

Pertussis in Washington State 2012

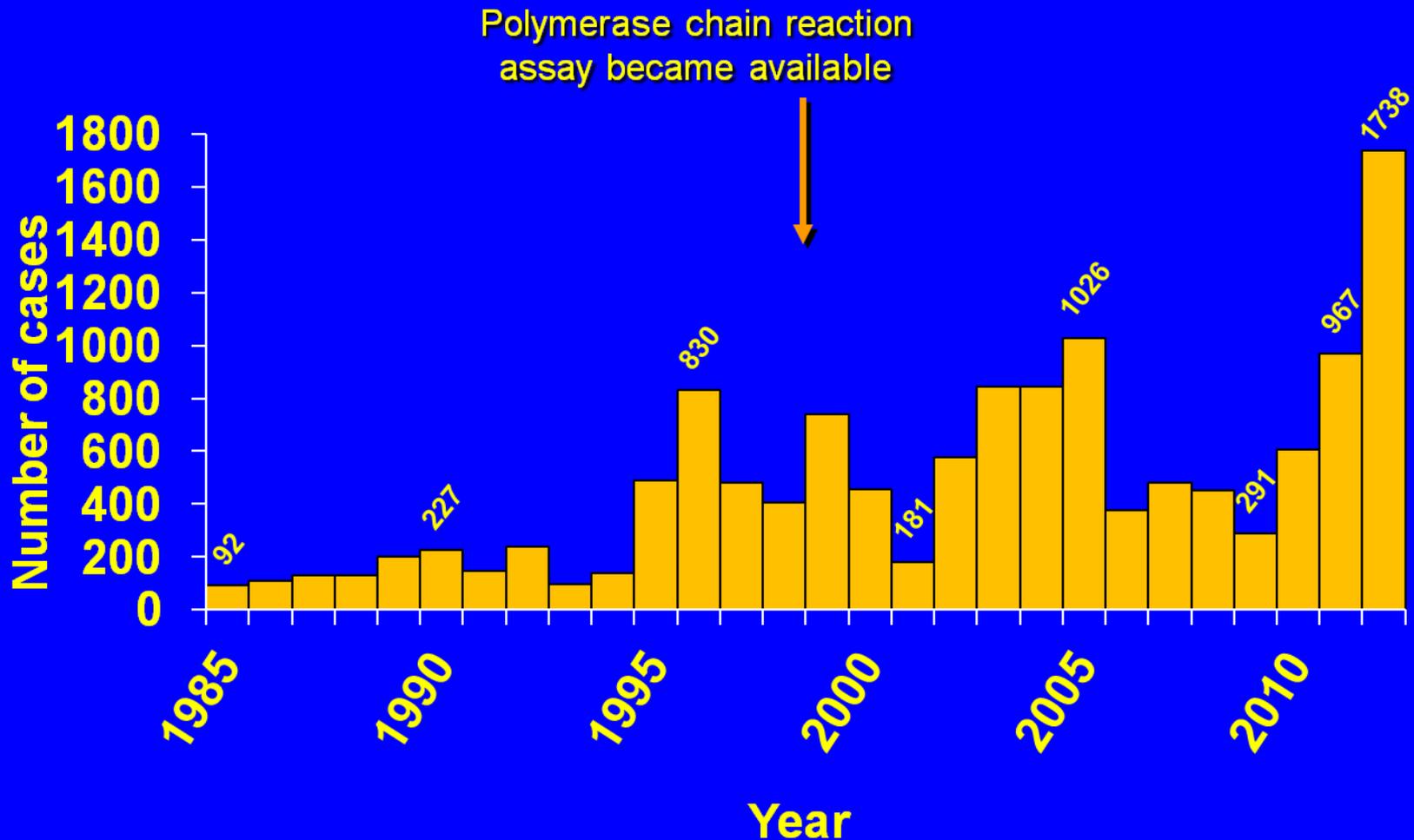
**National Vaccine Advisory Committee Meeting
Washington, D.C.
June 5, 2012**

Chas DeBolt RN, MPH

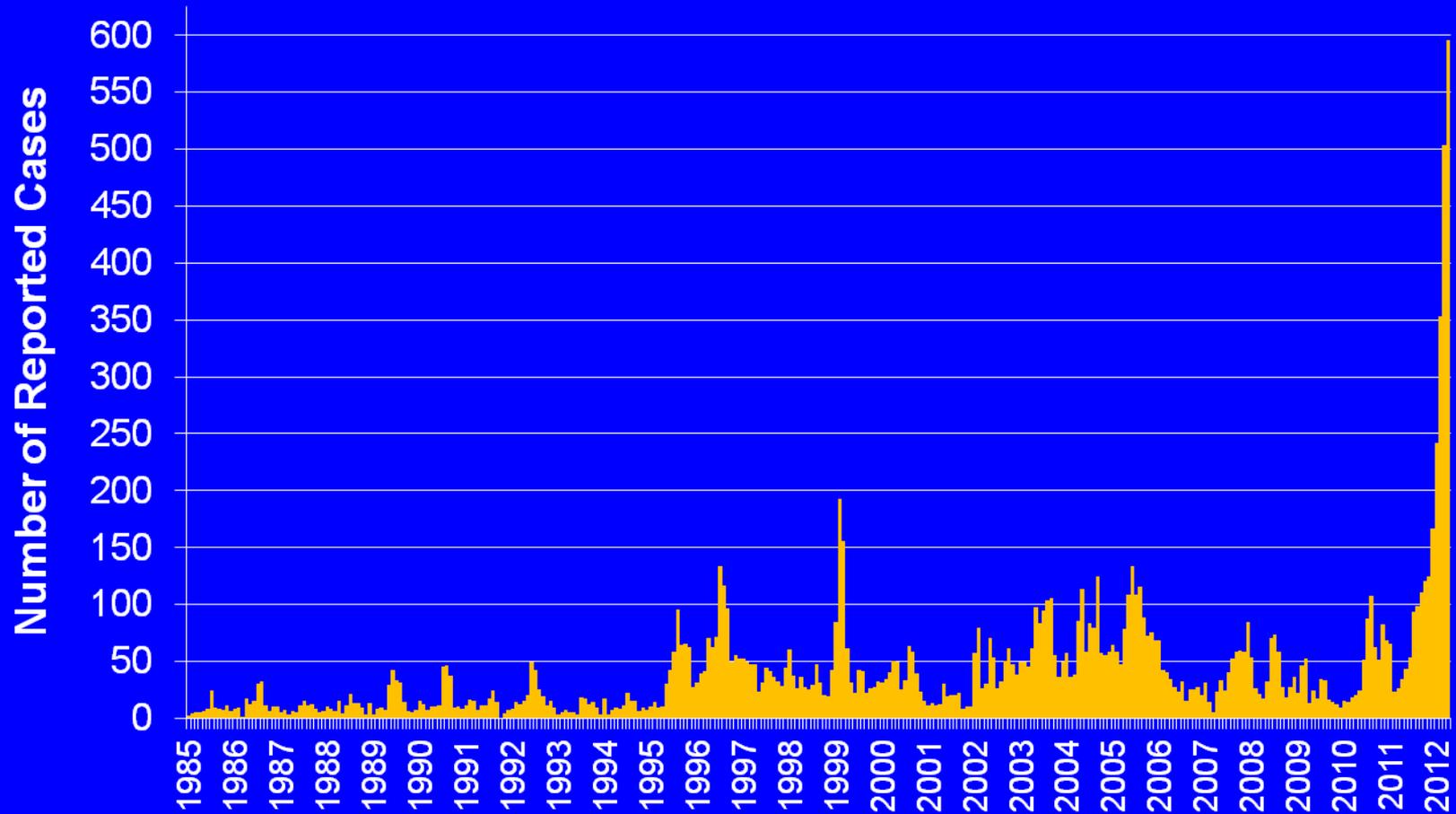
**Sr. Epidemiologist for Vaccine Preventable Diseases
Washington State Department of Health**



