Notes from the Field

Use of Electronic Messaging and the Media to Increase Case Finding During a Cyclospora Outbreak — Iowa, July 2013

On Friday, June 28, 2013, the Iowa Department of Public Health routinely reported two cases of a rare parasitic disease, cyclosporiasis, in its weekly electronic newsletter, the Epi Update. This newsletter’s primary audience is Iowa’s public health officials and health-care providers but includes many news reporters.

By Wednesday, July 3, seven cases had been reported, resulting in a special Epi Update "Alert" and a Health Alert Network alert to all hospitals, emergency departments, infection preventionists, public health agencies, and other health-care providers in Iowa. Both alerts included information on symptoms of cyclosporiasis and diagnosis and treatment guidelines. By July 4, most major media outlets in Iowa had reported the outbreak. A press release, updating information on this outbreak, was sent on July 8 to almost 400 individuals, almost all members of the media. That same day, IDH tweeted a message about the outbreak to the department’s 5,000 followers. By July 9, daily updates were being requested by the media. After both health-care providers and the public became aware of the outbreak, many people in Iowa were tested and diagnosed with this rare disease.

Cyclospora, a recently identified coccidian parasite, causes prolonged and relapsing diarrhea and vomiting, which can last several weeks to months in healthy adults (1). It can only be identified in the laboratory using special techniques. Commonly requested tests such as bacterial cultures and microscopic examination of stool for ova and parasite cannot reliably
detect this organism. It is not spread from person to person, because excreted oocysts require at least several days outside the host to become infectious. Previous outbreaks have been associated with fruits (i.e., raspberries (2)) and raw vegetables (i.e., mesclun lettuce, basil, and snow peas (3)).

Almost all Iowa cases have been diagnosed by testing at the state’s public health laboratory, the State Hygienic Laboratory (SHL). An astute laboratorian at SHL first spotted possible *Cyclospora* oocysts by microscopic examination of fresh stool and confirmed this diagnosis using a modified acid-fast stain technique. At SHL in June, 271 stool tests for ova and parasites were requested, and none specifically requested *Cyclospora* testing. In contrast, during the first 11 days of July, requests for ova and parasites stool tests increased to 378, and *Cyclospora* testing was specifically requested on 160 specimens.

**Case:** On June 24, a male aged 61 years presented to an Iowa emergency department with severe vomiting and diarrhea. Despite extensive testing during the patient’s 5-day hospital stay, no cause of illness was identified. After some symptomatic improvement, the patient was discharged, but within days relapsed with severe vomiting and diarrhea. On July 5, the patient’s health care provider, after reading the Epi Update “Alert”, ordered *Cyclospora* testing on a specimen from the patient, which was positive. The patient was treated with trimethoprim-sulfamethoxazole and symptoms resolved within days.

*Cyclosporiasis* is unusual in that patients can have diarrhea for weeks or months, in contrast to other foodborne pathogens. Its rarity, especially in Americans with no history of foreign travel, hinders diagnosis. Public health authorities have the ability not only to identify cyclosporiasis outbreaks, but to quickly educate health professionals and the public about the
symptoms of this disease and the need for specialized testing. They also can provide this special testing in a timely manner through public health laboratories, resulting in increased case detection and assisting in the diagnosis and treatment of patients suffering from this often serious and prolonged infection.

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References


IDPH, CDC, the State Hygienic Laboratory and local public health agencies are investigating an outbreak caused by *Cyclospora*.
- *Cyclospora* is a rare parasite.
- Previous outbreaks have been associated with fresh produce (fresh fruits and vegetables).
- People become infected with *Cyclospora* by consuming food or water contaminated with the parasite.

- The source of this outbreak is unknown at this time.
  - IDPH is working with local public health agencies to interview individuals who are ill to determine if there is a common food exposure that would indicate the source of illness.
  - Cluster investigations have also begun, which asks questions of both the ill person and their family and friends who are not ill, to determine what the well people did not eat.

- *Cyclospora* infection causes a watery diarrhea that lasts an average of 57 days, if untreated.
  - Most of the illnesses in this outbreak began in mid to late June. Many people report still being ill and some have had relapses.

- There is treatment (medicine) available to treat *Cyclospora* infection.
  - Specific laboratory testing (not commonly ordered) must be done to detect *Cyclospora*.
  - Specific treatment (not typically used to treat more common diarrheal illnesses) can be prescribed.

- If you are experiencing diarrhea, or have recently had a long bout with diarrhea, you should contact your health care provider and see if you should be tested for *Cyclospora* infection.
  - Additional symptoms of cyclosporiasis (the infection caused by *Cyclospora*) include:
    - Watery diarrhea
    - Fatigue (severe tiredness)
    - Loss of appetite
    - Weight loss
    - Bloating
    - Increased gas
    - Stomach cramps
    - Nausea
    - Vomiting
    - Muscle aches
    - Low-grade fever
EPI Update for Friday, July 19, 2013
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week’s EPI Update include:
- *Cyclospora* outbreak investigation continues
- West Nile virus update
- RAGBRAI XLI study
- Meeting announcements and training opportunities

*Cyclospora* outbreak investigation continues
To date, almost all confirmed cases of *Cyclospora* in Iowa report their illness beginning on or before July 1st; therefore, healthcare providers should consider the following when determining whether *Cyclospora* testing is indicated:
- If diarrheal illness onset occurred after July 1st, illness is more likely caused by a different pathogen.
- The percent of ordered tests that are positive for *Cyclospora* is decreasing dramatically.
- Fresh produce (fruits and vegetables) has been implicated in previous *Cyclospora* outbreaks and interviews with those who have been ill indicate vegetables were probably the source of this outbreak. Illness onset dates, coupled with the shelf life of fresh produce, make it very likely the vegetable that was the source of the outbreak has already been eaten or thrown away, and will not cause anyone else to become ill.

