



Winnebago County, Illinois
Weekly Influenza Surveillance Report
CDC Week 10
March 07, 2010—March 13, 2010

In Brief:

Mortality

Confirmed deaths from pneumonia/influenza Week 10: 1
Percent of deaths due to pneumonia/influenza: 1.64%
Baseline—7.61%, Epidemic—17.76%

School Absenteeism

Sentinel Site Absenteeism – All Schools – Week of 03/08 – 03/12: 7.57%
Sentinel Site Absenteeism – All Schools – Week of 03/01 – 03/05: 7.14%
Sentinel Site Absenteeism – Elementary Schools – Week of 03/08 – 03/12: 6.17%
Sentinel Site Absenteeism – Elementary Schools – Week of 03/01 – 03/05: 6.89%

Influenza-Like Illness Surveillance

Sentinel Site ILI rate—Week Ending March 13: 0.83%
Sentinel Site ILI rate—Week Ending March 06: 1.25%

Pneumonia Hospital Admissions

Week Ending March 13: 12
Week Ending March 06: 25

Note: Numbers include 2 hospitals and are one week behind due to reporting methods.

Laboratory Rapid Antigen Tests

Winnebago County positive rapid tests collected (beginning Week 35): 1395
Winnebago County positive rapid tests collected for Week 39 (ending October 3): 39
Winnebago County positive rapid tests collected for Week 40 (ending October 10): 65
Winnebago County positive rapid tests collected for Week 41 (ending October 17): 190
Winnebago County positive rapid tests collected for Week 42 (ending October 24): 354
Winnebago County positive rapid tests collected for Week 43 (ending October 31): 272
Winnebago County positive rapid tests collected for Week 44 (ending November 7): 199
Winnebago County positive rapid tests collected for Week 45 (ending November 14): 107
Winnebago County positive rapid tests collected for Week 46 (ending November 21): 40
Winnebago County positive rapid tests collected for Week 47 (ending November 28): 13
Winnebago County positive rapid tests collected for Week 48 (ending December 5): 9
Winnebago County positive rapid tests collected for Week 49 (ending December 12): 5
Winnebago County positive rapid tests collected for Week 50 (ending December 19): 5
Winnebago County positive rapid tests collected for Week 51 (ending December 26): 1
Winnebago County positive rapid tests collected for Week 52 (ending January 2): 0
Winnebago County positive rapid tests collected for Week 01 (ending January 9): 2
Winnebago County positive rapid tests collected for Week 02 (ending January 16): 0
Winnebago County positive rapid tests collected for Week 03 (ending January 23): 1
Winnebago County positive rapid tests collected for Week 04 (ending January 30): 5
Winnebago County positive rapid tests collected for Week 05 (ending February 06): 2
Winnebago County positive rapid tests collected for Week 06 (ending February 13): 3
Winnebago County positive rapid tests collected for Week 07 (ending February 20): 3
Winnebago County positive rapid tests collected for Week 08 (ending February 27): 1
Winnebago County positive rapid tests collected for Week 09 (ending March 06): 3
Winnebago County positive rapid tests collected for Week 10 (ending March 13): 2

