



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Ebola Outbreak in West Africa: One Year Later World Health Organization Assessment- January, 2015

World Health Organization’s (WHO) first notification of the West Africa Ebola outbreak was on March 23, 2014, and begins with: “The Ministry of Health (MoH) of Guinea has notified WHO of a rapidly evolving outbreak of Ebola virus disease (EVD) in forested areas of south-eastern Guinea. As of 22 March 2014, a total of 49 cases including 29 deaths (case fatality ratio: 59%) had been reported.....”.

Now, one year later, the case count exceeds 24,000, with well over 14,000 deaths.

WHO recently-published an assessment (“**One Year into the Ebola Epidemic: a Deadly, Tenacious and Unforgiving Virus**”) which provides an “in-depth” look at this outbreak, including analyses of factors contributing to the spread of the disease in this region of Africa, positive and negative aspects of the response in 2014, and overall lessons learned from 2014.

Some of the factors discussed that contributed to the spread of the disease, which are described as unique (compared to other outbreaks) to this region are:

- Community spread vs the historical health facility-based spread
- Poor preparation on the part of the countries, due in part to lack of experience with any prior outbreaks- the disease was unfamiliar and unexpected
- Geographic distribution: in West Africa, disease epicenters have been in densely-concentrated urban areas- including the capital cities of each country; previous outbreaks in other regions of Africa have been largely rural
- Public health infrastructure in Guinea, Sierra Leone, and Liberia are among the poorest in the world
- Highly mobile societies with porous borders in each country
- Severe shortages of health workers
- Cultural beliefs and behavioral practices

The sections of the report are:

- | | |
|--|---|
| 1. Introduction | 8. WHO technical support – a lasting impact? |
| 2. Origins of the Ebola epidemic | 9. Modernizing the arsenal of control tools: Ebola vaccines |
| 3. Factors that contributed to undetected spread | 10. Classical Ebola virus disease in DRC |
| 4. Guinea: The virus shows its tenacity | 11. Successful Ebola responses in Nigeria, Senegal, Mali |
| 5. Liberia: A country and its capital are overwhelmed | 12. The importance of preparedness – everywhere |
| 6. Sierra Leone: A slow start to an outbreak that eventually outpaced all others | 13. The warnings the world did not heed |
| 7. Key events in the WHO response | 14. What needs to happen in 2015 |

February, 2015
Volume 6, Issue 2

Points of Interest:

- Influenza activity is now at “Regional”
- Measles Cases in US increasing
- Weekly Ebola case incidence increasing

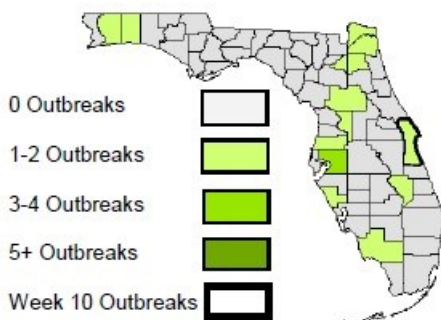
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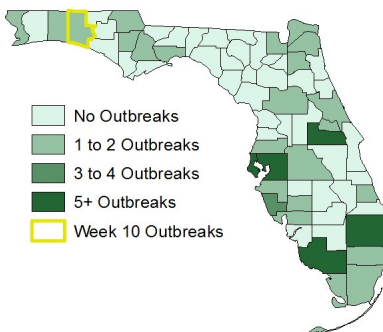
Respiratory Disease Surveillance

Outbreaks of ILI or Influenza Through Week 10: 2014 vs. 2015

Week 10, 2014



Week 10, 2015



⇒ Ninety-nine outbreaks have been reported so far this flu season (from 9/29/14 through 3/14/15).

⇒ During this same period last flu season (2013-2014), 20 outbreaks of ILI or Influenza had been reported.

Data and maps from [Florida Influenza Reports](#)

