

ICLAC ACIP Schedule Update

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April 10, 2014



Figure 1. Recommended Immunization schedule for persons aged 0 through 18 years – United States, 2014.

(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE (FIGURE 2)).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are in bold.

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19-23 mos	2-3 yrs	4-6 yrs	7-10 yrs	11-12 yrs	13-15 yrs	16-18 yrs
Hepatitis B (HepB)	1 st dose	← 2 nd dose →					← 3 rd dose →									
Rotavirus (RV) RV1 (2-dose series); RV5 (3-dose series)			1 st dose	2 nd dose	See footnote 2											
Diphtheria, tetanus, & acellular pertussis* (DTaP* <7 yrs)			1 st dose	2 nd dose	3 rd dose				← 4 th dose →			5 th dose				
Tetanus, diphtheria, & acellular pertussis* (Tdap; ≥7 yrs)														(Tdap)		
Haemophilus influenzae type b† (Hib)			1 st dose	2 nd dose	See footnote 3				3 rd or 4 th dose. See footnote 5							
Pneumococcal conjugate† (PCV13)			1 st dose	2 nd dose	3 rd dose				← 4 th dose →							
Pneumococcal polysaccharide† (PPSV23)																
Inactivated poliovirus† (IPV) (<18 yrs)			1 st dose	2 nd dose					← 3 rd dose →							
Influenza† (IV; LAV) 2 doses for some: See footnote 8										Annual vaccination (IV only)						
Measles, mumps, rubella† (MMR)									← 1 st dose →							
Measles, mumps, rubella† (MMR2)																
Varicella† (VAR)									← 1 st dose →							
Varicella† (VAR2)																
Hepatitis A† (HepA)																
Hepatitis A† (HepA2)																
Human papillomavirus† (HPV2: females only; HPV4: males and females)																
Human papillomavirus† (HPV4: males and females)																
Meningococcal† (Men-CY; ≥ 6 weeks; MenACWY-D; ≥ 9 mos; MenACWY-CRM; ≥ 2 mos)																

Range of recommended ages for all children
 Range of recommended ages for catch-up immunization
 Range of recommended ages for certain high-risk groups
 Range of recommended ages during which catch-up is encouraged and for certain high-risk groups
 Not routinely recommended

This schedule includes recommendations in effect as of January 1, 2014. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (<http://www.vaers.hhs.gov>) or by telephone (800-822-7967). Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including precautions and contraindications for vaccination, is available from CDC online (<http://www.cdc.gov/vaccines/recs/vao-admin/contraindications.htm>) or by telephone (800-CDC-INFO (800-232-4636)).

This schedule is approved by the Advisory Committee on Immunization Practices (<http://www.cdc.gov/vaccines/acip/>), the American Academy of Pediatrics (<http://www.aap.org>), the American Academy of Family Physicians (<http://www.aafp.org>), and the American College of Obstetricians and Gynecologists (<http://www.acog.org>).

NOTE: The above recommendations must be read along with the footnotes of this schedule.





Significant Changes to the 2014 Recommended Immunization Schedule for Persons aged 0 Through 18 Years

- Updating of the meningococcal conjugate vaccine legend on the schedule to reflect the approved use of MenACWY-CRM (Menveo) or MenHibrix for high-risk infants as young as 2 months of age (vaccinate at 2 mos, 4 mos, 6, mos, & 12 – 15 months; if started at age 19 through 23 mos give 2 doses of Menveo, 3 mos apart)
- Updating of the influenza footnotes to provide dosing guidance for children 6 months through 8 years of age for the 2013-14 and 2014-15 seasons (2 doses if being vaccinated against influenza for first time)
- Updating of the pneumococcal vaccine footnotes to include guidance for vaccination of persons with high-risk conditions (PCV-13 routine for all healthy children through age 5 yrs; add PPSV also for 2-5 yr olds with high risk conditions; PCV-13 for any high risk kid aged 6 yrs through 18 years who did not receive, plus PPSV23)



Changes (Cont)

- Updating of the Haemophilus influenza type b (Hib) conjugate vaccine, pneumococcal conjugate vaccine, and tetanus, diphtheria, and acellular pertussis (Tdap) vaccine catch-up schedules, to provide greater clarity



Recommended Adult Immunization Schedule—United States - 2014

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information.

