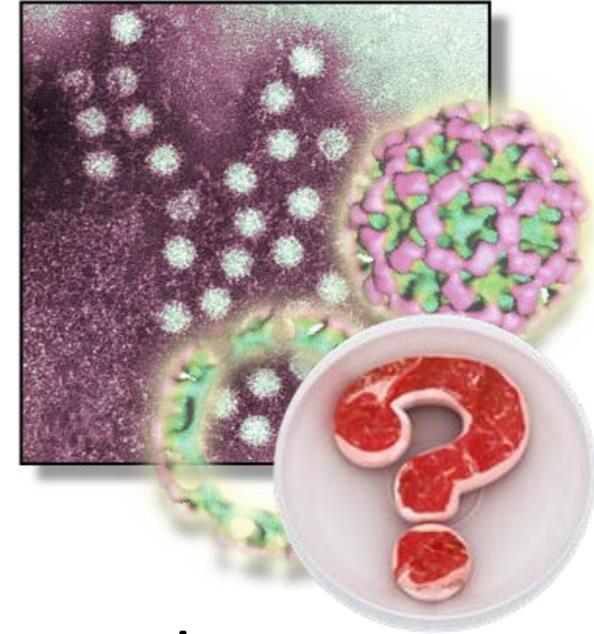
- Lab confirmed Norovirus from inmate specimens

HIGHLY TRANSMITTABLE –

Person-to-person and airborne

- Epi analysis - likely exposure occurred Saturday at dinner meal

- Environmental – malfunctioning food storage cooler, 3 days of prior meals not stored: allows testing to rule-out contamination



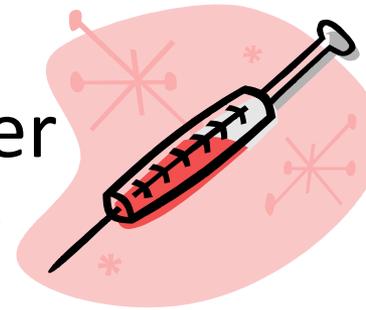
# Facility Challenges with Norovirus



- Delay in care-seeking behavior
  - Inmates initially charged for clinic visits = refusal to seek care, missed cases, more sick
- Highly transmittable through contaminated area
  - Hand hygiene resources/compliance limited
  - Limited bathroom facilities for ill inmates (sick-bays)
- Contractors, ASPC staff and inmates utilize kitchen
  - High volume cooking = likelihood for mass exposure

# Healthcare Associated Infections (HAI): Hepatitis C Exposure

- Hepatitis C virus (HCV) exposure in correctional facility – **media attention!**
- Insulin needle was reinserted into vial, after injecting HCV+ inmate once, to administer additional dosage to same patient
- Vial (unlabeled) returned to shelf with other vials.
- Potentially exposed all insulin dependent inmates seen in clinic after the event - ~103 inmates



# Healthcare Associated Infection: Hepatitis C Exposure

- All insulin dependent inmates received baseline HCV screening – **Success!**
- **Follow up testing** in 3-6 months presents challenge:
  - Tracking of released inmates
  - \$\$\$
- Poor infection control practice
  - Needle reinsertion after use
    - Don't Do It
  - Ensuring future prevention?



# Varicella in Jails, 2012

- 5/17– index case diagnosed
  - Sample sent to CDC, positive for wild-type varicella
- 5/21– 2<sup>nd</sup> case (epi-linked)
  - Sample sent to CDC
- 18 inmates quarantined until 6/19
  - 17 negative or equivocal labs
  - 1 pending
- Letter sent to former inmates exposed from 5/6 – 5/16 to see a provider if rash appears

# Specimen Collection

- Scabs from crusted lesions
  - Collect 4-5 days after rash onset
- Wear gloves, use tweezers
- Place in screw top/snap-cap tube or ziplock plastic bag
- Store at ambient temperature
  - Do not refrigerate or freeze
- Notify and send to ADHS Epi (602-364-3676)
- PCR testing done at CDC