Influenza Surveillance

National

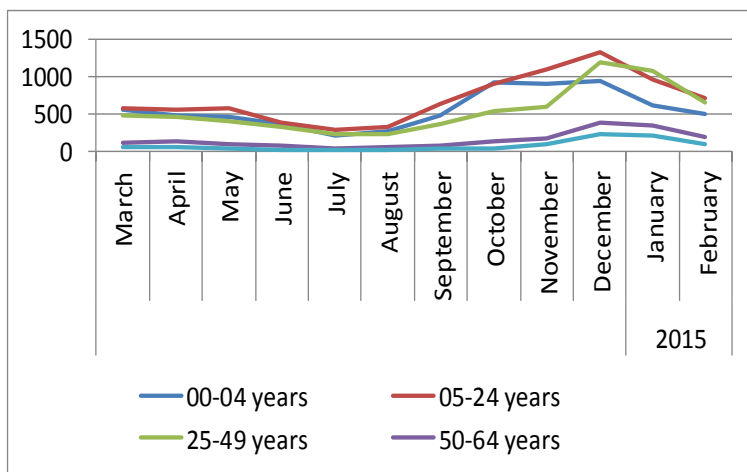
For week 9 (March 1st-7th) influenza activity continued to decrease, but was still classified as “elevated”. The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) reported 2.4% of patient visits were due to influenza-like illness (ILI); this is above the national baseline of 2.0%.

Florida (for week 10– March 8-14th)

- ⇒ Statewide, flu activity is at “Regional”. Most regions in the state are reporting declining activity.
- ⇒ Data is suggesting that this flu season peaked at week 52.
- ⇒ Emergency Department visits for ILI have declined and are at levels comparable to those seen in previous seasons at this time.

(data from [Florida Flu Review](#))

ESSENCE Emergency Department Visits of Influenza-like Illness by Age Group, Orange County, Florida, 2014-2015



Influenza Surveillance continued...

Orange County

⇒ Orange County is reporting “moderate” influenza activity for week 10 (March 8-14)

Percentage of Emergency Department visits classified as “ILI” in Orange County:
(data: ESSENCE)

Week	% ILI
10 (3/8-3/14)	3.48
9 (3/1-3/7)	3.58
8 (2/22-2/28)	3.81
7 (2/15-2/21)	3.79
6 (2/8-2/14)	3.94

Influenza Resources:

[Florida Department of Health Weekly Influenza Activity Report](#)

[Center for Disease Control and Prevention Weekly Influenza Activity Report](#)

Special Surveillance: Ebola

National

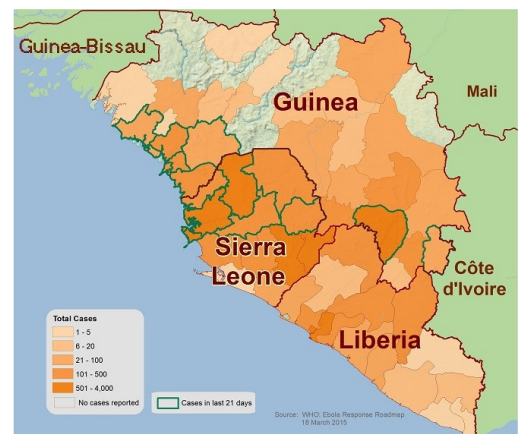
- ⇒ On March 13th an American healthcare worker who tested positive for Ebola virus while working in a treatment facility in Sierra Leone was admitted to the NIH Clinical Center’s Special Clinical Studies Unit in Bethesda, Maryland.
- ⇒ Ebola continues to represent a very low risk to the general public in the United States.
- ⇒ **Physicians should immediately call the local health department if a patient fits the criteria of an Ebola Patient Under Investigation** (Patient Screening Tool below).

International

Updated March 24, 2015:

Countries impacted include Guinea, Sierra Leone, and Liberia.

- ⇒ Case Count: **24,907**
- ⇒ Deaths: **10,326**
- ⇒ Laboratory Confirmed Cases: **14,715**
- ⇒ During the week 3/9/15 through 3/15/15, WHO reports there were 95 new confirmed cases in Guinea, the highest weekly total this year.



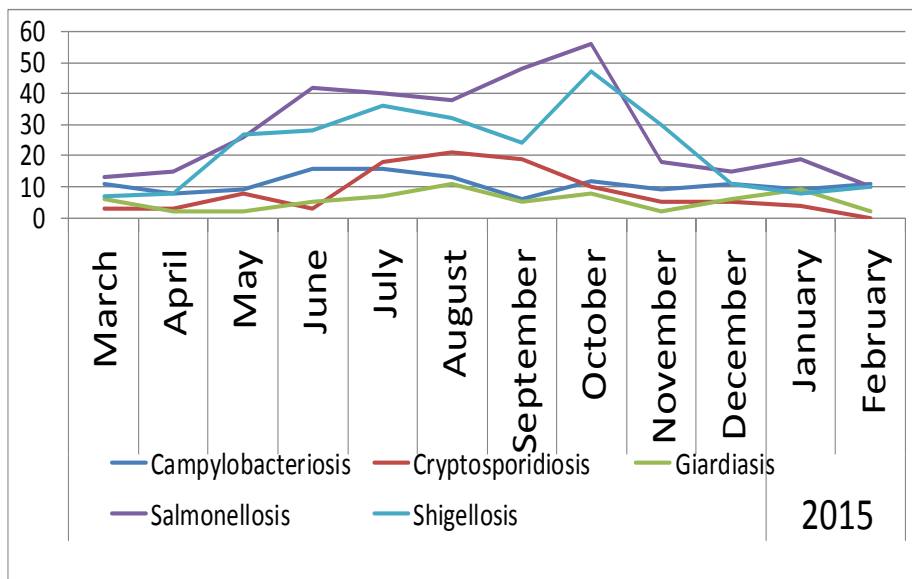
(Map Courtesy CDC)