Figure 1. Recommended adult immunization schedule, by vaccine and age group¹

VACCINE v	AGE GROUP v	19-21 year	22-36 year	37-49 year	50-59 year	60-64 year	≥ 65 year
Influenza v ¹		1 dose annually					
Tetanus, diphtheria, pertussis (Td/Tdap) v ¹		Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella v ¹		2 doses					
Human papillomavirus (HPV) Female v ²		3 doses					
Human papillomavirus (HPV) Male v ²		3 doses					
Zoster v ³						1 dose	
Measles, mumps, rubella (MMR) v ¹		1 or 2 doses					
Pneumococcal 13-valent conjugate (PCV13) v ⁴				1 dose			
Pneumococcal polysaccharide (PPSV23) v ^{4,5}			1 or 2 doses				1 dose
Meningococcal v ⁶		1 or more doses					
Hepatitis A v ⁷		2 doses					
Hepatitis B v ⁷		3 doses					
Haemophilus influenzae type b (Hib) v ⁸		1 or 3 doses					

¹Covered by the Vaccine Injury Compensation Program

- For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster
- Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)
- No recommendation

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at www.cdc.gov/vaers or by telephone, 800-422-7877. Information on how to file a Vaccine Injury Compensation Program claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 800-338-2982. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20006; telephone, 202-357-6400. Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at www.cdc.gov/vaccines/imz/ or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 8:00 a.m. – 8:00 p.m. Eastern Time, Monday – Friday, excluding holidays. Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services. The recommendations in this schedule were approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG) and American College of Nurse-Midwives (ACNM).

Figure 2. Vaccines that might be indicated for adults based on medical and other indications¹

VACCINE v	INDICATION v	Immuno-compromising conditions (including human immunodeficiency virus [HIV]) ^{1,2,3,4,5}	HIV infection (CD4+ T lymphocyte count) ^{6,7,8}	Men who have sex with men (MSM) ⁹	Heart disease, end-stage renal disease, receipt of hemodialysis	Asplenia (including elective splenectomy and persistent complement component deficiencies) ^{10,11}	Chronic liver disease	Diabetes	Healthcare personnel	
Influenza v ¹		1 dose IV annually	< 200 cells/μL	≥ 200 cells/μL	1 dose IV annually	1 dose IV annually			1 dose IV annually	
Tetanus, diphtheria, pertussis (Td/Tdap) v ¹		Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs								
Varicella v ¹		Contraindicated	2 doses							
Human papillomavirus (HPV) Female v ²		3 doses through age 26 yrs	3 doses through age 26 yrs							
Human papillomavirus (HPV) Male v ²		3 doses through age 26 yrs	3 doses through age 21 yrs							
Zoster v ³		Contraindicated	1 dose							
Measles, mumps, rubella (MMR) v ¹		Contraindicated	1 or 2 doses							
Pneumococcal 13-valent conjugate (PCV13) v ⁴		1 dose								
Pneumococcal polysaccharide (PPSV23) v ^{4,5}		1 or 2 doses								
Meningococcal v ⁶		1 or more doses								
Hepatitis A v ⁷		2 doses								
Hepatitis B v ⁷		3 doses								
Haemophilus influenzae type b (Hib) v ⁸		1 or 3 doses								

¹Covered by the Vaccine Injury Compensation Program

- For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster
- Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)
- No recommendation



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults ages 19 years and older, as of February 1, 2014. For all vaccines being recommended on the Adult Immunization Schedule, a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Live/attenuated combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are seasonal during the year, consult the manufacturer's package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/imz/acip-recommendations.html). Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.



COUNTY OF LOS ANGELES
Public Health

Significant Adult IZ Schedule Changes

- Recommendations for use of Hib vaccine for certain adults at increased risk for Hib who have not previously received the Hib vaccine (Splenic dysfunction, one dose; adults who have undergone a successful hematopoietic stem cell transplant, 3-dose series of Hib vaccine 6–12 months after transplant regardless of prior Hib vaccination; Hib vaccination of previously unvaccinated adults with HIV infection is no longer recommended because their risk for Hib infection is low).