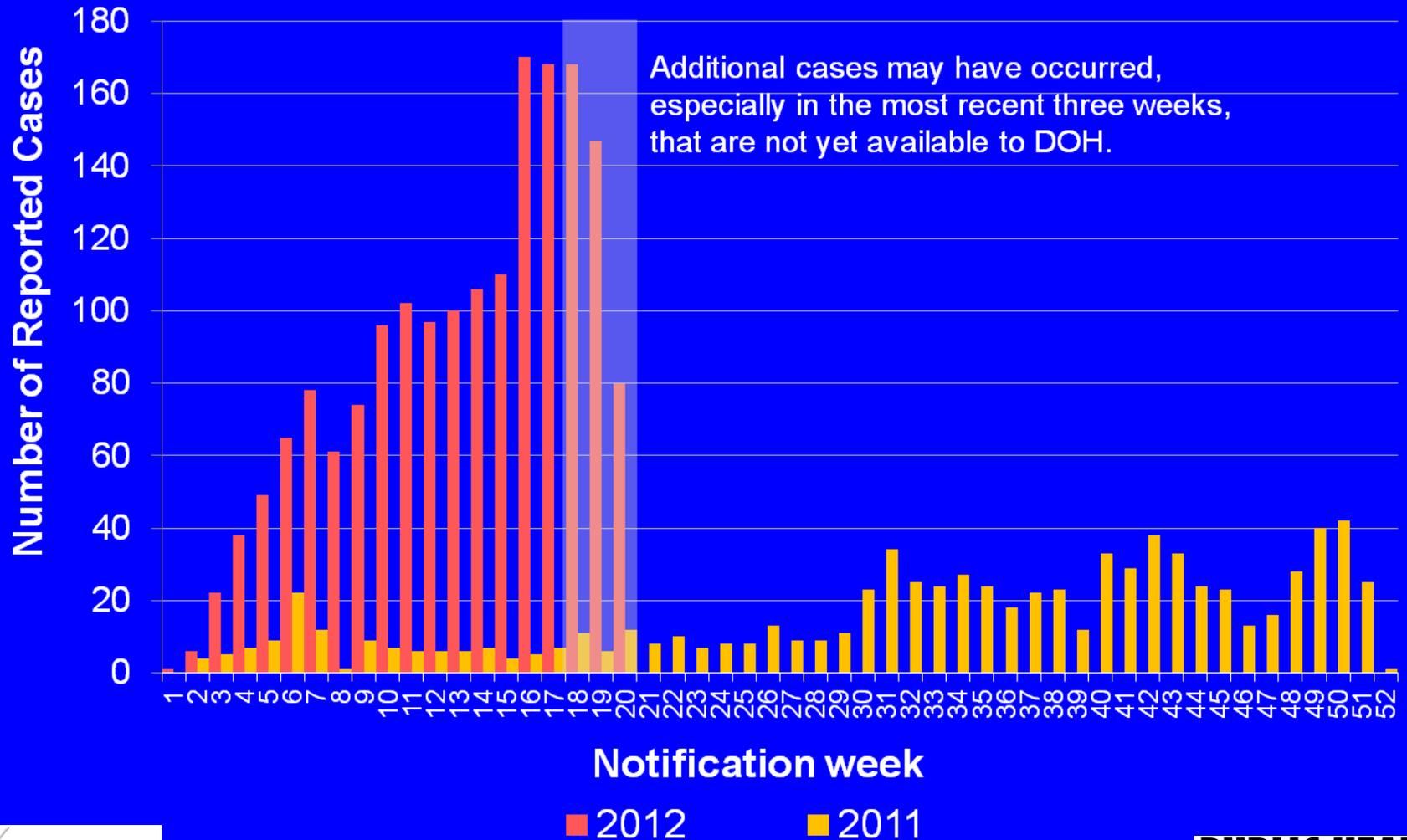
Reported cases of pertussis Washington State 1985-2012 YTD (week 20)



