

ENTERIC ILLNESS OUTBREAKS IN HEALTH CARE SETTINGS

COLORADO, 2004 – 2010

JANUARY 26, 2012

ASSISTED LIVING ADVISORY GROUP

NICOLE COMSTOCK, CDPHE COMMUNICABLE DISEASE EPI PROGRAM

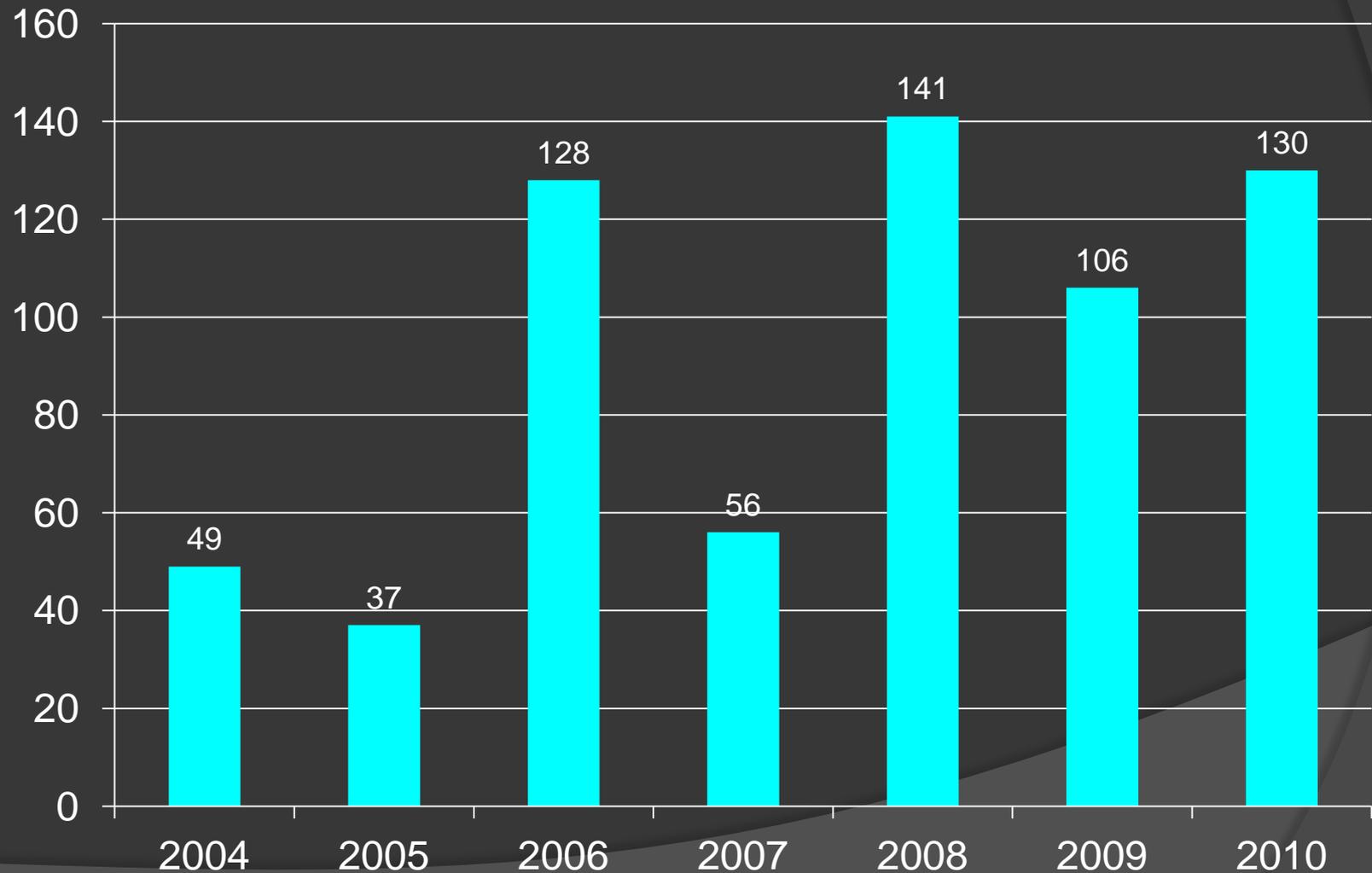
303-692-2700

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Surveillance History

- CDPHE began to formally track reports of GI illness (primarily viral gastroenteritis) in health care settings (primarily long term care facilities) in late 2003
 - Guidance distributed to facilities about how to report outbreaks, control measures, etc.
 - One page report form to public health after outbreak is over