While additional confirmed cases of *Cyclospora* infection continue to be reported and investigated, the focus of the investigation now turns to determining the source of the contamination (at no time was an Iowa-grown fruit or vegetable suspected to be the cause of the outbreak). In Iowa, this investigation is ongoing and led by DIA. IDPH will continue to update the CDC and the FDA as the Iowa epidemiologic investigation continues. Daily case counts will continue to be posted to the IDPH web site.


*West Nile virus (WNV) update*
Two human cases of West Nile virus have been reported in Iowa this summer, including a middle-aged (41 to 60 years of age) male from Linn County and an adult (18 to 40 years of age) female from Shelby County. Sentinel surveillance has identified one sentinel chicken as positive for West Nile virus infection in Pottawattamie County. West Nile virus is endemic in Iowa and activity usually peaks in late summer and early fall. Please continue to encourage measures to prevent mosquito bites:
• Insect repellant containing DEET used as directed for age
• Light-colored, long-sleeved shirt and long pants when outside for long periods of time when mosquitoes are most active (between dusk and dawn)
• Empty standing water where mosquitoes may breed

For more information on West Nile virus, visit www.idph.state.ia.us/CADE/DiseaseIndex.aspx?disease=West%20Nile%20Virus

RAGBRAI XLI study
The 41st Register’s Annual Great Bike Ride Across Iowa (RAGBRAI) will take place July 21 through 27. An epidemiologist from IDPH will be participating and performing a study on dehydration and rehydration among RAGBRAI riders. We hope all those involved with this year’s event have a safe and enjoyable week!

Meeting announcements and training opportunities
Extension Training Program for Infection Prevention: October 7-11, 2013 at the University of Iowa Hospitals & Clinics in Iowa City. The five-day intensive program is designed to provide fundamental and current information relevant to infection prevention and control professionals. Scientific, regulatory, economic, and practice information will be included. Contact Martha Freeman at 319-356-1742 for more information.

Have a healthy and happy week!
Center for Acute Disease Epidemiology
Iowa Department of Public Health
800-362-2736
Real Time Risk Communication
Cyclospora Outbreak evidence
Iowa Dept. of Public Health

Press coverage:

Two people in O’Brien County among those with rare parasite in Iowa (KIWA):

Intestinal illness found in nine Iowa counties (Sioux City Journal):

Siouxland patients reported to have severe intestinal illness (KTIV):
http://www.ktiv.com/story/22787349/2013/07/08/siouxland-patients-reported-to-have-severe-intestinal-illness


Cyclospora outbreak in Nebraska and Iowa (Food Poisoning bulletin):

Intestinal illness found in nine Iowa counties (QC Times): http://qctimes.com/news/state-and-regional/iowa/intestinal-illness-found-in-iowa-counties/article_3aa8f269-8c07-571b-9f93-f24e8d43e97f.html

Linn County, other health agencies encouraging residents to get tested for cyclospora (CR Gazette):
http://thegazette.com/2013/07/08/linn-county-other-health-agencies-investigate-intestinal-illness-outbreak/

Health officials tracking cases of cyclospora (Radio Iowa):
http://www.radioiowa.com/2013/07/08/health-officials-tracking-cases-of-cyclospora/


26 sick: seek and ye shall find, 14 more cases of cyclospora in Iowa, Nebraska (Barf blog):

Intestinal illness found in nine counties (Dubuque Telegraph Herald):
http://www.thonline.com/news/iowa-illinois-wisconsin/article_3f7a72b0-08cb-538b-ade3-76da910202cd.html

State medical director: gastrointestinal disease not likely to spare QC (QC Times):
http://qctimes.com/lifestyles/health-med-fit/state-s-doc-cyclospora-most-likely-in-q/article_6a256240-f0d7-5566-bff0-bb40cca75836.html

In search of rare diarrhea parasite (Patch): http://iowacity.patch.com/groups/schools/p/in-search-of-the-rare-diarrhea-parasite-state-researchers-looking-into-iowa-cyclosporiasis-outbreak


Iowa Cyclospora outbreak rises to 39 cases (Global Dispatch): http://www.theglobaldispatch.com/iowa-cyclospora-outbreak-rises-to-39-cases-63819/

Rare foodborne illness hits Nebraska (1011): http://www.1011now.com/home/headlines/Rare-Food-Borne-Illness-Hits-Nebraska-215396611.html


Cyclospora reports edge closer to Scott County (QC Times): http://qctimes.com/lifestyles/health-med-fit/cyclospora-reports-edge-closer-to-scott-county/article_235b3f68-cd83-5290-a5b8-638c64f4dbc2.html