Pneumonia and Influenza Mortality Surveillance, 2009-2010

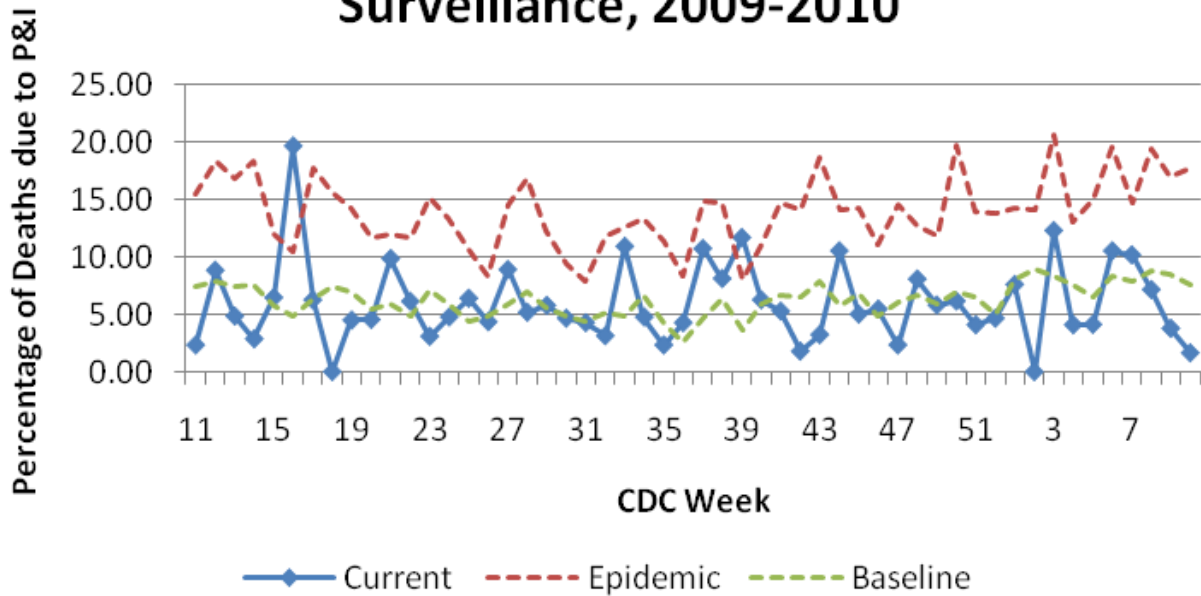


Figure 1 displays the current percentage of deaths attributable to pneumonia and influenza combined. This value is compared to a baseline and upper threshold (95%, or 1.96 standard deviations above the mean) figure, calculated using data from the previous 14 years. Week 10 is below the baseline and upper 95% threshold.

Sentinel School Absenteeism Elementary and All Sites 2009-2010

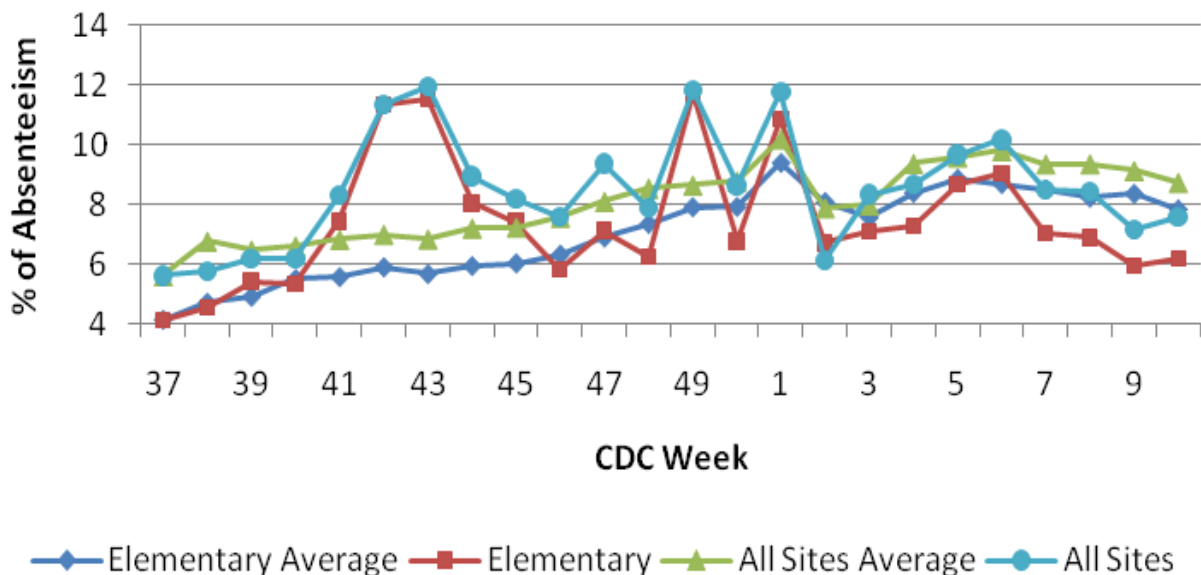


Figure 2 compares Elementary and All-Sites school absenteeism from sentinel sites against the average of the previous eight school years. For both Elementary and All-Sites absenteeism, the data are below the historical averages. There was no school during Weeks 51 and 52.

