Utah Weekly Pertussis Update

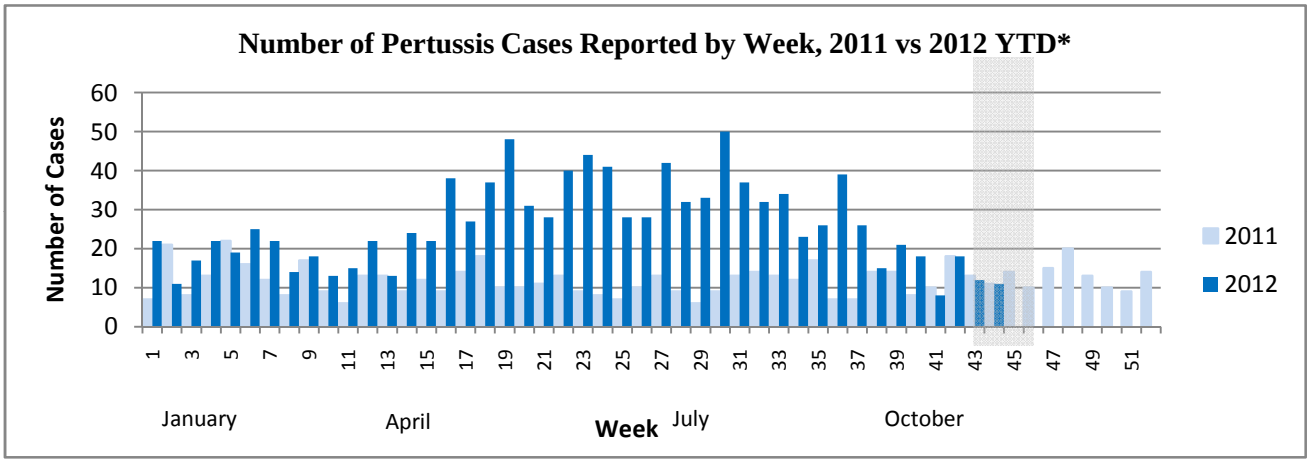
2012 data, through MMWR week ending November 17 (MMWR week 46)

Data presented in this report are based on current data available and will be subject to change weekly.

Data Summary

Total number of cases reported, 2012 year-to-date (YTD)	1146	Utah Incidence rate, 2012 year-to-date (YTD) per 100,000 person-years	45.1
Total number of cases reported 2011	618	Utah Incidence rate, 2011 per 100,000 person-years	21.7
Number of cases reported in past week	38	National Incidence rate, 2012 per 100,000 person-years (As of 9/20/12)	9.3
Total number of cases reported, through same time period 2011	537	National Incidence rate, 2011 per 100,000 person-years	6
Age groups with the highest rates	<1 year 5-14 years	Cases in infants <1 year	103

Number of cases reported by week



*Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

2012 Year-to-Date Incidence Rates, By Age

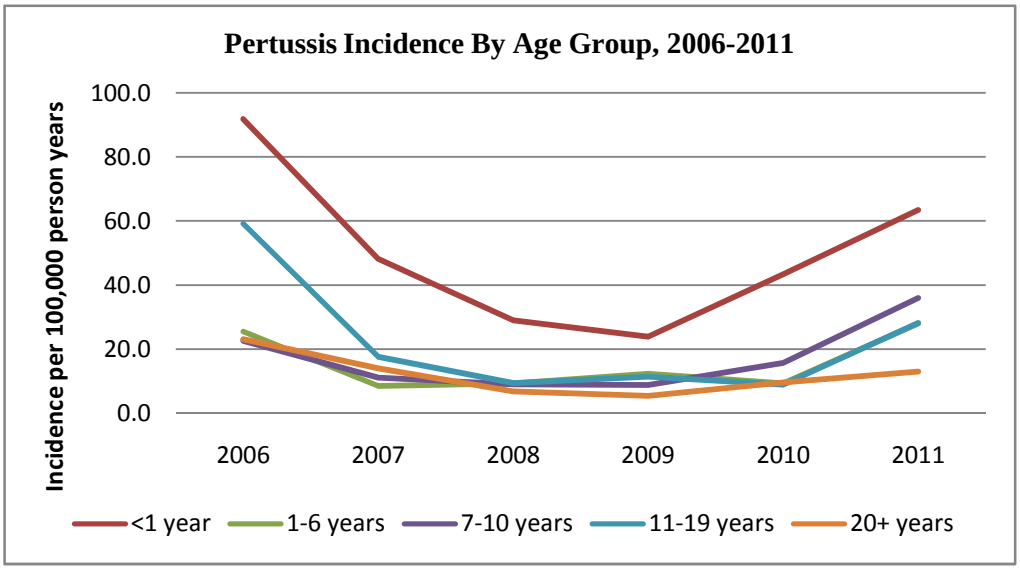
Age (years)	2012 Cases	2010 population	Rate*
<1	111	55,242	227.8
1-4	161	217,411	83.9
5-14	390	476,561	92.8
15-24	125	459,367	30.8
25-34	87	471,944	20.9
35-44	110	346,255	36.0
45-54	78	322,009	27.5
55-64	45	241,232	21.1
65+	39	257,876	17.1
Total	1146	2,847,897	45.6

* Rate is calculated per 100,000 person years

Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

Rates by Age Group, Utah 2006-2011

NOTE: Previous weekly reports included 2009 rates that were artificially elevated due to an error in the data; as of Oct 18, 2012, this has been corrected