Adults (Cont)

- Information on RIV and the use of RIV and IIV among egg-allergic patients was added to the footnote, indicating that RIV or IIV can be used among persons with hives-only allergy to eggs. However, RIV contains no egg protein and can be used among persons aged 18 through 49 years with egg allergy of any severity.



Adults (Cont)

- The meningococcal vaccine footnote was edited to clarify which persons need either 1 or 2 doses of vaccine 2 months apart (2 doses for splenic dysfunction or compliment pathway deficiency; HIV *if* need to be vaccinated)
- To provide greater clarity regarding which patients require the meningococcal conjugate versus the meningococcal polysaccharide quadrivalent vaccines (persons 56 yrs and older get MPSV4 unless in first bullet above, or if previously received conjugate vaccine).





An Epidemic of Epidemics!

April 10, 2014

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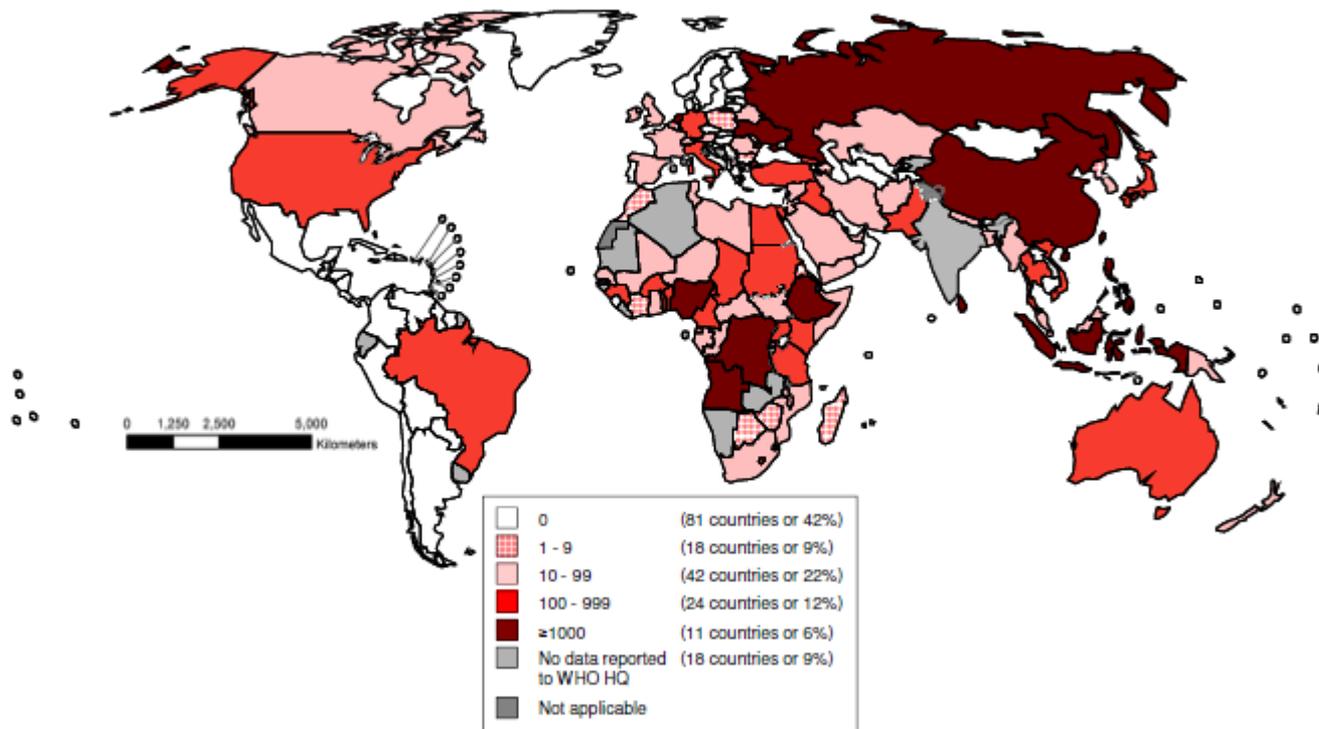
LA County DPH IP



Measles!!!!!!