60 confirmed sickened by foodborne illness in Iowa (Sioux City Journal): http://siouxcityjournal.com/ap/state/confirmed-sickened-by-food-borne-illness-in-ia/article_498b52e2-c6ef-5bba-b1a6-cbdacac9c09f.html

Number of Iowa cyclospora cases rises to 60 (DM Register): http://www.desmoinesregister.com/article/20130714/NEWS/307140046/1056/NEWS09/Number-Iowa-cyclospora-cases-rises-60

More cyclospora cases reported in Iowa (USA Today): http://www.usatoday.com/story/news/nation/2013/07/14/more-iowans-sickened-by-cyclospora/2516649/

Cyclospora reports continue to increase in Linn County, across Iowa (CR Gazette): http://thegazette.com/2013/07/15/cyclospora-reports-continue-to-increase-in-linn-county-across-iowa/

First cyclospora case reported in Johnson County (Daily Iowan): http://www.dailyiowan.com/2013/07/16/Metro/33966.html

Iowa now has 71 cases of intestinal illness (KCAU): http://www.kcautv.com/story/22846277/iowa-now-has-71-cases-of-intestinal-illness

Cyclospora cases in Iowa, Nebraska jump to 119 (CIDRAP): http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=newssearch&cd=4&ved=0CD0QqQI oADAD&url=http%3A%2F%2Fwww.cidrap.umn.edu%2Fnews-perspective%2F2013%2F07%2Fcyclospora-cases-iowa-nebraska-jump-119&ei=C1flUZyNLtLH4AO_6YDIDg&usg=AFQjCNHTRiPZgfw5UEarRxVrk3HX3mUV8g&sig2=PbqqhTOiTLF0X4KiE9HxCA


Woodbury County reports first case of foodborne illness (Sioux City Journal): http://siouxcityjournal.com/news/local/woodbury-county-reports-st-case-of-food-borne-illness/article_3daba75b-cd1b-521e-9fb7-fac8de0d9d1c.html

More cases of rare parasite, Cyclospora are reported in Iowa (KTIV): http://www.ktiv.com/story/22842728/2013/07/15/more-cases-of-rare-parasite-cyclospora-are-reported-in-iowa

At least 100 sickened by parasite tied to contaminated fruits, vegetables (CBS): http://www.wibw.com/features/toyourhealth/headlines/At-Least-100-Sickened-By-Parasite-Tied-To-Contaminated-Fruits-Vegetables-215596351.html

Iowa now has 71 cases of intestinal illness (AP): http://www.wsbtv.com/news/ap/agriculture/ap-top-news-in-iowa-at-358-pm-cdt/nYrNy/


Health officials say intestinal illness cases continue to climb in Iowa, Nebraska (The Republic): http://www.therepublic.com/view/story/84ce64fd3f8d49ddad15fe455580d218/IA--Intestinal-Illness-Iowa-Nebraska

The lowdown on cyclospora (Journal Star): http://journalstar.com/the-lowdown-on-cyclospora/article_3f3febbf-06a3-5a49-8481-ebd8619d05a4.html

Texas reports Cyclospora cases as Midwest outbreak grows (CIDRAP): [http://www.cidrap.umn.edu/news-perspective/2013/07/texas-reports-cyclospora-cases-midwest-outbreak-grows](http://www.cidrap.umn.edu/news-perspective/2013/07/texas-reports-cyclospora-cases-midwest-outbreak-grows)


Cyclospora illness: fewer cases reported (WHO-TV): [http://whotv.com/2013/07/16/cyclospora-illness-fewer-cases-reported/](http://whotv.com/2013/07/16/cyclospora-illness-fewer-cases-reported/)

Dubuque County reports two cases of Cyclospora illness (Dubuque Telegraph-Herald): [http://www.thonline.com/news/tri-state/article_10b0f3ce-eedd-11e2-8e49-001a4bcf6878.html](http://www.thonline.com/news/tri-state/article_10b0f3ce-eedd-11e2-8e49-001a4bcf6878.html)


Cyclospora outbreak sickens more than 170 in Midwest (Fox): http://www.foxnews.com/health/2013/07/17/cyclospora-outbreak-sickens-more-than-170-in-midwest/

159 with Cyclospora in Iowa, Nebraska and Texas (Food Poison Journal): http://www.foodpoisonjournal.com/foodborne-illness-outbreaks/159-with-cyclospora-in-iowa-nebraska-and-texas/


Officials: cyclospora outbreak has crested (DM Register): http://www.desmoinesregister.com/article/20130718/NEWS/307180081/Officials-Cyclospora-outbreak-has-crested


Wisconsin reports four cyclospora cases, Midwest total well over 200 (Global Dispatch): http://www.theglobaldispatch.com/wisconsin-reports-four-cyclospora-cases-midwest-total-well-over-200/

Number of new cyclospora cases tapers off in Iowa (DM Register): http://www.desmoinesregister.com/article/20130724/NEWS/307240065/-1/milestones/Number-new-cyclospora-cases-tapers-off-iowa

Cyclospora outbreak reaches Dickinson County, health officials say numbers decreasing overall (Dickinson County News): http://www.dickinsoncountynews.com/story/1988252.html