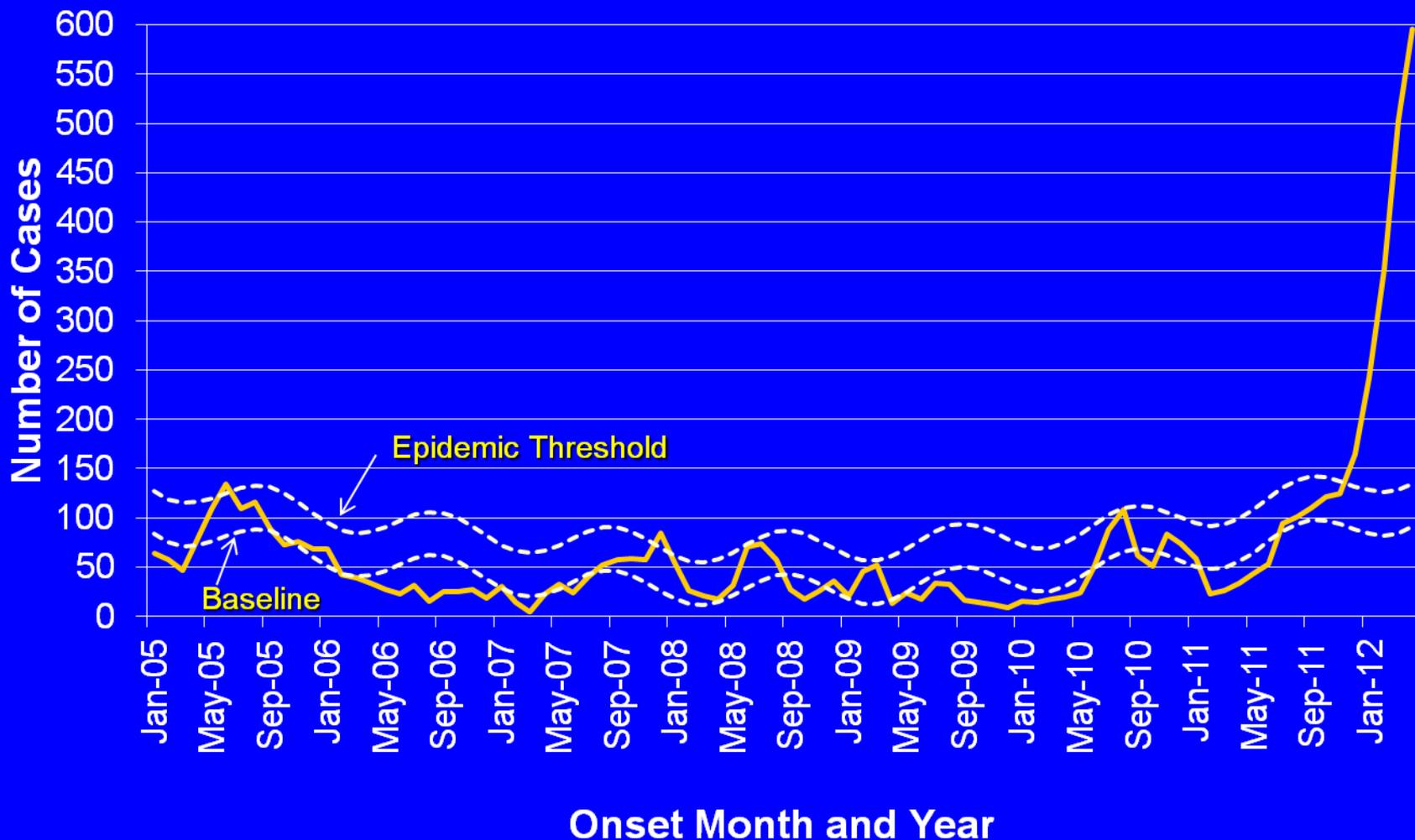
Number of Pertussis Cases Reported in Washington State by Onset Month and Year, 1985-2011 and 2012 YTD (through April)



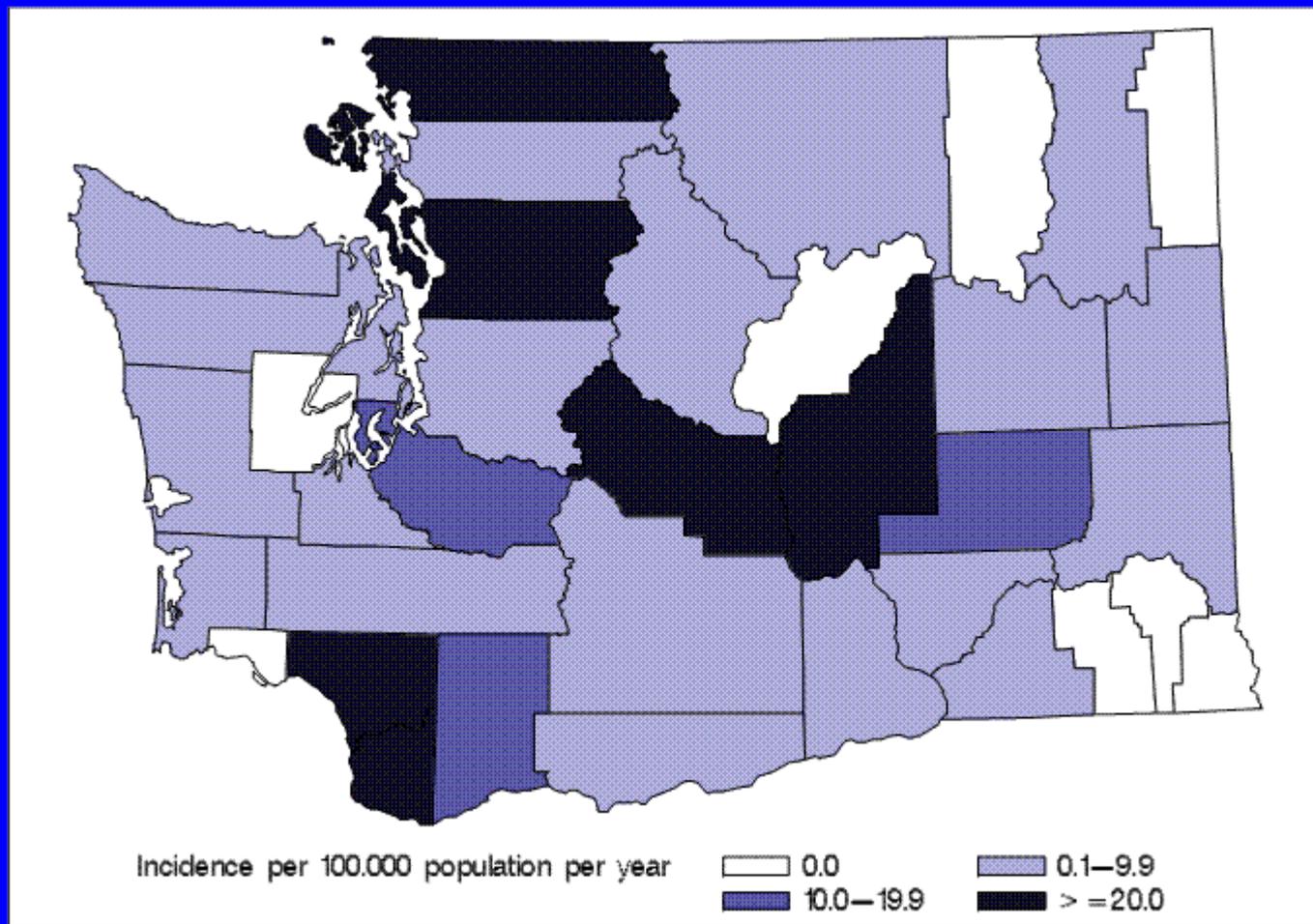
Number of Pertussis Cases Reported in Washington State by Notification Week 2011 vs. 2012 YTD (week 20)