Utah's rates among different age groups is comparable to national figures, which can be found at: http://www.cdc.gov/pertussis/surv-reporting.html

School Age Incidence Rates, 2012 Year-to-Date

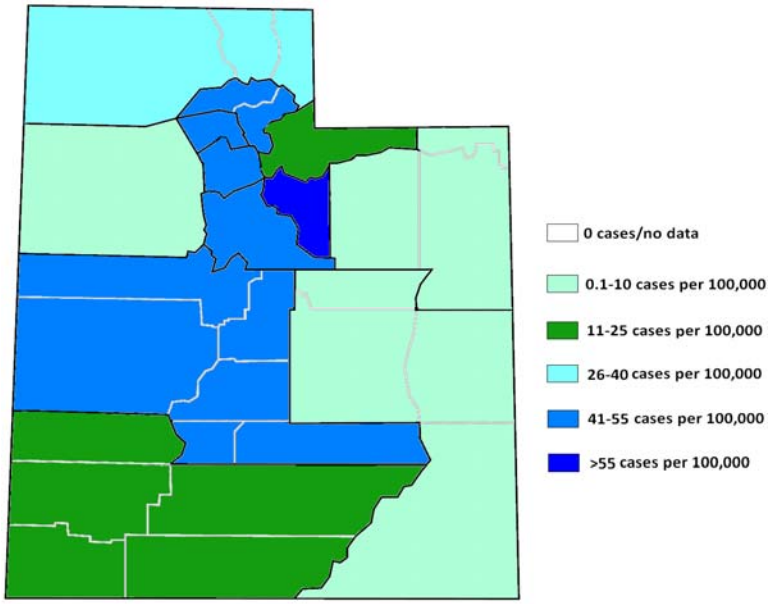
Grade	Age (years)	Cases	2010 Population	Rate*
Preschool	3-4	81	106,218	86.4
Kindergarten	5	34	52,765	73.0
1	6	35	51,948	76.4
2	7	33	50,811	73.6
3	8	35	50,547	78.5
4	9	35	49,081	80.8
5	10	60	46,857	145.1
6	11	52	44,949	131.1
7	12	36	43,944	92.9
8	13	30	43,111	78.9
9	14	40	42,548	106.6
10	15	35	41,611	95.3
11	16	17	41,935	46.0
12	17	19	42,317	50.9

* Rate is calculated per 100,000 person-years
School age incidence rates were calculated using the average age of a student in each grade.
The high incidence rates in 5th and 6th grade may be due to waining immunity.

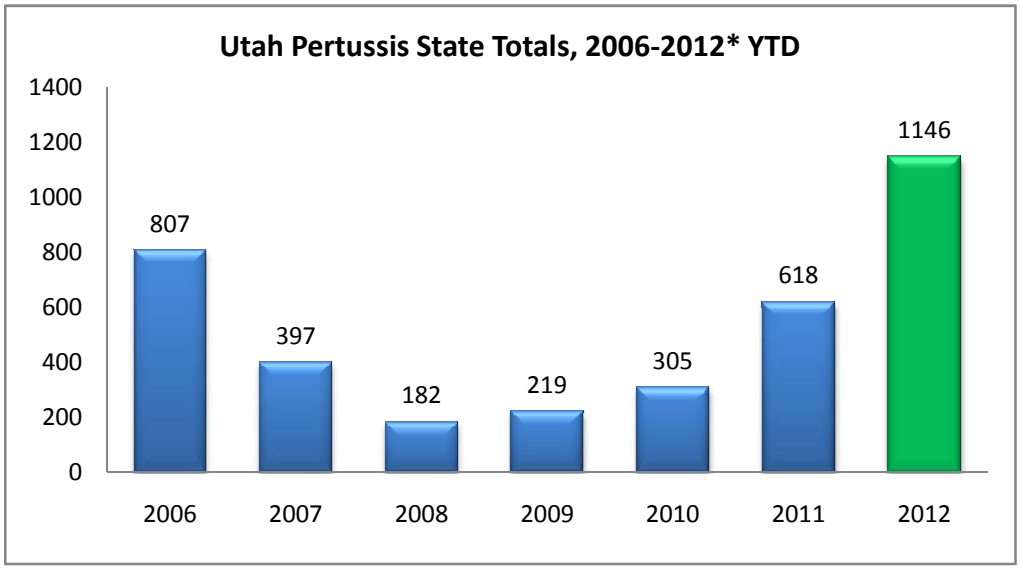
Incidence of pertussis by Local Health Department, 2012 YTD

Local Health Department	2012 Cases	Rate*
Bear River	57	38.3
Central Utah	32	46.7
Davis County	131	47.5
Salt Lake Valley	479	51.2
Southeastern Utah	2	4.0
Southwest Utah	26	13.7
Summit County	9	24.8
Tooele County	3	5.7
TriCounty	3	6.7
Utah County	260	54.5
Wasatch County	31	147.4
Weber-Morgan	113	53.1

* Rate is calculated per 100,000 person-years using 2010 Utah population estimates



Utah Case Counts of Pertussis, 2006-2012



2006 was the last year with a notably elevated number of pertussis reports in Utah and the U.S. Pertussis tends to be cyclical, and reports have been increasing in Utah since 2009.
* 2012 data includes pertussis cases reported year to date. 2006-2011 data reflects cases reported during the entire calendar year for each year.