Iowa cyclospora outbreak now 127 cases (Food Poisoning Journal): http://www.foodpoisonjournal.com/foodborne-illness-outbreaks/iowa-cyclospora-outbreak-2013-now-127-cases/
Stomach bug mystery: 250 people in 6 states have cyclospora infection, CDC says (Science Times):  

Three more states report cyclospora cases; total rises to 283 (CIDRAP):  

Cyclospora outbreak highlights differing epidemiology philosophies (Food Safety News):  

Cyclospora outbreak behind more than 275 illnesses (CBS):  
http://www.cbsnews.com/8301-204_162-57595469/cdc-cyclospora-parasite-behind-more-than-275-illnesses/

Cyclospora outbreak sickens more than 200 (WebMD):  

Iowa cyclospora response criticized (DM Register):  

Bagged salads blamed for cyclospora food-poisoning outbreak (DM Register):  

Bagged lettuce likely culprit in cyclospora outbreak (CR Gazette):  

Most cyclospora patients ate pre-packaged salads, contaminated bags are off shelves (KWWL):  
http://www.kwwl.com/story/22972805/2013/07/30/most-cyclospora-patients-ate-pre-packaged-salads-contaminated-bags-are-off-shelves

Iowa has most reports of cyclospora parasite infection (WQAD):  
http://wqad.com/2013/07/30/iowa-has-most-reports-of-cyclospora-parasite-infection/

Iowa, Nebraska link Cyclospora cases to bagged salad mix (CIDRAP):  

Odd salmonella strain found in Iowa, Scott Co. too (Sioux City Journal):  

Q&A: tracking the source of the cyclospora outbreak (Fox News):  

If bagged salad is prewashed, experts say, leave well enough alone (Omaha World Herald): http://www.omaha.com/article/20130731/LIVEWELL25/130809948


Marler Clark calls on public health agencies to name names linked to cyclospora outbreak (PR WEB): http://www.prweb.com/releases/2013/7/prweb10981646.htm

145 cases of cyclospora infections reported in Iowa (WQAD): http://wqad.com/2013/07/31/145-cases-of-cyclospora-infections-reported-in-iowa/


Iowa, Texas push cyclospora count over 400 (CIDRAP): http://www.cidrap.umn.edu/news-perspective/2013/08/iowa-texas-cases-push-cyclospora-count-over-400

IDPH Cyclospora investigation (MMWR): http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6230a4.htm?s_cid=mm6230a4_e


Cyclospora illness: lawsuit filed over illness (WQAD): http://whotv.com/2013/08/06/cyclospora-sickness-lawsuit-filed-over-illness/

Farm stops salad production over cyclospora stomach bug outbreak (ABC): http://abcnews.go.com/blogs/health/2013/08/12/farm-stops-salad-production-over-cyclospora-stomach-bug-outbreak/

Cyclospora can cause weeks of illness before being identified (Food Safety News): http://www.foodsafetynews.com/2013/08/cyclospora-can-take-weeks-of-illness-to-identify/


Cyclospora outbreak nears 600 illnesses (Food Quality News): http://www.foodqualitynews.com/Food-Alerts/Cyclospora-outbreak-nears-600-illnesses
Nationwide tally for cyclospora cases now at 618 (Food Safety News):
http://www.foodsafetynews.com/2013/08/tally-for-cyclospora-cases-now-at-613/

Restaurants grapple with cyclospora outbreak (Memphis Commercial Appeal):

Salad Farm cited in cyclospora outbreak re-opens after FDA assessment (CR Gazette):

With 643 ill, cyclospora is among largest outbreaks in 5 years (Food Poisoning Bulletin):

Cyclospora Outbreak Investigation web site:
http://www.idph.state.ia.us/EHI/Issue.aspx?issue=Cyclospora Outbreak Investigation

Cyclospora Outbreak Facebook page example
Twitter account example:

IDPH - Public Health (@IAPublicHealth) - Aug 22
Cyclospora cases in Iowa nearly steady at 155 this week, up from 154 last week. Crypto cases up from 393 to 538... fb.me/JwlEsXzKS

IDPH - Public Health (@IAPublicHealth) - Aug 22
Welcome to the IDPH Facebook page and follow us on Twitter @IAPublicHealth

IDPH - Public Health (@IAPublicHealth) - Aug 22
Back to school time. When is your child too sick to go? #publichealth guidelines from IDPH bit.ly/dvTIP9 @iadeptofed #childhealth

IDPH - Public Health (@IAPublicHealth) - Aug 1
Iowa #cyclospora #outbreak cases at 146. Next case count update will be Thursday, 8/8 as new cases are declining.

IDPH - Public Health (@IAPublicHealth) - Aug 1
Why won't Iowa #PublicHealth give name of the lettuce mix source of the #cyclospora #outbreak? Because it's the law. bit.ly/lcp9I5j

IDPH - Public Health (@IAPublicHealth) - Jul 31
RT @IowaIDPH: Help promote NAID immunization awareness.
Media requests for interviews:

7/3/13 DM Register (Tony Leys), KTIV and Omaha World Herald (Bob Wilson) interviewed Dr. Quinlisk regarding a health alert issued today by IDPH about cyclospora. In the last two weeks, seven cases of Cyclospora infection have been identified in Iowa. The seven cases reside in several Iowa counties. Public health is investigating to identify possible common exposures. Two other Midwestern states are also reporting one to three cases this week, and are investigating. Cyclosporiasis is an intestinal illness caused by the microscopic parasite Cyclospora cayetanensis. People can become infected with Cyclospora by consuming food or water contaminated with the parasite. Cyclospora is not spread person to person.