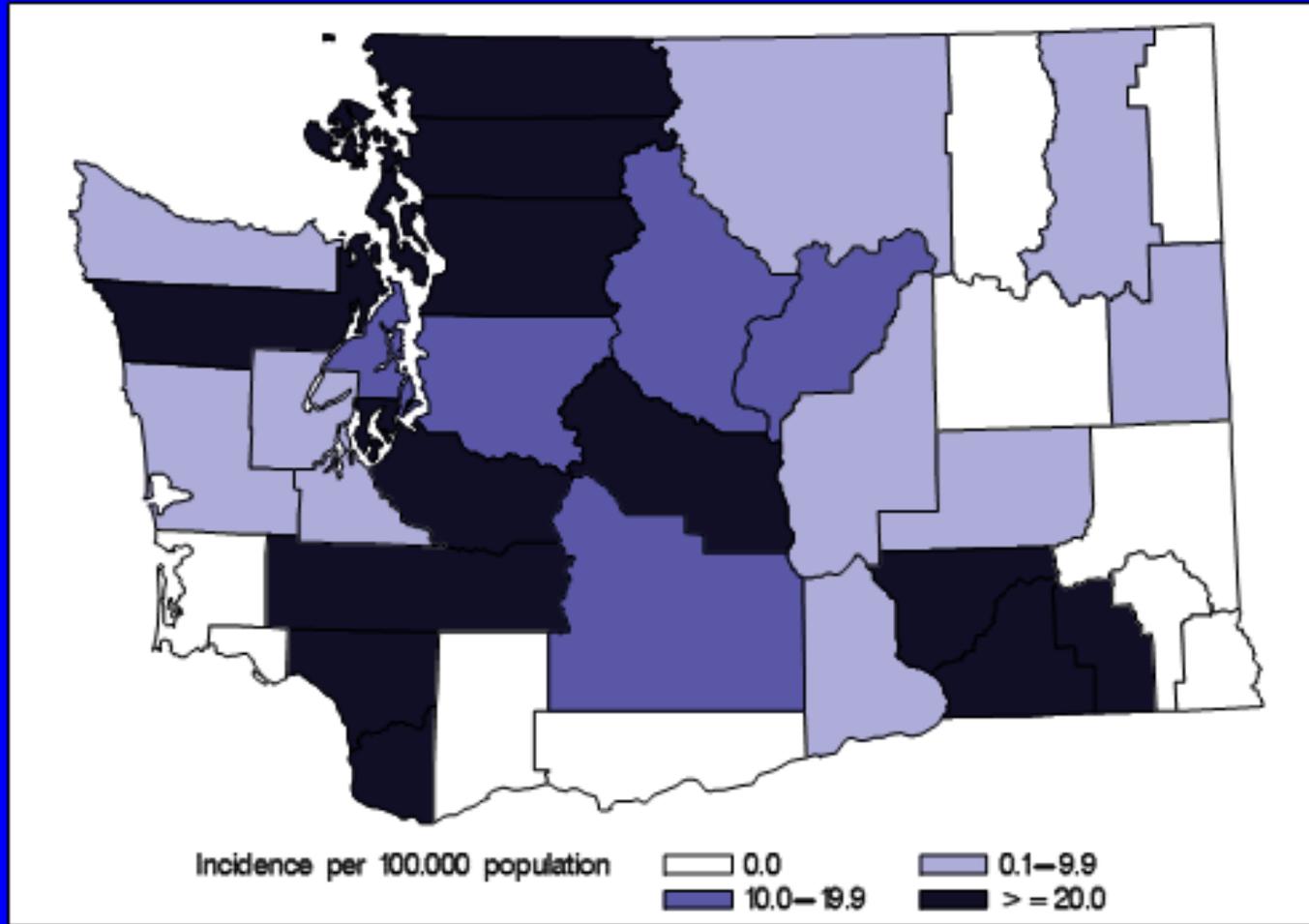
WA State Pertussis Cases Reported by Month and Year with Projected Baseline and Epidemic Thresholds 2005-2011 and 2012 YTD (through April)