Ebola Resources:

Patient Screening Tool: [Florida Department of Health](#) [Florida Department of Health EVD Resources](#)
 Centers for Disease Control and Prevention: [Ebola Information and Guidance](#)
 World Health Organization: [Global Alert and Response Situation Reports](#)

Gastrointestinal Illness Surveillance

Select Reportable Enteric Diseases in Orange County, Florida, March 2014 to February 2015



Gastrointestinal Illness Points of Interest:

- ⇒ In February, Campylobacter and Shigellosis case numbers increased slightly in comparison to January. Cases of Salmonellosis, Cryptosporidiosis, and Giardiasis decreased.
- ⇒ During February, 7 foodborne illness complaints were reported to the Florida Department of Health in Orange County for investigation.
- ⇒ No lab-confirmed Norovirus foodborne outbreaks were reported in February in Orange County.

Gastrointestinal Illness Resources:

[Florida Online Foodborne Illness Complaint Form - Public Use](#)

[Florida Food and Waterborne Disease Program](#)

[Florida Food Recall Searchable Database](#)

[Florida Department of Health - Norovirus Resources](#)

[CDC: A-Z Index for Foodborne Illness](#)

[CDC: Healthy Water](#)

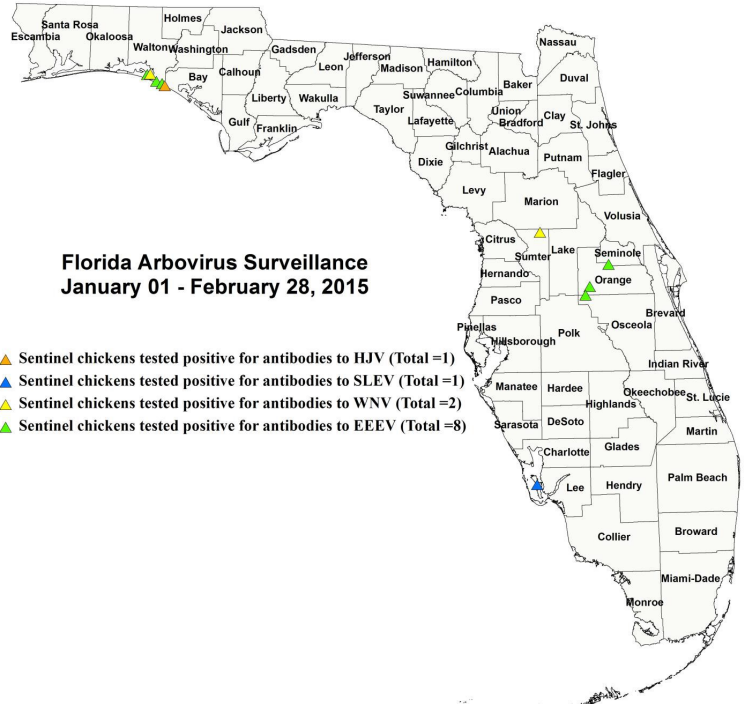
**REPORT
FOODBORNE
ILLNESS
ONLINE**

Arboviral Surveillance

January 1– February 28, 2015

Florida

- ⇒ For week 8 (February 22-28), no counties were under a mosquito-borne illness advisory or alert.
- ⇒ Five cases of imported dengue fever (international travel-associated) with onset in 2015 have been reported in Florida. One of these was in a non-Florida resident.
- ⇒ Fifteen cases of imported Chikungunya have been reported in Florida with onset in 2015.
- ⇒ No cases of locally acquired dengue or Chikungunya have been reported YTD
- ⇒ Nine cases of international travel-associated malaria with onset in 2015 have been reported. Three of these were in non-Florida residents.