Total ILI by Sentinel Sites

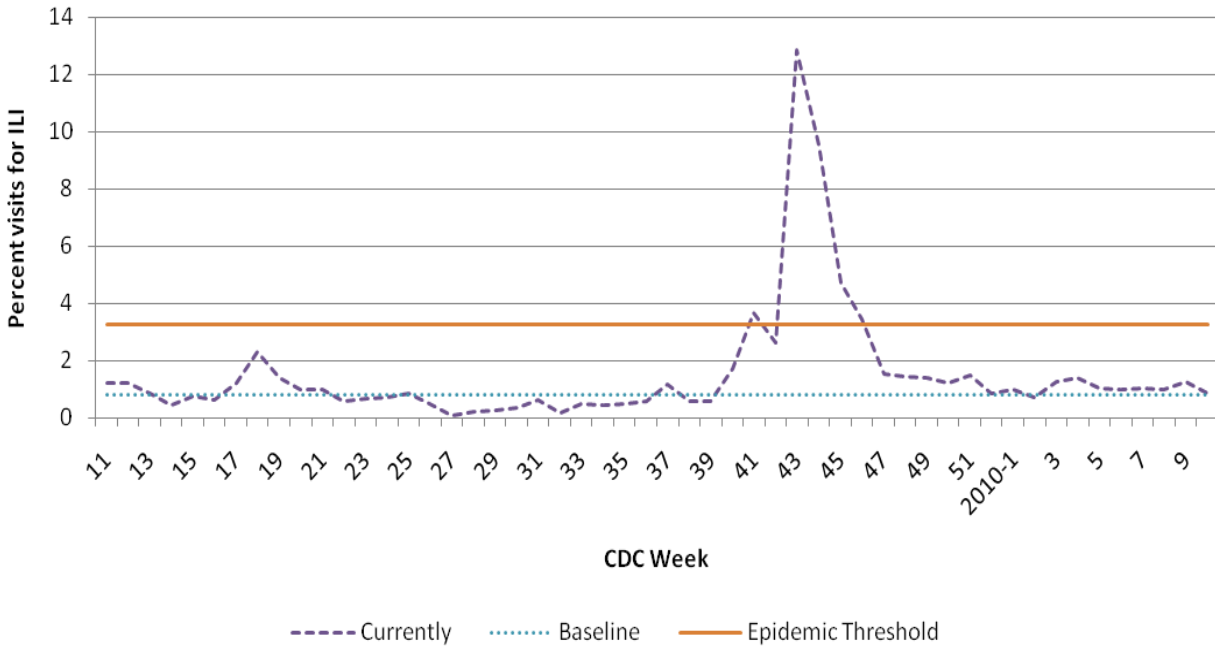


Figure 3 is the representation of all visits from sentinel sites* for Influenza-Like Illness, or ILI. Also included are the baseline and upper threshold (95%, or 1.96 standard deviations above the mean) calculated from the previous 3 years. This week's ILI activity continues to decline from 19 weeks ago and is currently below epidemic values. *Currently 2 sentinel sites reporting.