Pertussis Incidence by County 2011 Onsets



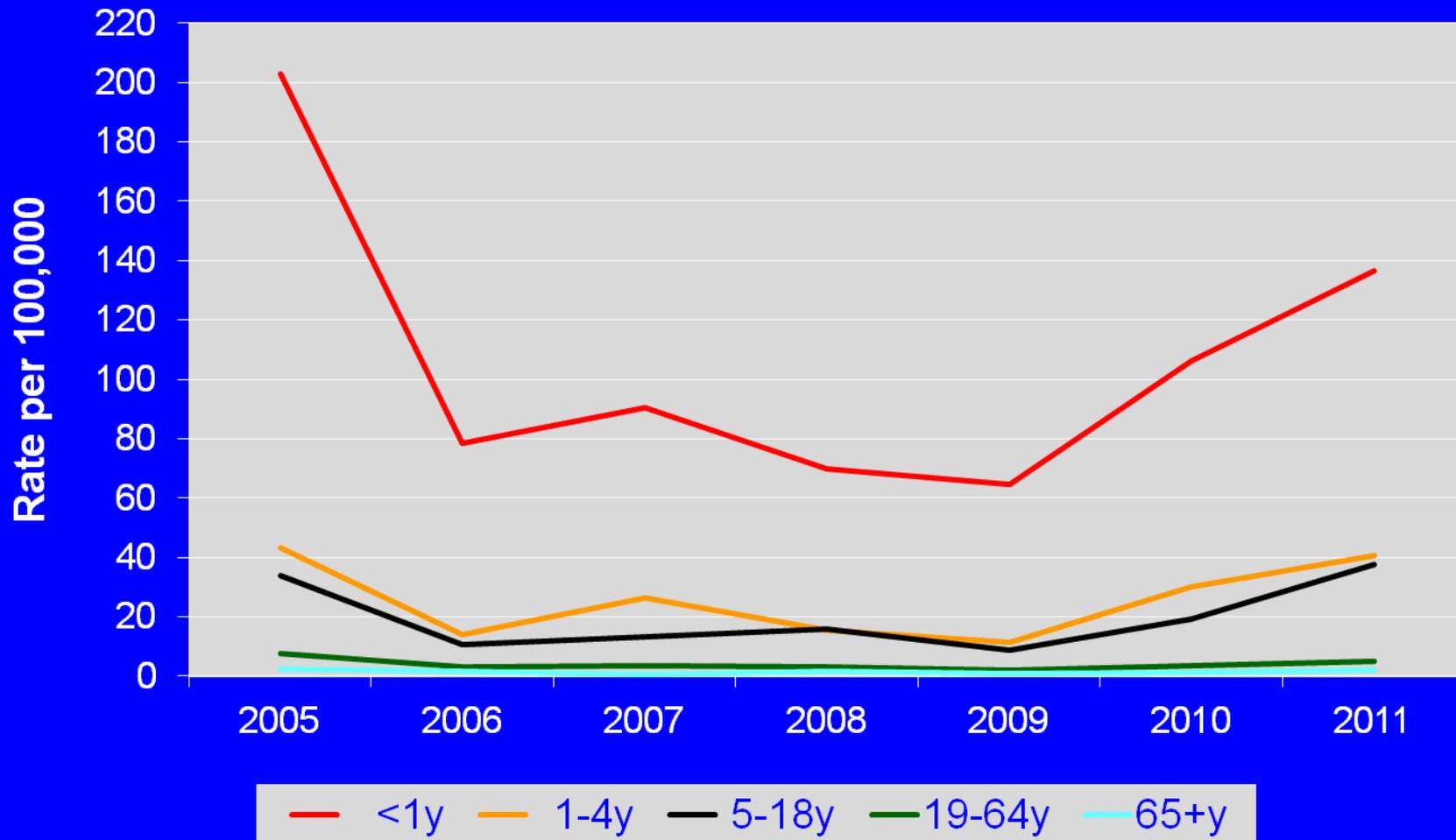
Recent Pertussis Incidence by County February 2012 - April 2012 Onsets



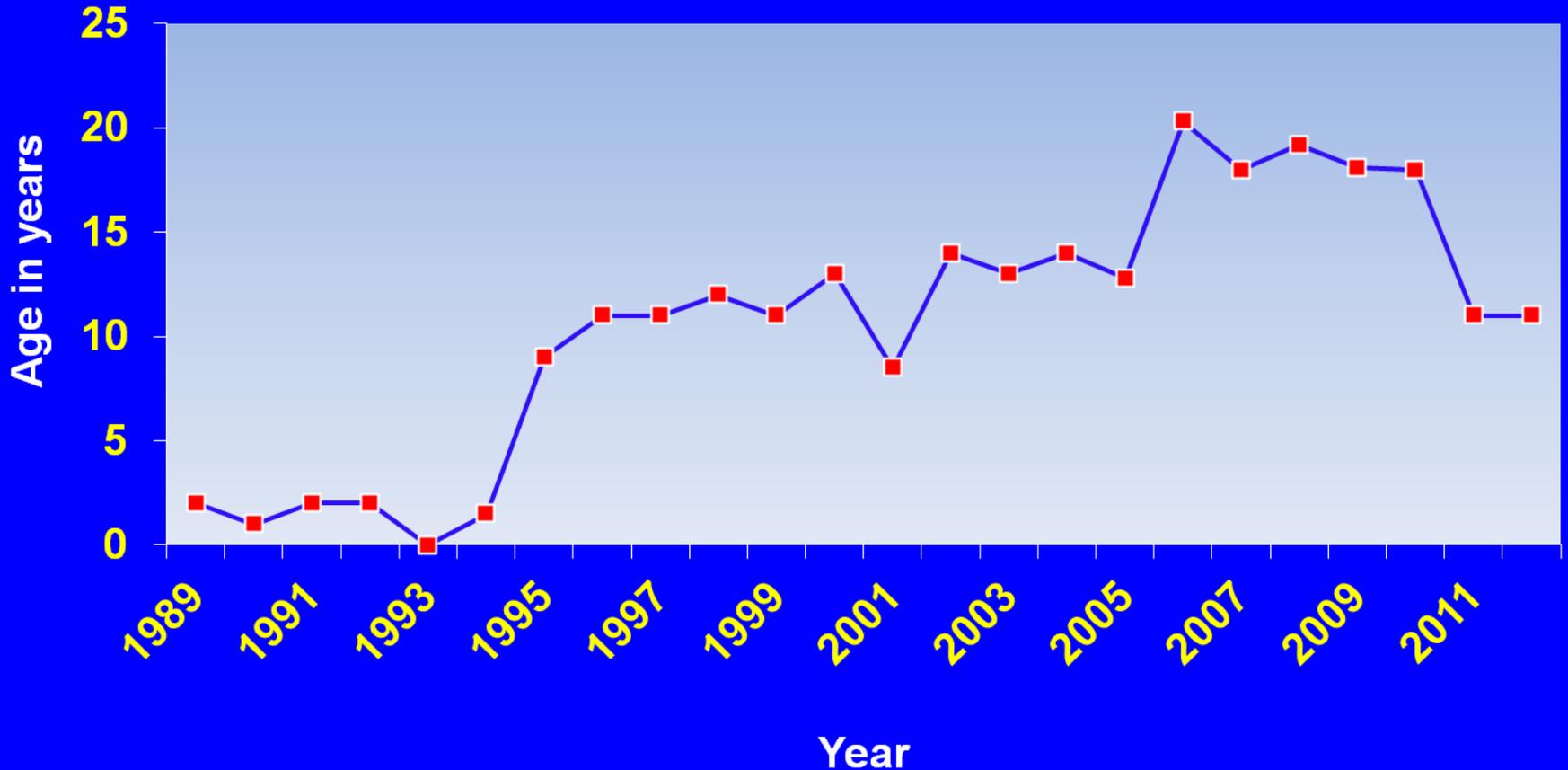
Pertussis case reporting in Washington State 2007-2012 YTD (week 20) by case classification

Onset Year	All reports	Cases Reported to CDC (Confirmed & Probable)	PCR+ Suspect Cases	Total Cases if PCR+ Suspect Cases were Included
2007	510	482	13	495
2008	502	461	19	480
2009	342	291	18	309
2010	682	608	32	640
2011	1,082	967	68	1,023
2012 YTD	2,090	1,738	150	1,888