Orange County

- ⇒ No locally-acquired cases of Dengue or Chikungunya reported.
- ⇒ One case of imported Chikungunya (international travel history two weeks prior to symptom onset) has been reported in February.
- ⇒ No cases of imported Dengue were reported in 2015.
- ⇒ One case of imported Malaria was reported in February.

Arboviral Resources:

[Weekly Florida Arboviral Activity Report \(Released on Mondays\)](#)

[Orange County Mosquito Control](#)

Chikungunya Resources

[Florida Department of Health Chikungunya Information](#)

[CDC Chikungunya Information](#)

[CDC Chikungunya MMWR](#)



Disease	ORANGE				All Counties			
	February		Cumulative (YTD)		February		Cumulative (YTD)	
	2015	Mean, 5 yr	2015	Mean, 5yr	2015	Mean, 5yr	2015	Mean, 5 yr
Brucellosis	0	0	0	0.2	1	0.2	1	1.2
Campylobacteriosis	14	7.4	25	16.2	260	152.6	540	328.8
Carbon Monoxide Poisoning	0	0.2	0	0.8	31	9.8	51	27.6
Chikungunya Fever	1	0	1	0	17	0.2	51	0.2
Cholera (Vibrio cholerae Type O1)	0	0	2	0	0	0.4	3	1.4
Ciguatera Fish Poisoning	1	0	1	0.2	5	2.4	6	3.6
Creutzfeldt-Jakob Disease (CJD)	0	0	0	0	4	1.4	7	2.4
Cryptosporidiosis	2	1.8	6	4.2	42	36.4	95	68.6
Cyclosporiasis	0	0	0	0.2	0	2.6	0	3.8
Dengue Fever	0	0.6	0	1.2	3	5	8	17
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	2	1.2	4	1.6	41	25	63	55.4
Giardiasis: Acute	6	4.8	11	9.6	84	85.6	153	188.2
Haemophilus influenzae Invasive Disease	1	1	1	2.2	15	23	37	47.8
Hansen's Disease (Leprosy)	0	0	0	0	1	0.8	2	1
Hemolytic Uremic Syndrome (HUS)	0	0.2	1	0.2	2	0.2	3	0.6
Hepatitis A	0	0.8	1	1.2	8	9.8	19	17.6
Hepatitis B: Acute	1	1	1	2.2	41	22.8	69	48.6
Hepatitis B: Chronic	46	24.6	86	54.2	480	302.8	927	616.2
Hepatitis B: Perinatal	0	0	0	0	0	0.2	0	0.4
Hepatitis B: Surface Antigen in Pregnant Women	6	5.6	14	9.8	34	38.2	56	79.4
Hepatitis C: Acute	0	0.6	0	2	11	9.6	24	22.2
Hepatitis C: Chronic	162	128.8	312	264.6	2887	2125.4	5613	4234.2
Hepatitis E	0	0	0	0	1	0.4	1	0.4
Influenza-Associated Pediatric Mortality	0	0	0	0.2	0	0.6	0	1.6
Lead Poisoning	2	5	3	8.2	66	86	107	141.4
Legionellosis	2	0.4	4	1.6	28	14.4	56	34.2
Listeriosis	0	0	0	0.6	2	1.4	3	8
Lyme Disease	0	0.4	0	0.4	8	6.6	21	12.6
Malaria	1	0.4	1	1.2	3	5	13	15.6
Measles (Rubeola)	0	0	0	0.8	0	0.4	5	1.4
Meningitis: Bacterial or Mycotic	0	0.4	0	1.8	10	13.8	22	29
Meningococcal Disease	0	0	0	0	4	6.6	8	13.2
Mercury Poisoning	0	0	0	0	2	0.2	4	1
Mumps	0	0	0	0	4	0.4	6	1.6
Pertussis	1	1.6	3	3.6	35	32.8	59	71
Pesticide-Related Illness and Injury: Acute	0	0	0	0.2	0	4.2	1	9.6
Rabies: Possible Exposure	4	10.4	14	16.2	229	187.8	457	368.6
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	0	1	0.4	6	0.6
Salmonellosis	9	11.4	30	30.6	205	231.2	550	553.2
Shigellosis	12	2.6	15	8.4	232	95.2	310	179.4
Strep pneumoniae Invasive Disease: Drug-Resistant	0	3.2	1	10	4	70	18	156
Strep pneumoniae Invasive Disease: Drug-Susceptible	1	2.6	3	7	47	76.6	86	166
Toxoplasmosis - Expired 6/4/2014	0	0.2	0	0.2	0	1.4	0	2
Typhoid Fever (Salmonella Serotype Typhi)	0	0.2	0	0.4	2	1	2	2
Varicella (Chickenpox)	2	4	2	7.4	85	73.2	147	140.8
Vibriosis (Vibrio alginolyticus)	0	0	0	0	2	1.4	4	2
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	0	1	0	2	0.2
Vibriosis (Vibrio vulnificus)	0	0	0	0	2	0.2	2	0.2
Total	276	221.4	542	469.4	4940	3765.6	9618	7677.8