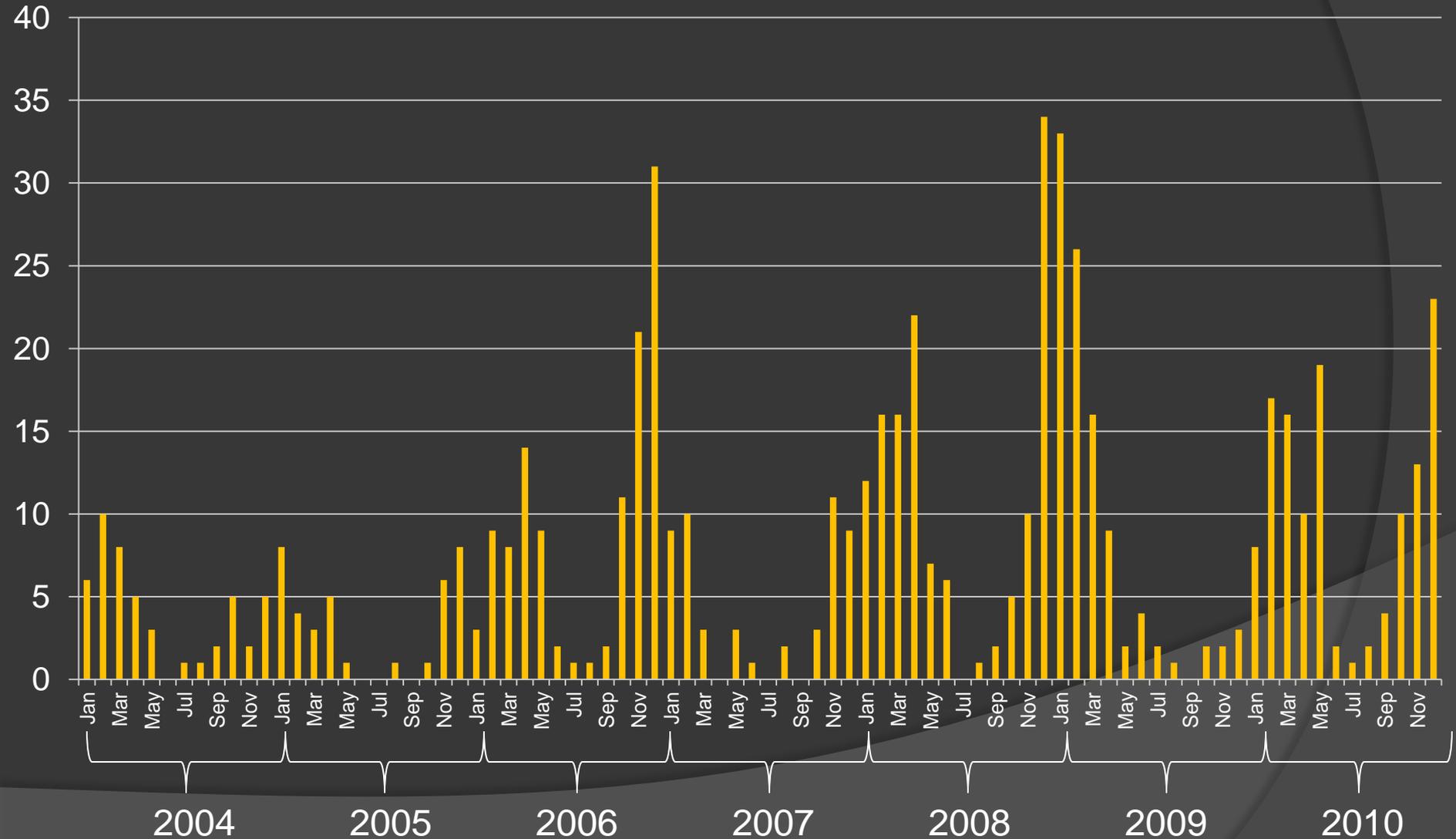
Number of Reported Enteric Illness Outbreaks in Health Care Settings, Colorado, 2004 – 2010 (N = 647)