Pneumonia from Sentinel Sites

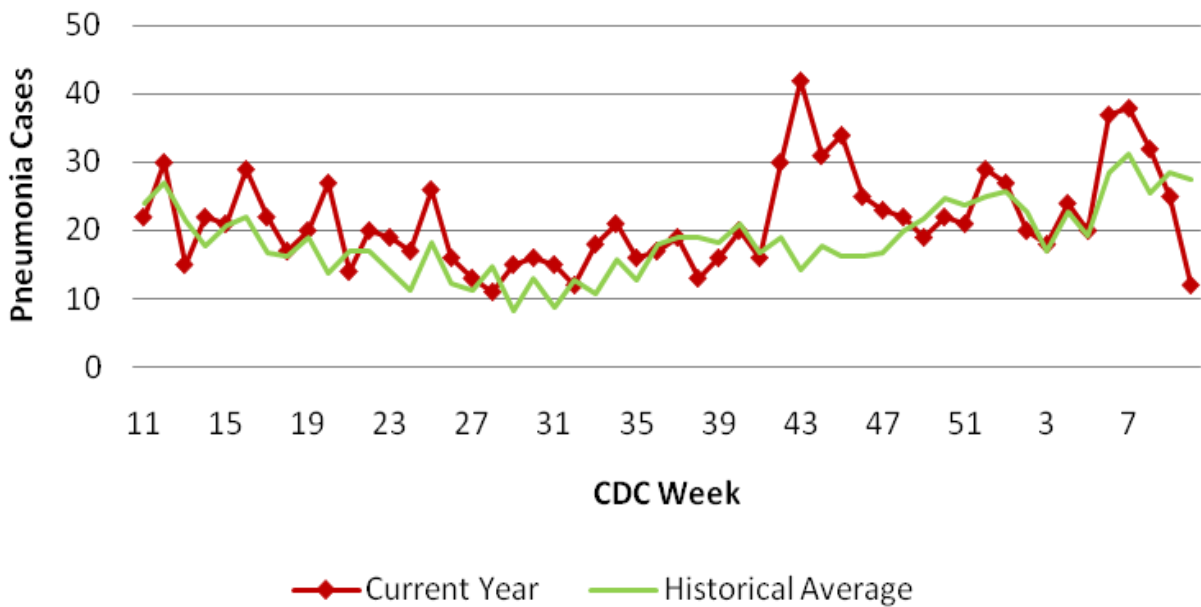


Figure 4 compares the number of pneumonia admissions against the average pneumonia from sentinel sites over the previous three years. Weeks 6 through 8 were above the historical average, but weeks 9 and 10 are below. Please note, these numbers only include two hospitals, and one is one week behind in reporting methods.

Positive Rapid Influenza Tests (as of 03/13/2010)
 Total Number of A+/B+ Samples Collected by Week for All Facilities
 Compared to a 4-Year Historical Average
 (N = 1395, 99% A+, 1% B+)

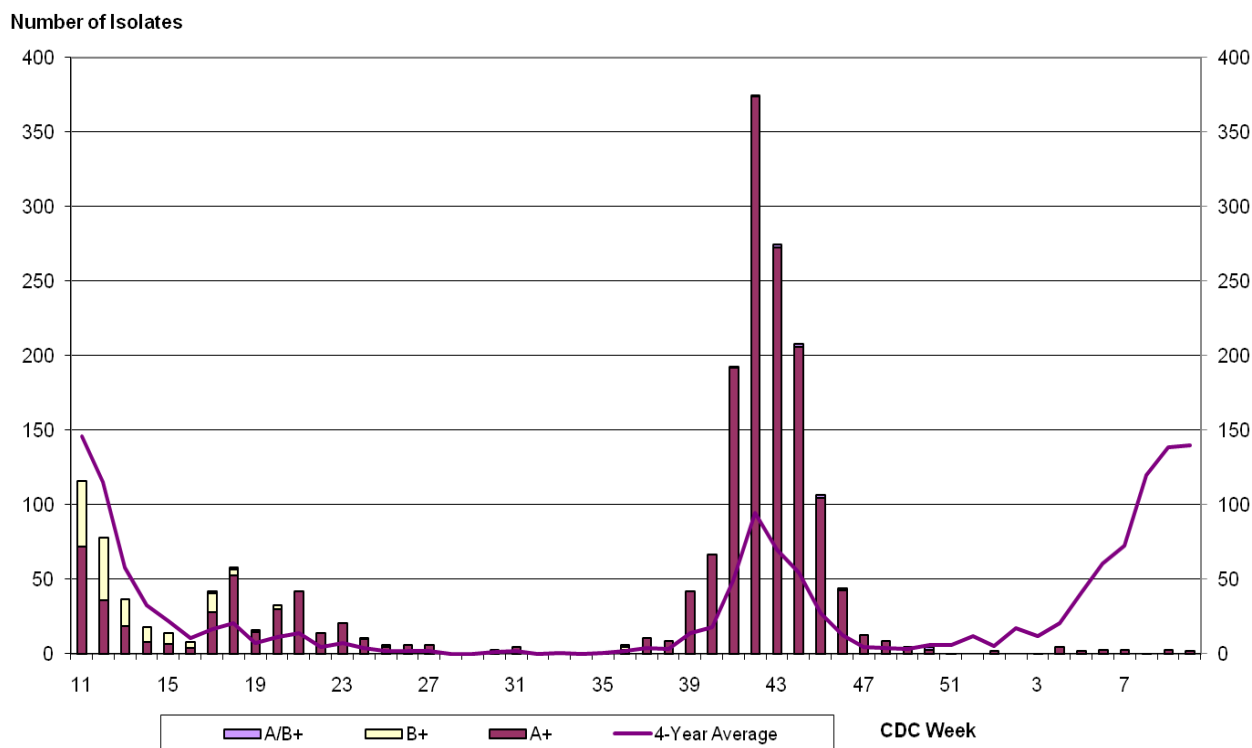


Figure 5 represents the number of positive rapid influenza (broken down by influenza sub-typing) compared to a 4-year historical average. Previously, data were above the historical average, but Weeks 50 of 2009 through Week 10 of 2010 are below.