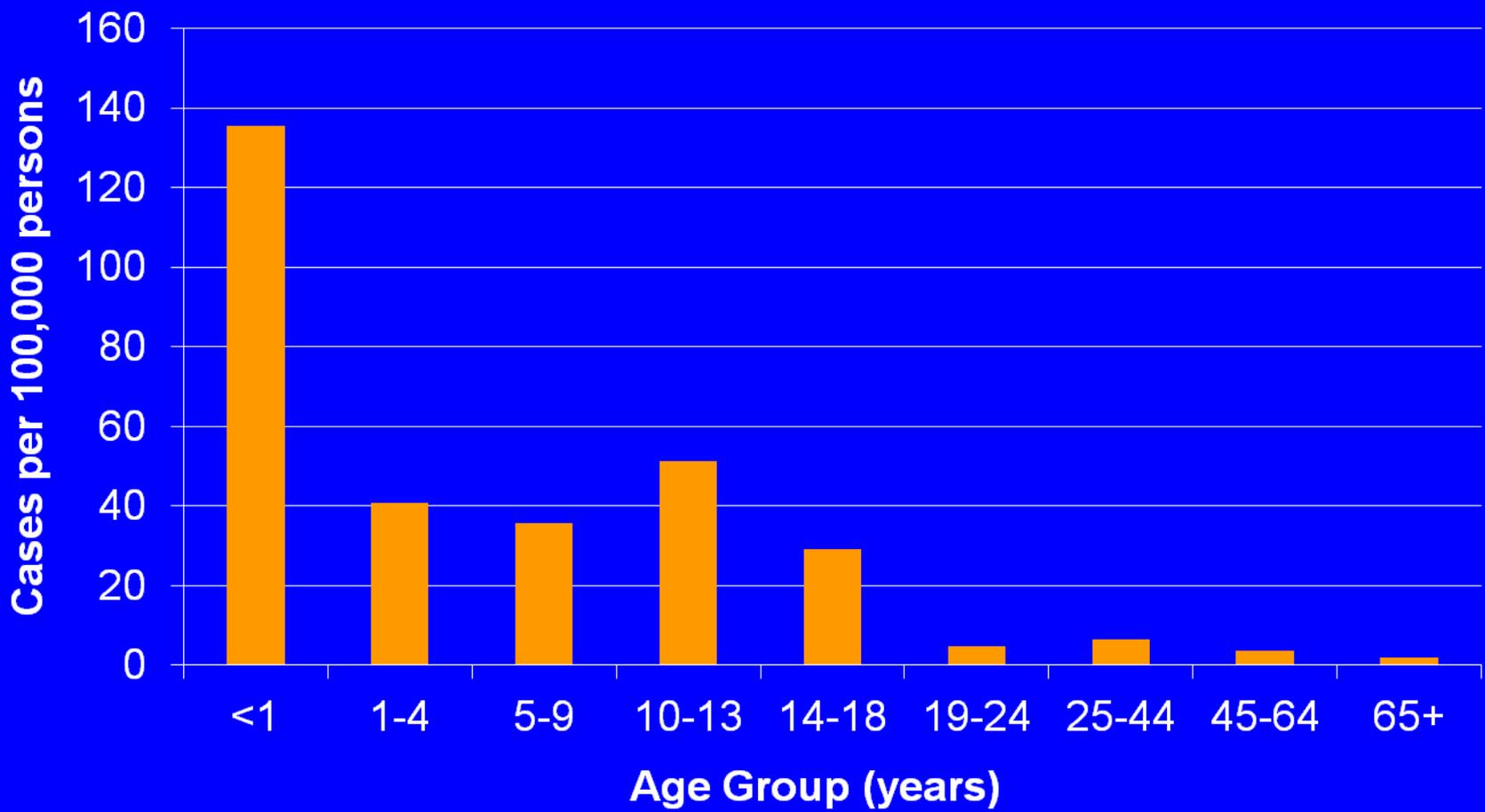
Washington State Pertussis Rates by Age Group 2005-2011



Median age of reported pertussis cases Washington, 1989-2011 and 2012 YTD (week 20)