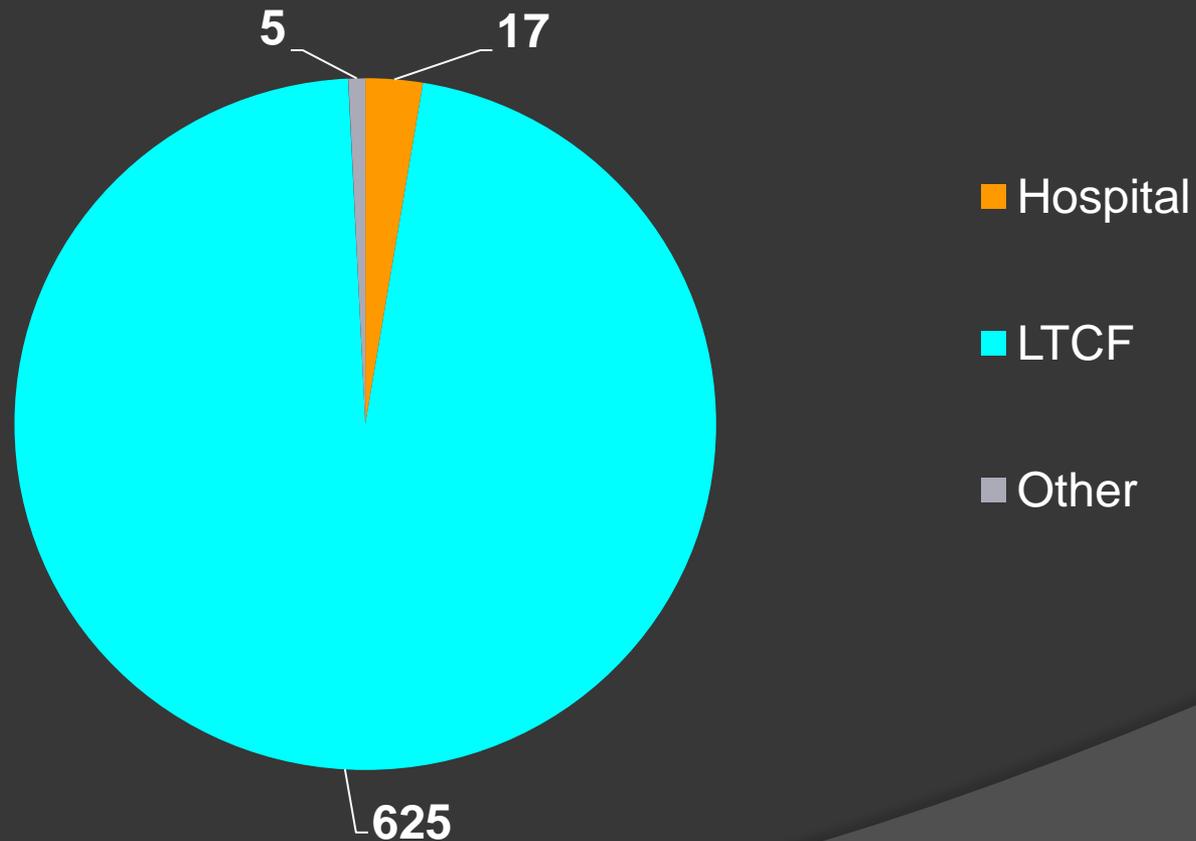
Affected Counties

- ⦿ Among 647 enteric outbreaks reported 2004 – 2010:
 - Facilities in 40 counties reported outbreaks
 - Denver – 99 outbreaks
 - Arapahoe – 98
 - Jefferson – 87
 - El Paso – 66
 - Adams – 47
 - Mesa – 37
 - Larimer – 35
 - Boulder – 30
 - Weld – 23
 - Pueblo - 21