7/5/13 Fort Dodge Messenger (Peter Kaspari) interviewed Dr. Quinlisk about cyclospora. In the last two weeks, seven cases of Cyclospora infection have been identified in Iowa. No new cases were identified over the holiday.

Iowa Public Radio (Pat Blank) inquired if there were any additional cases of cyclospora reported since Wednesday. Answer: no.

7/8/13 DM Register (Tony Leys), KCCI (Cynthia Fodor), ABC 5 (Ron Morasco), CR Gazette (Haley Bruce) interviewed Dr. Quinlisk about the outbreak of an intestinal illness caused by the parasite cyclospora – 22 cases have been identified to date in Iowa. A press release on the topic was issued today: [http://www.idph.state.ia.us/IdphNews/Reader.aspx?id=FE35EE76-2F40-4C15-B6C9-1ACCC335A249](http://www.idph.state.ia.us/IdphNews/Reader.aspx?id=FE35EE76-2F40-4C15-B6C9-1ACCC335A249)

7/9/13 Center for Infectious Disease Research and Policy - CIDRAP (Lisa Shnirring) inquired if IDPH can release the names of other states involved in the cyclospora outbreak. Answer: no, they must identify themselves.
Iowa City Press Citizen (Tara Bannow) and QC Times (Deirdre Baker) interviewed Dr. Quinlisk about the cyclospora outbreak.

7/10/13 KCCI (Marcus Macintosh) interviewed Dr. Quinlisk about the Cyclospora outbreak. Dr. Quinlisk also spoke about the outbreak at today’s State Board of Health meeting, at which WHO radio (Richard Lee) was in attendance.

7/11/13 KPTM Fox 42 news inquired how many cases of Cyclospora infection have now been reported in Iowa? Answer: 39

Iowa Public Radio (Ben Stanton) interviewed Dr. Quinlisk on the noon program about the Cyclospora outbreak.

7/12/13 WMT (Randy Lee) interviewed Dr. Quinlisk on their morning talk show about the cyclospora outbreak, which now includes 45 cases. IDPH issued a press release about the ongoing investigation: http://bit.ly/11J1lpo. Dr. Quinlisk was also interviewed by AP (David Pitts), DM Register (Tony Leys), CR Gazette (Lee Hermiston), Sioux City Journal (Molly Montag) and Omaha World Herald (Bob Pitts). Iowa Public Radio (Dean Borg) requested case count information.

7/13/13 IDPH released a new case count of Cyclospora infections today (71): http://www.idph.state.ia.us/IdphNews/Reader.aspx?id=2422745E-8A38-480F-B123-8FE5D0EB98B8. WHO-TV (Courtney Johns), DM Register (Tony Leys), Iowa Public Radio (Dean Borg), The Packer (Coral Beach), Omaha World Herald (Bob Glissman), Daily Iowan (Alison Chrissman) and Dubuque Telegraph Herald (Erik Hogstrom) interviewed Dr. Quinlisk about the outbreak.

Additional media contacts regarding the outbreak were ongoing through the weekend, including the DM Register, Sioux City Journal, KCCI and WHO-TV.

7/16/13 IDPH announced the Cyclospora outbreak has grown to 81 cases, but that it appears the source (vegetable, most likely) would have already been eaten or destroyed by now. Case counts are decreasing. Media inquiries included the Omaha World Herald, Sioux City Journal, Food Safety News and KMTV.

7/17/13 Cyclospora Outbreak cases are now at 87. Daily case counts are posted to the IDPH web site. Inquiries today from DM Register (Tony Leys) who inquired if we are close to determining the source. Answer: that part of the investigation now goes to DIA and FDA.

7/18/13 There are now 102 cases of Cyclospora in Iowa. Dr. Quinlisk was interviewed about this topic by Radio Iowa (Dar Danielson), KICD (Robert Clark) and ABC17 in Missouri.

ABC5 (Sabrina Ahmed) asked if IDPH could contact a Cyclospora case to see if they would talk to her about their illness. (Public Health cannot give confidential case information). The reporter was directed to Polk County Public Health, which indicated it may be able to find a person willing to contact the station to do an interview.

7/19/13 Wisconsin Public Radio contacted IDPH for a possible interview about the Cyclospora outbreak. The reporter was interested in the food traceback investigation linked to the outbreak, which is a
function of DIA and FDA. When the reporter learned that, he switched his focus to an interview with FDA.

IDPH released the latest Cyclospora case count – 109 cases.

7/22/14 Grant City Times Tribune – Missouri (Grant Gibson) inquired about the number of cyclospora cases in Iowa and the ongoing investigation into the source. Source questions were referred to DIA.

Radio Iowa (Matt Kelley) interviewed Dr. Quinlisk about Iowa’s drop in pertussis cases (151 YTD) compared to last year’s total of 995. Missouri is having an outbreak, and the reporter was comparing the situations in the two states.