Number of Reported Measles Cases with onset date from Aug 2013 to Jan 2014 (6M period)

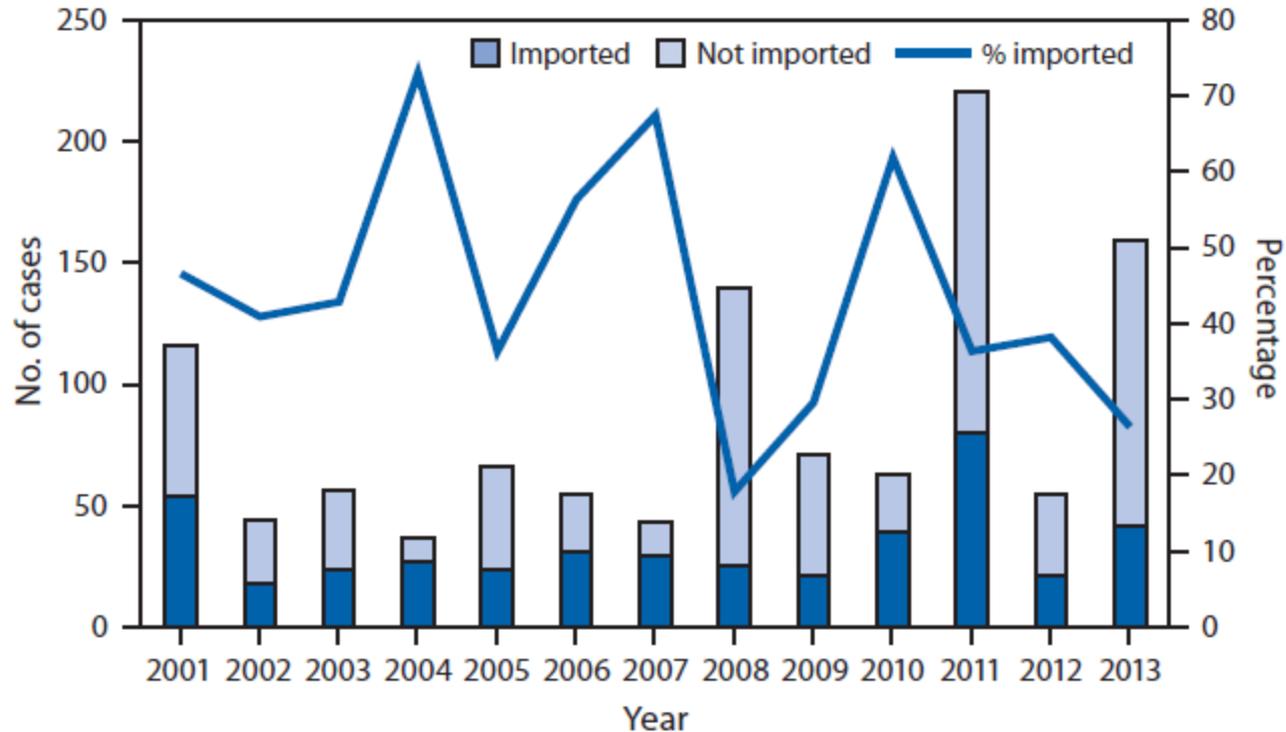


Data source: surveillance DEF file
Data in HQ as of 10 March 2014

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. ©WHO 2014. All rights reserved.



FIGURE 1. Number and percentage of measles cases that were directly imported and number of cases that were not directly imported* — United States, 2001–2013†



CDC. Measles – United States, January 1 – August 24, 2013. MMWR 2013; 62(36)