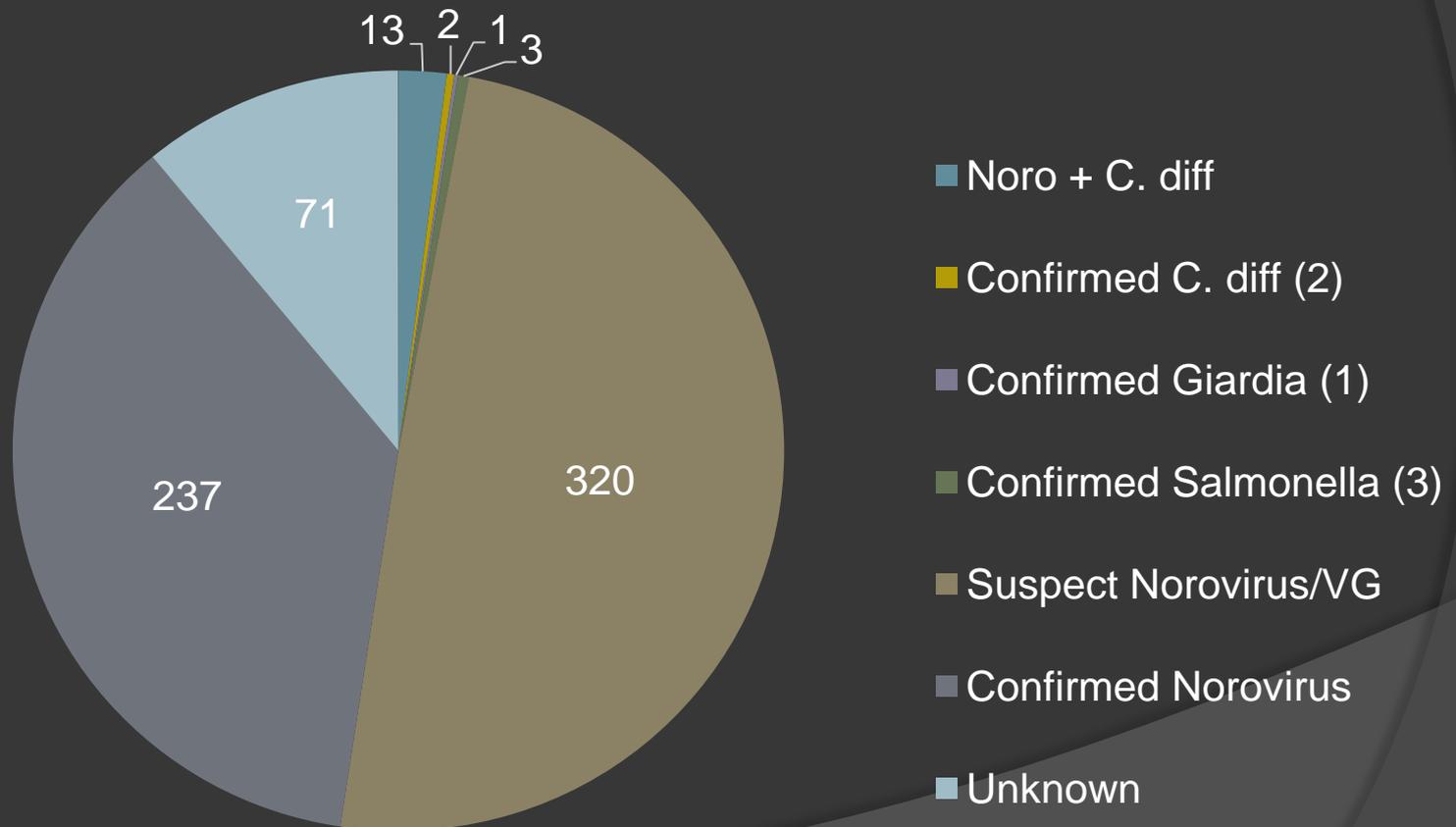
Reported Enteric Illness Outbreak in Health Care Settings by Month of First Onset, Colorado, 2004 - 2010 (N = 604)



Specific Settings of Health Care Setting Enteric Outbreaks, Colorado, 2004 – 2010 (N=647)



Etiologies of Health Care Setting Enteric Outbreaks, Colorado, 2004 – 2010 (N=647)



Attack Rates

- ◎ Residents/patients:
 - # of ill residents/patients – **median 17 (range 0-188)**
 - % of ill residents/patients – **median 29% (range 0-100%)**
- ◎ Staff:
 - # of ill staff – **median 11 (range 0-50)**
 - % of ill staff – **median 15% (range 0-100%)**
- ◎ Hospitalizations: **143/647 (22%) of outbreaks** reported at least 1 hospitalization
 - (median 2, range 1-14, all but one were noro OB's)
- ◎ Deaths: **18/647 (3%) of outbreaks** reported at least 1 death
 - (median 1, range 1-2, all were noro OB's)