7/23/13 Food Safety News (Carla Gillespie) inquired how many cases of cyclosporiasis Iowa has as of today. Answer: 127

WHO radio (Dick Layman) inquired about the CDC’s new web page of the cyclosporiasis outbreak. He wanted to know if CDC was now involved in the investigation. I explained CDC has always been involved, and the page was launched to address the widening number of states with cases. FDA is in charge of the national investigation and he was referred to their point person for information about the investigation into the source of illness.

7/24/13 Dickinson County News interviewed Dr. Quinlisk about the cyclospora outbreak.

7/25/13 Cyclospora case count in Iowa is now 138. Dr. Quinlisk was interviewed about the outbreak by ABC News (Robert Besser), CBS News (Kevin Finnegan) and Dr. Garvey was interviewed by the Wall Street Journal (Meredith Rutland), WebMD (Brenda Goodman) and KMEG (Larry Wentz).

7/26/13 KCRG (John McGlothlen) inquired as to the Cyclospora outbreak case count by county. He was directed to the IDPH website, which updates these numbers daily.

7/29/13 NBC (Jo’Nel Aleccia) interviewed Dr. Quinlisk about the cyclospora outbreak. A Minnesota epidemiologist has criticized the pace at which the source investigation into the outbreak has been conducted. The source investigation is not a function of IDPH, and while that remains true, IDPH is supportive of the deliberative, careful approach state and national investigators have approached the outbreak. Questions about the source of the outbreak are referred to FDA and DIA. Additional inquiries were fielded from CNN (Miriam Falco)

Center for Infectious Disease Research and Policy (Lisa Schirring) inquired about outbreaks in Iowa. Q&A: Do you know what Salmonella subtype is involved with the outbreak your department is investigating? (Is it Salmo Enteritidis?) Also, for that outbreak, do you know if any other states have related cases? Yes, it is Salmonella Enteritidis. We are not aware of any other states having an outbreak.

Also, I saw an item on Food Safety News about yet another outbreak involving Campylobacter. Do you have any info about it? It sounded like there might have been a health alert sent to providers about that, according to their story. But I wanted to check with you to verify. (Also, for that one, any indication that it might be a multistate event?) We are seeing Campy like we do every year. As of last Thursday there had been 226 cases year-to-date as compared to our 5 year
average year-to-date of 360.4 so we are down a little- but definitely still having activity. Recent HAN’s were on Salmonella (prior to the press release and Cyclospora. No HANs on campy from us.

7/30/13
AP (David Pitts) inquired about Iowa’s cyclospora illness outbreak for a national AP roundup on all the states involved. David was provided with the current case count (143) as well as the DIA press release issued today identifying prepackaged salad mix as the source (http://www.idph.state.ia.us/IdphNews/Reader.aspx?id=D44A7A52-341D-44DD-A781-EC32C589BF20). He asked how IDPH was communicating updates on the outbreak. Answer: Daily updates on the IDPH web page dedicated to the outbreak, frequent conference calls with local public health to address concerns on local level, press releases and daily tweets.

Food Safety News (Dan Flynn) called to inform us the publication would be going out with a story today naming the establishments where the salad mix was served. He asked for a comment from IDPH. Answer: IDPH is prohibited by state code from releasing information concerning the identity of a business unless it is deemed necessary for the protection of the public. Since the food involved in the outbreak is no longer in the food supply chain, there is no public health threat; thus, the entity may not be identified. A similar inquiry was received and answered by CBS News (CBS News with Scott Pelley) and CBS News (Heather Tesoriero).

Sioux City Journal (Nate Robson) interviewed Dr. Quinlisk regarding the cyclospora outbreak. He also asked for the brand of salad mixture and was told that information cannot be released (see above). He also asked basic questions about food safety. Additional and similar inquiries from Fox Radio News (Jill Nado), The Packer (Coral Beach), ABC News (Rick Besser), WHO radio (Sue Danielson), CR Gazette (Haley Bruce) and KWWL (Michelle Corliss). KCCI (Todd Magel) also requested an interview and was referred to DIA.

7/31/13 IDPH issued a press release today discussing the Cyclospora outbreak, and focusing on the investigative process: http://www.idph.state.ia.us/IdphNews/Reader.aspx?id=1F87D25C-7F7C-46E0-AFA7-154CD16E88B4

ABC5 (Addie Olson), KCCI (Laura Nichols), Metro Networks (Michael Arney), NBC5-Chicago (Lindsey Deal), CNN (Trisha Henry) and NBC (Sydney Lupkin) interviewed Dr. Quinlisk about the cyclospora outbreak. Additional clarification of case counts was requested by Quad City Times (Deirdre Baker).

An editorial writer for the Minneapolis Star-Tribune (Jill Bercum) had a series of critical questions for Dr. Quinlisk regarding why IDPH has not released the brand of the lettuce mixture implicated in the outbreak, or the places where it was served or sold Q&A:

1. How many cases (in Iowa and nationally) have been linked to restaurant exposure? This outbreak is about exposure to prepackaged salad mixture, not the locations where these were obtained or eaten. Over 80% of our cases reported eating the same prepackaged salad mix that contained iceberg and romaine lettuce, red cabbage and carrots. This mixture came into Iowa already packaged as a mixture and already contaminated.
2. How many restaurants have had customers who became ill in this outbreak? Over a 100 different restaurants were patronized by cases during their incubation periods.
3. Why haven’t you named the restaurants or the distributor of the contaminated product? Iowa has different laws than Minnesota, which is why you may not be aware of them. Please see our website
for information on Iowa Laws and how it is applied – go to
http://www.idph.state.ia.us/search/search.aspx?q=reportable+disease+data+release&x=0&y=0 and
click on Statement of Confidentiality (summary below).