Total H1N1 Hospitalizations

Onset of Symptoms, Winnebago County since Week 35

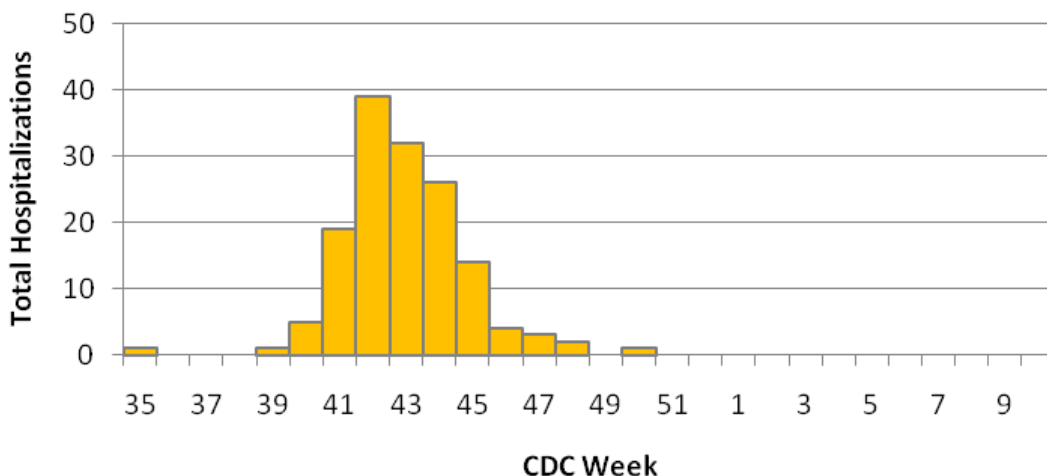


Figure 6, above, shows the number of H1N1 hospitalizations by onset of symptoms and week for Winnebago County. Please note the large spike in cases beginning in week 41. Also, there were no new hospitalized cases with onset of symptoms in Weeks 49, 51, and 52 of 2009 in addition to Weeks 1 through 10 of 2010.

H1N1 Cases by Age and Week

Winnebago County, IL

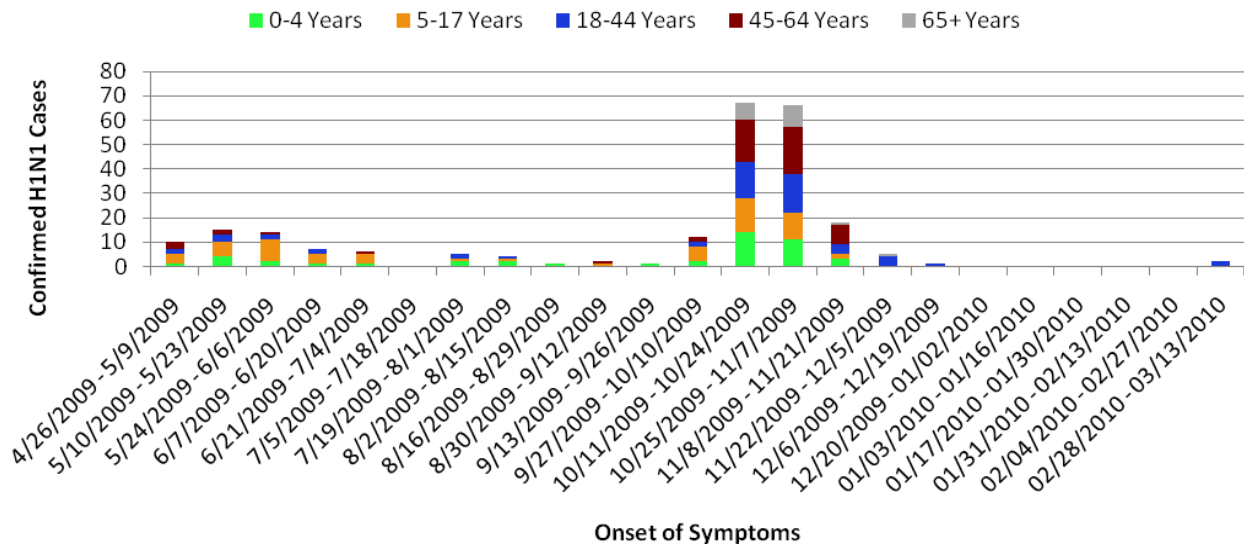


Figure 7 is representative of all H1N1 cases by age and bi-week periods. There had been a large increase in case numbers in previous two, two-week periods, but there has been a decline lately. Also, the majority of cases were in those under 18 years old, but more recent cases have been documented in those over the age of 18. There were two new cases week ending 03/13/2010.