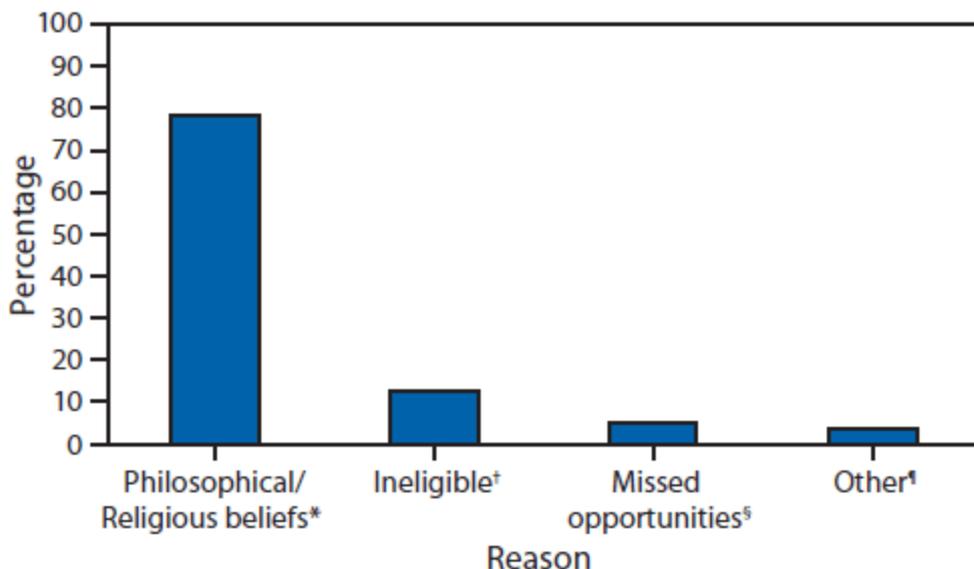


FIGURE 2. Number of measles cases (N = 159), by state — United States, 2013*

CDC. Measles – United States, January 1 – August 24, 2013. MMWR 2013; 62(36)



The Number of U.S. Residents With Measles Who Were Unvaccinated - 117



* Includes persons who were unvaccinated because of their own or their parents' beliefs.

† Includes persons ineligible for measles vaccination, generally those aged <12 months.

‡ Includes children aged 16 months–4 years who had not been vaccinated and international travelers aged ≥6 months who were unvaccinated but had no exemption.

§ Includes persons who were known to be unvaccinated and the reason was unknown.

CDC. MEASLES – UNITED STATES, JANUARY 1 – AUGUST 24, 2013. MMWR 2013; 62(36)



Measles Hot Spots in U.S. So Far This Year

- 25 cases in NYC (10 adults, 9 children)
- 2 cases in Connecticut
- 51 in California (10 in LA County)



Annual Measles Cases

	2013	2012	2011	2010	2009
U.S	187	55	220	63	71
LA County	3	6	8	8	1



LA County Measles Cases, 2014

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Rash Onset	1/11	1/21	1/28	1/28	2/1	2/19	1/17	1/24	2/15	3/1
Age	36 yrs	16 yrs	37 yrs Mom	5 Child mo	22 mo	11 mo	10 yrs	6 yrs	6 yrs	6 yrs
Origin	India?	India	Link Philip.	Link Philip.	Link Philip.	Vietn	Philip.	Philip.	?	From #9; school
Vacc Status	Doubt	PBE	Unkn	Too young; Dr. Bob	Dr. Bob, delay	Too young	PBE	PBE	PBE	PBE