II. IDENTIFIABLE INFORMATION IS CONFIDENTIAL
As a general rule, reportable disease records and other information which identifies a person or
business involved in a reportable disease investigation are confidential under Iowa law. The law
specifically provides as follows:
A report or other information provided to or maintained by the department, a local board, or a local
department which identifies a person infected with or exposed to a reportable or other disease or
health condition (or a business associated with a reportable or other disease or health condition) is
confidential and shall not be accessible to the public.
Information contained in a report may be reported in public health records in a manner which prevents
the identification of any person or business named in the report.
“Business” includes entities with identifiable proper names, such as schools, churches, non-profit
organizations, restaurants, and companies.
(Iowa Code § 139A.3(2)“b” & “c”; see also Iowa Code §§ 22.7(2), 22.7(16), 139A.30, 641 IAC 1.17(1)).
This section includes information about persons who have been diagnosed through positive test results
or other means, and also includes information about persons for whom IDPH or local boards of health or
health departments maintain pending or negative test results.
Information which identifies a business named in a report is also confidential and shall not be accessible
to the public. (Iowa Code § 139A.3(2)“c” and 641 IAC 1.17(2)). “Business” is defined broadly in the law as
“every trade, occupation, or profession.” (Iowa Code § 139A.2(2)). The identity of a business may be
released in certain limited circumstances discussed in section IV of this policy.

1. In two decades of covering outbreaks, I cannot recall a situation in which public health officials
have declined to provide this information. It looks like you’re protecting industry and not consumers.
Thoughts? We are following Iowa law. See above. If you have questions about this Iowa law, please
contact the Attorneys General Office or the State Legislature.
2. At what point -- last 24 hours? 48 hours? Last week? -- did you become certain enough of
bagged lettuce to publicly link it to the outbreak? Approximately two weeks ago, the epidemiologic
investigation implicated salad mixture, however, since the salad mixes were bought, served and eaten at
various locations (multiple grocery store, events and restaurants), a food trace back investigation was
performed to determine if this salad mixture came from the same origin or if this was an incidental
finding given that salad eating is very common among Iowans. Recently, it was determined that they
were indeed from the same origin, even though they were obtain at many different locations and types
of event, (and in both Iowa and Nebraska) they had eaten the same salad mix. Thus yesterday Iowa and
Nebraska put out a press release to inform the public.
3. What finding/data pushed the investigation beyond this critical point? See above.
4. What other food items did you rule out that might also be associated with salads? In the
beginning we were looking at all foods, especially fruits and vegetables (since these have been
implicated in the past.) Very quickly we determined that there were no fruit or fruit products in
common, and we let the public know that we had excluded fruits. At that point salad was implicated
(see above on that part of the investigation). However, as it was later determined that implicated the
salad mixture came into Iowa premixed and already contaminated, it was not possible to determine
which of the iceberg lettuce/romaine lettuce/red cabbage/carrots was the contaminated food or if
several of them had been contaminated.
5. What statistical data do you have that show that another item, such as a garnish, is not involved? No other food item(s) was epidemiologically implicated.

6. Your news release suggests that you did not have the resources to do tracebacks on everything that might have been in the bagged lettuce. This is incorrect. Our Department of Inspections and Appeals were instrumental in determining that 80% of Iowa cases had been exposed to the same prepackaged salad mix – even though their exposures occurred at over 50 possible sites (including over 15 restaurants and over 30 grocery stores as well as other possible sites). To do this, the food inspectors had to contact or visit each of these sites, determine what salad mixes were available over a month time period at that site, link it to the cases information and determine if the salad mix was the same. This salad mix did not have one specific brand name etc, so had to be traced back to the distributor and then back to the grower and then back to the farm to determine that it was the same farm. Well over a month has passed since the first cases have been reported. You've had time to do this. So have CDC and FDA. Why hasn't this been done? Once it was determined that this was an interstate, and possible an international food product, FDA became involved.

7. What efforts are underway to ensure that more contaminated product does not come from the same source? See above – please contact FDA. Why should consumers feel confident going into the grocery stores or restaurants and buying bagged lettuce or eating salads? Of all our cases, almost all had exposure to this specific salad mixture in mid June (our cases had onsets of illness in June). This information combined with the fact that the shelf life of salad mix is quite limited, demonstrates that this specific salad mix is no longer available and therefore no longer a risk. I don't buy the argument that the contaminated product is now off the shelves. Perhaps you could talk to experts on the shelf life of salad mix. If we don't know the source, there’s a real risk that the contamination has not been contained and that future product might also be contaminated with this parasite as the operation continues to harvest and sell product. There is historical information of possible future risk from future harvests on the same fields. This is a serious concern and one that I understand FDA is taking very seriously. However, Iowans who became ill with cyclospora became ill in June, despite continued testing of over 100 ill persons each day.