Pertussis incidence by age group Washington State, 2011

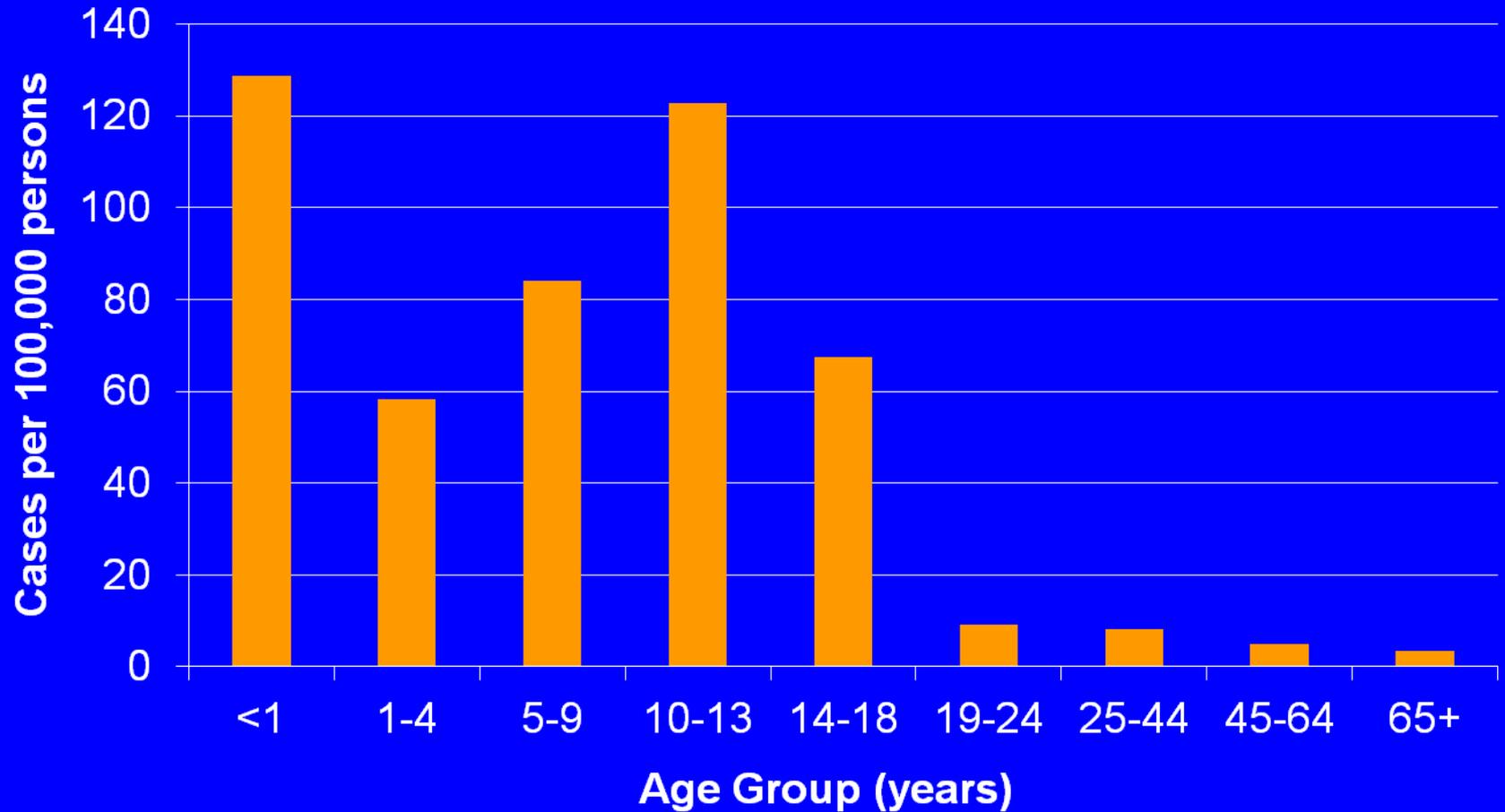


WA State pertussis cases by age group 2011

Age Group (years)	2010 OFM Population	Number of Cases	Rate per 100,000 persons per year	% cases by age group
<1	88,544	120	135.5	12.4%
1-4	355,275	145	40.8	15.0%
5-9	432,656	155	35.8	16.1%
10-13	346,396	178	51.4	18.4%
14-18	454,703	133	29.2	13.8%
19-24	577,706	28	4.8	2.9%
25-44	1,830,703	120	6.6	12.4%
45-64	1,823,910	69	3.8	7.2%
65+	823,357	17	2.1	1.8%
All ages	6,733,250	965	14.3	

Pertussis incidence by age group

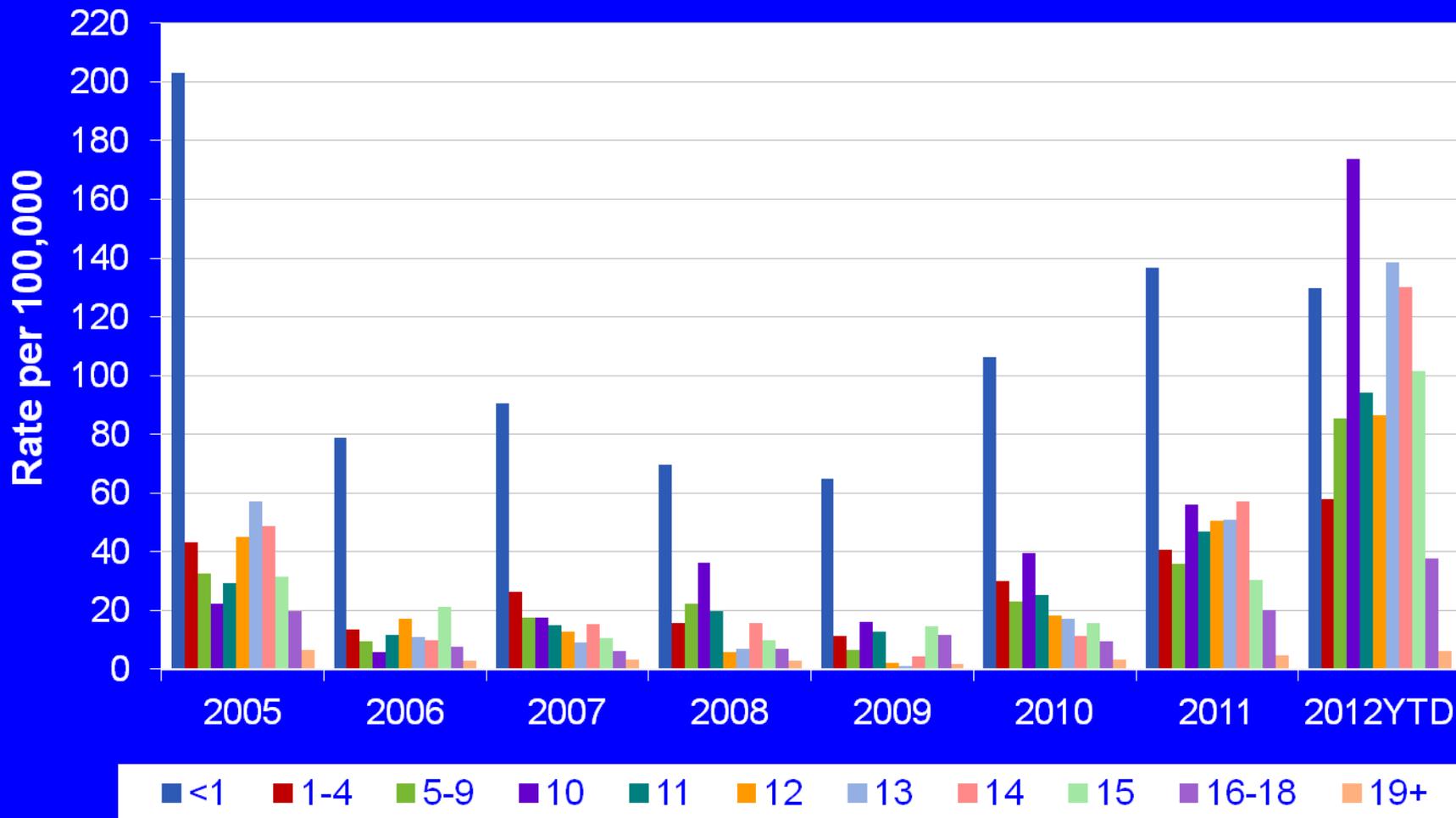
Washington State, 2012 YTD (week 20)