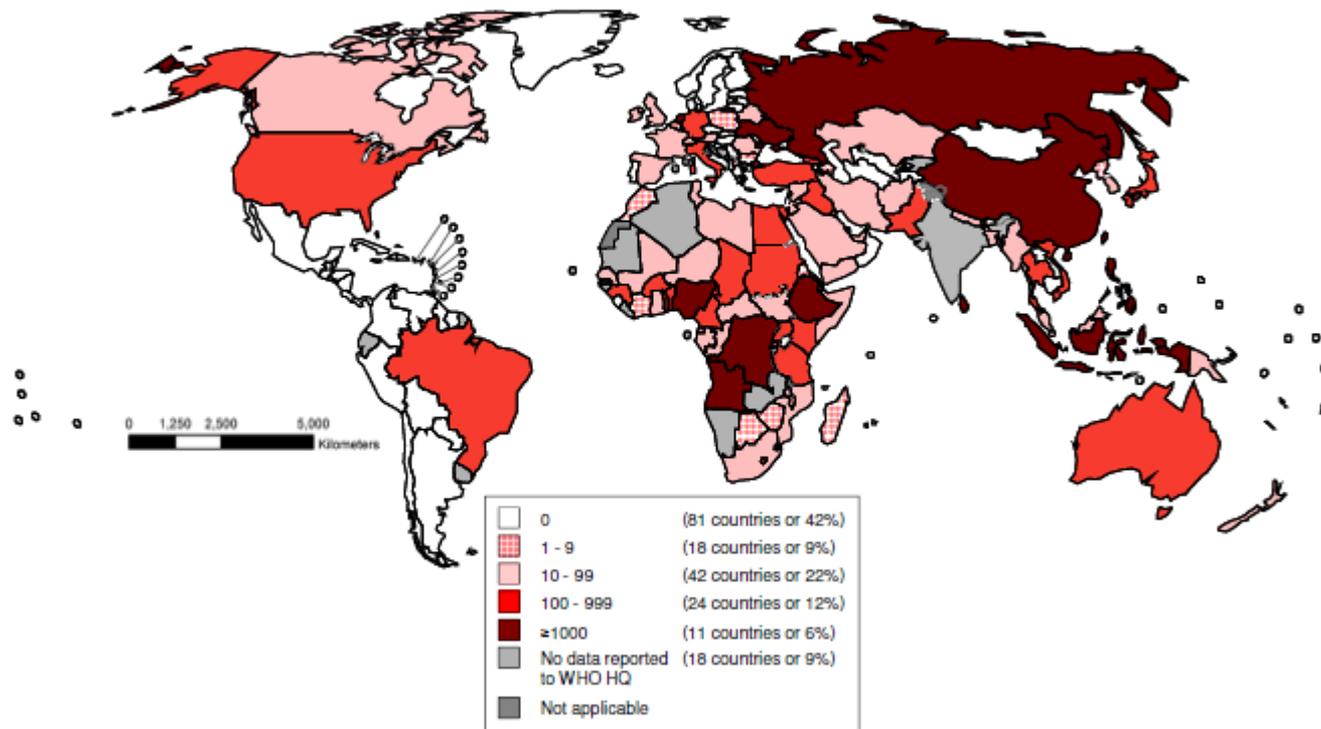


Why????

- Foreign travel destinations west of LA, increased measles activity
- Aging birth cohort that never had disease and that attended school when the attenuated vaccine was not available and/or not required for school in every State
- More folks able to travel with young children
- Clustering of PBE families (same schools, same providers)



Number of Reported Measles Cases with onset date from Aug 2013 to Jan 2014 (6M period)



Data source: surveillance DEF file
Data in HQ as of 10 March 2014

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Invasive Meningococcal Disease in LA County





Situation

- The Los Angeles County Department of Public Health is investigating a potential cluster of invasive meningococcal disease (IMD) among MSM.
- Since January 1, 2014 there have been a total of eight (8) IMD cases.
- Of these eight cases, four cases were reported among men who have sex with men, including three men who were HIV-positive.



Situation (Cont)

- There have been three deaths, all occurring in MSM, two of whom were HIV-positive.
- In contrast to previous IMD investigations in 2012 and 2013, some commonalities were found among the 2014 MSM cases. Of the four IMD cases among MSM, three reported residence or socializing around the West Hollywood and North Hollywood areas, and three were between 27- 28 years of age (the fourth case was 50 years of age).



Situation (Cont)

- Based on consultation with IMD experts at the California Department of Public Health and the Centers for Disease Control and Prevention (CDC), LAC DPH is recommending Meningococcal vaccine for both HIV-positive MSM (including men who may or may not identify as gay or bisexual) and HIV-negative MSM whose activities put them at higher risk.



Situation (Cont)

- Recommend meningococcal vaccination for the following groups: 1) all HIV-positive MSM; 2) all MSM, regardless of HIV status, who regularly have close or intimate contact with multiple partners or engage in other high risk behaviors, particularly those who share cigarettes/marijuana or use illegal drugs



Situation (Cont)

- Starting 4/3, and over weekend, public health clinics at Hollywood Wilshire, North Hollywood, Curtis Tucker, MLK Jr Center for Public Health, and Pomona began offering vaccine to targeted groups
- Community partners serving targeted groups are vaccinating too
- Letters sent to health plan medical directors requesting that they cover vaccine administered by their providers to persons in targeted groups





Summary

- This is a local recommendation, based on current local data, that suggests these groups may be at increased risk for meningococcal disease
- Non of the cases are linked because they are all of different sero-groups, so **not** labeled an outbreak