Duration of Outbreaks

- First and last onset dates known for 465/647 outbreaks (72%)
 - Median 11 days (range 1-63 days)

Transmission Routes

- Person-Person – 464 (72%)
- Point source – Unknown Vehicle – 16 (2%)
- Point source – Food – 9 (1%)
- Other – 2 (1%) (1 was a Salmonella outbreak in a NICU)
- Animal Contact – 1 (1%) (Giardia)
- Unknown – 155 (24%)

LTCF Surveillance Forms

- Among 625 LTCF outbreaks reported, 398 (64%) had the one page form returned to CDPHE

Key Control Measures

- ⦿ **Implement control measures as soon as a potential outbreak is recognized**
- ⦿ **HANDWASHING**
 - Increase throughout facility
 - Hand sanitizers – use in addition to proper handwashing
- ⦿ **STAFF**
 - Exclude ill staff until at least 48 hours after last episode of vomiting/diarrhea (esp. food handlers)
 - Including work at other health care facilities
 - Limit staff movement between affected / non-affected units / areas

Key Control Measures (cont.)

◎ RESIDENTS

- Restrict ill persons to their room/apartment as much as possible until at least 48 hours after last episode of vomiting/diarrhea
- If resident is transferred to a different facility, notify receiving facility of the outbreak

◎ TRACKING

- Track ill staff and residents on a line list

Key Control Measures (cont.)

◎ FACILITY

- Promptly clean any areas affected by vomit or fecal accidents (consult with public health for methods)
- Notify visitors of the situation
- Until outbreak is over:
 - Suspend group activities
 - Consider halting new admissions
 - Discontinue self-service or family-style dining

◎ DISINFECTION

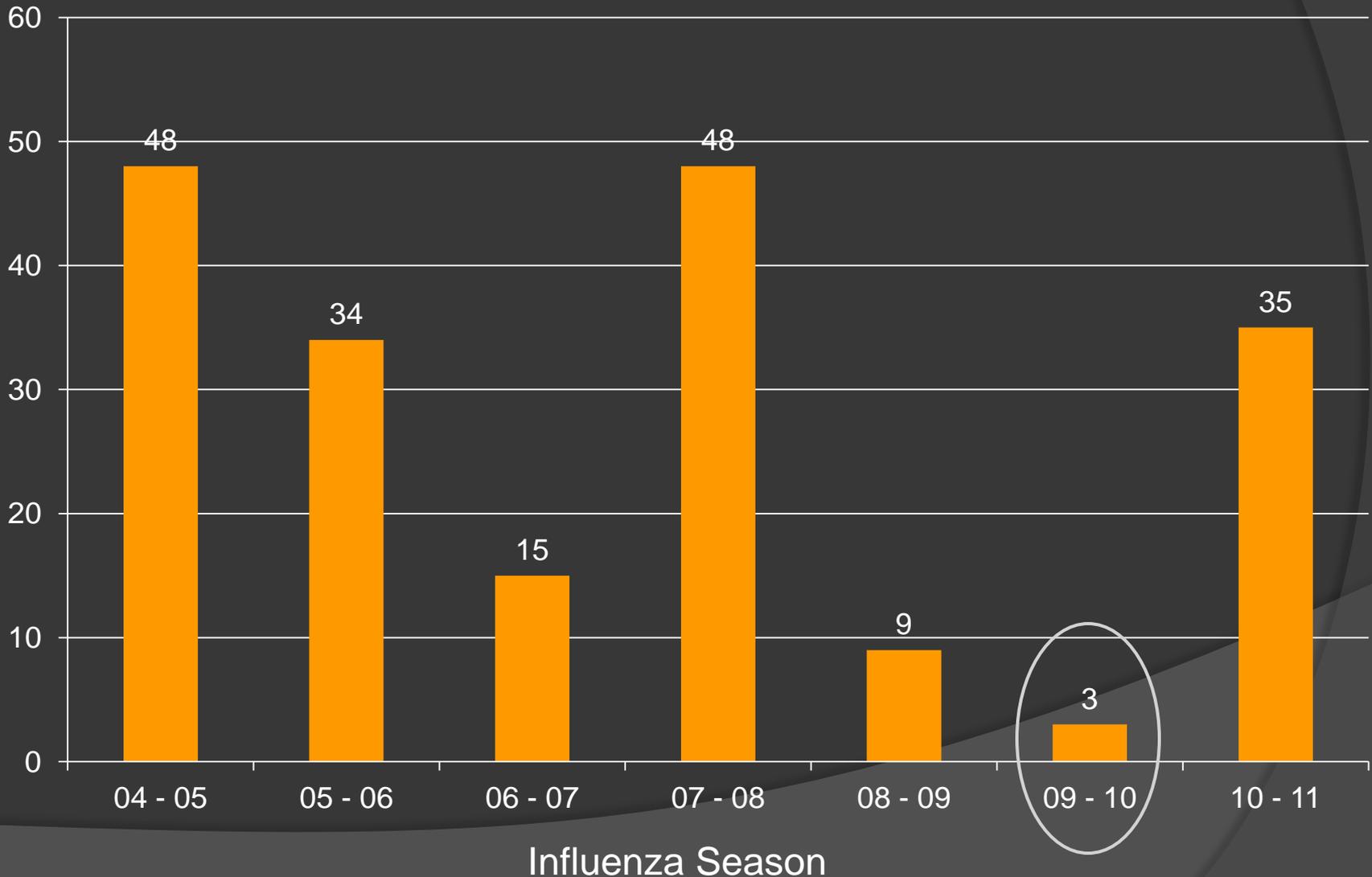
- Use a 10% solution of household chlorine bleach (1 c. bleach per 9 c. water) or an EPA-approved disinfectant with specific activity against norovirus - www.epa.gov/oppad001/chemregindex.htm
- Clean and disinfect more frequently, especially bathrooms & commonly touched surfaces