8. I'd like a copy of the questionnaire that Iowa officials used to interview people who became ill in the outbreak. This was modified over times as our investigation was honed. I will send the initial questionnaire.

9. When did interviews of people who became ill begin? On June 28. Have interviews been completed on all people who became ill? Almost all. We are still trying to reach a couple people reported in the last few days.

10. Did you receive any offers from other states to help investigate this outbreak? We have been coordinating our investigation with Nebraska since the beginning. As other states began to see cases that had not traveled to Iowa nor Nebraska (indicating a non-iowa/non-Nebraska exposure) we shared our information and our questionnaire and CDC took over coordination of the national investigation. If so, what was the reply? See above.

8/2/13 Continuing cyclospora inquiries from Lisa Schnirring (CIDRAP), Omaha World Herald (Bob Glissman) and CBS (Heather Tessoriero), Food Safety News (Carla Gillespie). FDA is issuing a web advisory this afternoon which will name the farming operation the cyclospora outbreak has been traced to. Additional media calls are expected after this posting. IDPH will be able to confirm the farm’s name, as confirmed by our AAG, since it has been announced by FDA.

8/5/13 KCCI (Megan Landolt) inquired how many cyclosporiasis cases Iowa has to date. Answer: 151.
8/6/13 CR Gazette (Haley Bruce) interviewed Dr. Quinlisk about confidentiality regarding the Cyclospora outbreak.

8/8/13 Cyclospora – 153 cases. Number of new cases slowing dramatically. Texas now has the most cases in the country, with over 200.
As of 4:30PM on Thursday, July 18th, 109 cases of Cyclospora infection have been identified in Iowa.

To date, almost all confirmed cases of Cyclospora in Iowa report their illness beginning on or before July 1st. Therefore, healthcare providers should consider the following when determining whether Cyclospora testing is indicated:

- If diarrheal illness onset occurred after July 1st, illness is more likely caused by a different pathogen.
- The percent of ordered tests that are positive for Cyclospora is decreasing dramatically.
- Fresh produce (fruits and vegetables) has been implicated in previous Cyclospora outbreaks and interviews with those who have been ill indicate vegetables were probably the source of this outbreak. The illness onset dates, coupled with the shelf life of fresh produce, make it very likely the vegetable that was the source of the outbreak has already been eaten or thrown away, and will not cause anyone else to become ill.

While additional confirmed cases of Cyclospora infection continue to be reported and investigated, the focus of the investigation now turns to determining the source of the contamination (at no time was an Iowa-grown fruit or vegetable suspected to be the cause of the outbreak). In Iowa, this investigation is ongoing and led by DIA. IDPH will continue to update the CDC and the FDA as the Iowa epidemiologic investigation continues. Daily case counts will continue to be posted to the IDPH web site.

Another kudos below.....

Patricia Quinlisk, MD, MPH
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Promoting and Protecting the Health of Iowans

From: Moran, John S. (CDC/OSELS/EAPO) [mailto:jmm4@cdc.gov]
Sent: Friday, August 02, 2013 10:20 AM
To: Flore, Anthony (CDC/GH/DPDM)
Cc: Moedenaar, Ronald L. (CDC/OSELS/EAPO); Weatherwax, Douglas (CDC/OSELS/EAPO)
Subject: RE: MMWR Notes from Field - IA cyclo messaging and cyclo outbreak

Tony,

The ProMED moderator wrote that this week’s cyclospora “Notes from the Field” presents “an excellent short case study on the value of the use of Digital Disease Detection methods for disease surveillance” and “It is nice to see official reports validating the use of non-traditional information sources.” This is why we were happy to publish the Note despite its limitations.
Hi Polly. Thanks for all your department has been doing to get excellent info out about the Cyclospora outbreak. It was great to also see that report in MMWR yesterday. I know you’re going to start doing updates on Thursdays, but I’m hoping to check with you about one more thing that you may or may not be able to comment on, but I need to give it a shot and want to keep you in the loop.

Twice this week I’ve gotten information that the bulk of the cases appear to be linked to Olive Garden restaurants and possibly other Darden outlets.

One of the reports I’ve received also mentioned that Darden has a single prepackaged lettuce supplier, which likely sourced some of the ingredients from outside the US.

I’m wondering if you have any information on this that the IDPH can share. Maybe I’m getting bad information, but since I got two reports, I feel obligated to check in with you about this.

Thanks so much for taking our query.

Best regards,

Lisa Schnirring
Writer, CIDRAP News
Center for Infectious Disease Research and Policy University of Minnesota https://www.cidrap.umn.edu
ph: 612/624-2260
e-mail: lsnirri@umn.edu
Hi, Polly,

That would be great. Thanks so much!

By the way, we're seeking an interview with a Cyclospora patient. Might you know of anyone who'd be willing to be interviewed?

Best,
Heather
212.975.5804

Hi Heather,

I'll be happy to help you out. I'll have our Medical Director, Dr. Patricia Quinn, give you a call.

Tesoriero, Heather Won
Polly,

It is so great that you guys issued this statement explaining the process and why the businesses potentially involved have not been named.

This is the info that both industry and consumers have been asking about. I wish the feds would take such a proactive approach during investigations.

Thanks again for keeping me in the loop.

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Cc: Coral Beach; lschwe@unim.edu; lansdrews@foodsaftynews.com