WA State pertussis cases by age group, 2012 YTD (through week 20)

Age Group (years)	2010 OFM Population	Number of Cases	Rate per 100,000 persons	% cases by age group
<1y	88,544	114	128.7	6.6
1-4y	355,275	207	58.3	11.9
5-9y	432,656	364	84.1	20.9
10-13y	346,396	425	122.7	24.5
14-18y	454,703	307	67.5	17.7
19-24y	577,706	53	9.2	3
25-44y	1,830,703	150	8.2	8.6
45-64y	1,823,910	90	4.9	5.2
65+y	823,357	28	3.4	1.6
All ages	6,733,250	1,738	25.8	

Washington State Pertussis Rates by Age Group 2005-2011 and 2012 YTD (week 20)



Infant Deaths, 1996-2011

Year	County
1996	Grant
1998	King
2000	Grant
2006	Benton
2008	Yakima
2010	Whatcom
2010	Grant
2011	Yakima
2011	Snohomish

Age at onset:

- All were under 1 year of age
- Eight (89%) were 2 months of age or under

Sex:

- Male – 5 (56%)
- Female – 4

Ethnicity:

- Hispanic or Latino – 6 (67%)
- Not Hispanic or Latino – 2
- Unknown - 1

Vaccination status of non-adult pertussis cases in Washington 2010-2011 and 2012 YTD (week 20)

	2010-2011	2012 YTD
7 months through 18 years Proportion marked up-to-date for pertussis- containing vaccine in the PHIMS case report	64%	61%
7-10 years of age Proportion with:		
4 or more doses	81%	71%
5 or more doses	68%	59%
13-18 years of age Proportion who received a Tdap dose	62%	60%

State Department of Health Response: Communications

- **Tdap vaccination messaging in Child Profile mailings reaching 470,000 families.**
- **Radio media buy**
- **YouTube and other social media.**
- **Postings on front page of agency website.**
- **Regular updates to local/tribal health and professional medical associations.**
- **Media availability with Gov. Gregoire and Sen. Cantwell.**

State Department of Health Response: Provider Education and Tools

- **Initial communication from State Health officer to all providers requesting action.**
- **CDC webinar training May 30th (with continuing medical education credits).**
- **Updated surveillance, reporting and investigation guidelines.**
- **Created new tools/templates for school and child care reporting to public health.**

State Department of Health Response: Vaccine Access

- **Promoting the GIFT program to provider free vaccine (19,000 doses as of 04/30/12)**
- **27,400 federally funded Tdap doses to local health and tribes for under- and uninsured adults.**
- **Working with local health to organize community vaccination clinics.**
- **State immunization registry: tracking Tdap doses administered; annual comparisons.**

Acknowledgements

- **Azadeh Tasslimi MPH**
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- **Kathy Lofy MD, MPH**
- **Jeff Wise**

END

Triage reports of pertussis

An indication of a high-risk contact/setting will increase the priority of a report.

Investigations need to be performed even if resources are extremely limited for:

- Culture- or PCR-positive cases (includes those whose illness does not yet meet the clinical case definition)
- Epi-linked cases that meet the clinical case definition
- Infants < 12 months of age

Investigations can be temporarily suspended if resources are limited for (in order of importance): (Reports should be entered in PHIMS as usual whether further investigated or not.)

1. Cases that meet the clinical case definition but have no epi-link or lab confirmation ('probable' cases)
2. Cases with classic symptoms (paroxysmal cough, post-tussive emesis, or whooping) and < 2 week cough duration with no testing or a negative test
3. Cases with an epi-link that do not yet meet the clinical case definition (symptomatic contacts of a case)

Contact Provider

- Verify that patient is aware of the diagnosis
- Request pertussis immunization history and pertinent clinical information
- Ask about high-risk* contacts/settings
- Verify appropriate treatment
- Determine what exclusion recommendations were made
- Determine whether high-risk household contacts received chemoprophylaxis

Interview Patient

Case

- Determine clinical symptoms and onset of illness
- Provide education about period of communicability, method of transmission, and avoidance of high-risk persons/settings
- Recommend avoiding all public settings until 5 days of antibiotics (Day 6) or 21 days after onset of cough if not treated

Contacts

- Identify high-risk close contacts* or setting for follow-up
- If no high-risk close contacts or setting are identified, instruct patient to inform contacts of exposure and to seek advice from their own healthcare provider regarding chemoprophylaxis

Symptomatic

High-risk Close Contacts*

Asymptomatic

Activities

- Educate
- Facilitate evaluation, testing, treatment, and exclusion as appropriate
- Notify facility if high-risk setting identified
- Report those who meet clinical case definition

Activities

- Educate
- Advise symptom watch
- Facilitate chemoprophylaxis



SCHOOLS and CHILD CARE FACILITY - REPORTING PERTUSSIS TO PUBLIC HEALTH

Please report laboratory or clinically-diagnosed pertussis in children to [your local health department](#) .
Fill out the following information as completely as possible. Public health staff may be unable to follow up on cases that have inadequate information.

- Name of student _____
DOB / / Date of Onset (any symptoms) / /

- Name/contact information of healthcare provider who made the diagnosis:
Name _____ Phone number _____
Clinic Name _____

- Lab results: Positive Negative Not tested Unknown Date tested / /

- Pertussis immunization dates (please enter dates **or** fax Certificate Of Immunization Status form
DTaP dates / / / / / / / / / /
Tdap date / /

No pertussis doses received Reason not vaccinated: Parent refusal Other _____

- Was the child treated with antibiotics? Y N Unknown
Name of antibiotic _____ Date prescribed? / /

- Does the child have contact with any high risk persons? Y N Don't know
High risk is defined as:
 - Infants < 1 year old
 - Pregnant women (particularly those in 3rd trimester of pregnancy)
 - Anyone who may expose infants < 1 year old or pregnant women (e.g., members of a household with infants or pregnant women, child care workers who take care of infants < 1 year old, health care workers with face-to-face contact with infants < 1 year old or pregnant women, childbirth educators)

- Were preventive antibiotic treatment was given to household and high risk close contacts?
Household contacts: Y N Don't know High risk contacts: Y N Don't know

- Was the child excluded from school or child care until after 5 days of antibiotics? Y N Partially
Dates attended school/childcare while contagious: / / through / / None
Contagious period = from the first day of any symptoms (includes runny nose) until after 5 days of antibiotics have been completed (or 21 days after the onset of severe cough if no antibiotics taken.)



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