◎ EDUCATION

- Provide education about symptoms and control measures to all staff and residents

Number of Reported Influenza Outbreaks in LTCF's by Influenza Season, Colorado, 2004-05 to 2010-11 (N = 192)

Number of Influenza Outbreaks Reported by LTCF's



Resources



http://www.cdphe.state.co.us/hf/Protocols.htm - Windows Internet Explorer

http://www.cdphe.state.co.us/hf/Protocols.htm

File Edit View Favorites Tools Help

Convert Select

http://www.cdphe.state.co.us/hf/Protocols.htm

Colorado Welcome to... Colorado.gov

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Colorado Department of Public Health and Environment

Health Facilities

Protocols for Prevention, Treatment and Management of Infectious Diseases for Colorado Long Term Care and Rehabilitation Facilities

- [Guidelines for Prevention and Control of Influenza Outbreaks in Long Term Care Facilities](#)
- [Recommendations for Prevention and Control of Methicillin-resistant *Staphylococcus aureus* in Long-term-care Facilities](#)
- [Management of Vancomycin-Resistant *Enterococcus* spp. \(VRE\)](#)
- [Tuberculosis Surveillance and Screening](#)
- [Management of *Clostridium difficile*-associated diarrhea](#)
- [Norovirus Outbreak Guidelines for Long Term Care Facilities](#)
- [West Nile virus infection prevention and control recommendations](#)

[[Health Facilities Home](#)] [[Contact us](#)] [[Colorado Home](#)] [[Health Department](#)]

Topics:

- Influenza
- MRSA
- VRE
- TB
- C. diff
- Norovirus
- WNV
- More in the future...

<http://www.cdphe.state.co.us/hf/Protocols.htm>

Reporting to Public Health

When to call public health?

- Cases of reportable conditions/diseases (the lab reports most of these too)
 - 7 day and 24 hour reportable conditions
 - Reportable conditions lists available at:
<http://www.cdphe.state.co.us/dc/reportable.html>
- If you suspect an outbreak or cluster of illness, regardless of diagnosis or type of outbreak

Who to call?

- CDPHE Communicable Disease Epidemiology – 303-692-2700 (after hours 303-370-9395)
- Your local public health agency

What to expect?

- CDPHE Communicable Disease Epidemiology and/or Local Public Health will assist with the case or outbreak investigation
- CDPHE Health Facilities Division consulted as needed

Health Care Associated Infection Unit

- Within the CDPHE Communicable Disease Epidemiology Program
- Assist health care facilities with outbreak investigations (primarily non-GI and non-influenza outbreaks)
- Special projects with health care facilities through CDC grant
- Consultation
- 303-692-2700 (Dr. Wendy Bamberg – lead)