US Measles Outbreaks Update

State	Confirmed Cases	As of	Source
California	130	2/27/15	California Department of Public Health Measles
Nevada	9	2/27/15	Southern Nevada Health District Newsroom
Illinois	15	2/25/15	Illinois Department of Public Health
Washington	8*	3/13/15	Clallum County Dept. of Health and Human



The California cases are linked to an international traveler. The Nevada outbreak has been traced to an infected staff member at a Las Vegas restaurant. The majority of the Illinois cases are associated with a day care in Cook County. *The Washington cases include 5 from Clallum County, and, based on a [news report](#), 2 from Grays Harbor and 1 from Whatcom County. Investigations are ongoing, and include outbreak sources in Nevada, Washington, and Illinois.

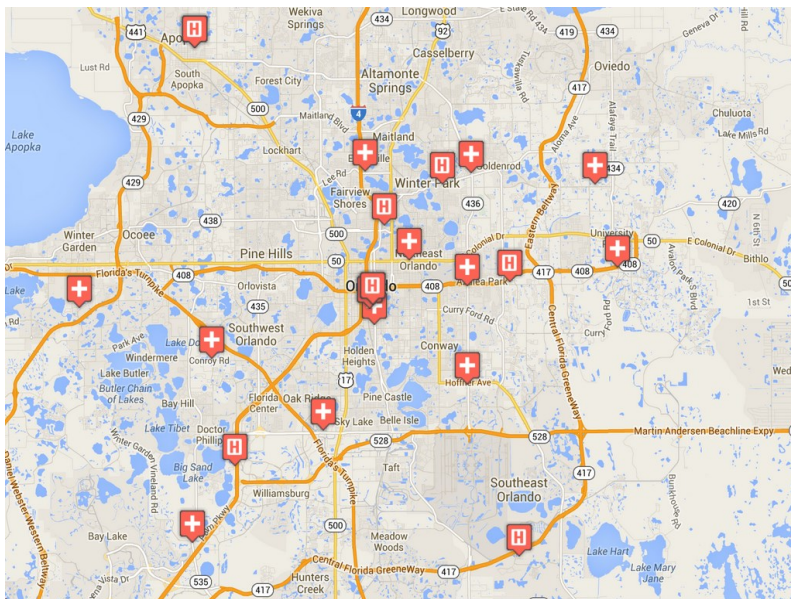
Other Disease Resources

In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided links for surveillance information on these diseases in [Florida](#) and [Orange County](#).



Florida Department of Health: ESSENCE

-  Hospital linked to ESSENCE
-  Florida Hospital Centra Care Clinic linked to ESSENCE



Since 2007, the Florida Department of Health has operated the Early Notification of Community-based Epidemics (ESSENCE), a state-wide electronic bio-surveillance system. The initial scope of ESSENCE was to aid in rapidly detecting adverse health events in the community based on Emergency Department (ED) chief complaints. In the past seven years, ESSENCE capabilities have continually evolved to currently allow for rapid data analysis, mapping, and visualization across several data sources, including ED record data, Merlin reportable disease data, Florida Poison Information Network consultations, and Florida Office of Vital Statistics death records. The majority of the information presented in this report comes from ESSENCE. Florida currently has 186 emergency departments and 30 urgent care centers (Florida Hospital Centra Care) reporting to ESSENCE-FL for a total of 216 facilities.

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The Epidemiology Program conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions that are reported from physician's offices, hospitals, and laboratories.

Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381, Florida Statutes.

Data is collected and examined to determine the existence of trends. In cooperation with the Office of Emergency Operations, the Epidemiology Program conducts syndromic and influenza-like-illness surveillance activities.

Syndromic surveillance was added to the disease reporting process as an active method of determining activities in the community that could be early indicators of outbreaks and bioterrorism.

Our staff ensures that action is taken to prevent infectious disease outbreaks from occurring in Orange County communities and area attractions. Along with many public and private health groups, we work for the prevention of chronic and long-term diseases in Central Florida.

ALL DATA IS PROVISIONAL