Age Range	Total Cases n / %	Percent of Hospitalizations n / %
0 - 4	45 / 19%	27 / 17%
5 - 17	62 / 26%	27 / 17%
18 - 44	56 / 24%	39 / 24%
45 - 64	55 / 23%	50 / 31%
65 +	18 / 8%	18 / 11%
Total	236 / 100%	161 / 100%

Below, Novel H1N1 influenza by Gender

Gender	N	%
Male	106	45%
Female	130	55%

Above, Novel H1N1 cases by age and hospitalizations by age

Age Range	1 mo - 85 yrs
Mean	27.69 yrs
Median	21 yrs

Left, age range, mean and median for Novel H1N1 influenza

Below, various statistics for Novel H1N1 Confirmed cases, as of March 13, 2010

Comorbidity/ Risk Factors	Unhospitalized Cases (%) (n = 51)		Hospitalized (%) (n = 158)		All (%) (n=209)
	n	%	n	%	%
Asthma	(7)	13.7	(54)	34.1	29.2
Diabetes	(1)	1.9	(26)	16.4	12.9
Pregnancy	(1)	1.9	(4)	2.5	2.4
Immunocompromised	-	-	(13)	8.2	6.2
None Disclosed	(42)	82.4	(70)	44.3	53.6
Seasonal Influenza Vaccination					
Received	(4)	7.8	(3)	1.9	3.3
Did Not Receive	(15)	29.4	(13)	8.2	13.4
Unknown	(32)	62.7	(142)	89.9	82.3

Novel H1N1 Laboratory Submissions

Week	Winnebago County			Out of Jurisdiction		
	Submitted	Positive	Percent Positive	Submitted	Positive	Percent Positive
Ending 11/28	37	3	5%	7	0	0%
Ending 12/05	32	3	6%	12	0	0%
Ending 12/12	34	0	0%	8	0	0%
Ending 12/19	36	1	3%	6	0	0%
Ending 12/26	34	0	0%	10	0	0%
Ending 01/02	36	0	0%	5	0	0%
Ending 01/09	29	0	0%	8	0	0%
Ending 01/16	31	0	0%	4	0	0%
Ending 01/23	14	0	0%	3	0	0%
Ending 01/30	28	0	0%	7	0	0%
Ending 02/06	33	0	0%	4	0	0%
Ending 02/13	40	0	0%	9	0	0%
Ending 02/20	28	0	0%	5	0	0%
Ending 02/27	20	0	0%	8	1	0%
Ending 03/06	24	2	8%	6	0	0%
Ending 03/13	21	0	0%	2	0	0%
Total	1414	236	17%	327	11	3%

Figure 7 shows the number of Novel H1N1 submissions from both residents and non-residents of the County. Overall 1741 Novel H1N1 tests have been submitted, 247 (14%) being positive. In addition, Winnebago County has experienced 5 deaths from the Novel H1N1 Influenza.

Outside the County:

Illinois influenza activity (as of week 10):
Sporadic

Illinois number of Novel H1N1 influenza hospitalizations:
2,983

Illinois number of Novel H1N1 influenza deaths:
102

Source: Illinois Department of Public Health

United States influenza activity (as of Week 10):
Regional in 3 States/Territories
Local in 9 States/Territories
Sporadic in 33 States/Territories

U.S. number of Novel H1N1 influenza cases for Week 10:
148

U.S. cumulative number of Novel H1N1 influenza cases:
65,424 Week 35 through Week 10

Source: Centers for Disease Control and Prevention



Questions/Comments?

Zachary McCormic, MPH
Epidemiologist
Health Promotion and Protection
Winnebago County
Health Department
401 Division Street
Rockford, IL 61107
815-720-4215



Public Health
Prevent. Promote. Protect.