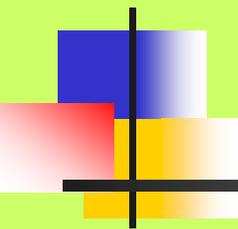
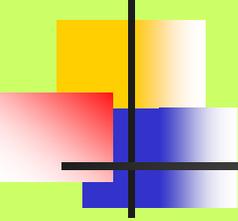


2009 ACIP Immunization Updates



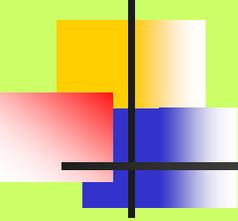
Maria Grumm RN, MPH
Oregon PH Division Immunization Program

Oregon School Based
Health Clinics
10/8/09



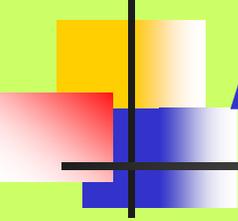
What's New from ACIP?

- 2009/10 seasonal influenza vaccine recommendations
- 2009/10 pandemic H1N1 influenza vaccine
- Polio - minimum intervals and age changes
- Boostrix Tdap expanded age range
- Td/Tdap catch-up schedule
- Meningococcal -2nd dose for high risk
- Expanded coverage for PPV23 (Pneumovax)



2009-10 Seasonal Influenza ACIP recommendations

- All persons ≥ 6 months who want to reduce risk of becoming ill
- All children 6 months thru 18 yrs.
- Persons ≥ 50 yrs
- Children & teens receiving aspirin Rx
- Persons with chronic disorders (pulm, renal, heart, neurologic, metabolic (diabetes), immunocompromised)



2009-10 Seasonal Influenza ACIP recommendations

- Persons with conditions causing respiratory dysfunction
- Health care workers
- Pregnant during flu season
- Residents long-term care facilities
- Persons who live and care for others at high risk for flu (e.g. infants <6 mos)

www.cdc.gov/mmwr/pdf/rr/rr58e0724.pdf

Who gets sick from seasonal influenza?

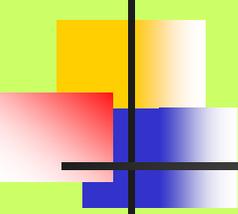


Most office visits

Hospitalization/death

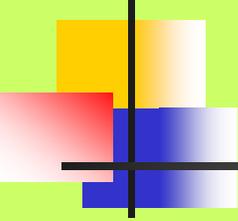


Most often ill



ACIP Priority groups for H1N1 Pandemic flu vaccine (2009-10)

- Pregnant women
- Household contacts/caregivers for children < 6 months of age
- Healthcare and emergency medical services personnel (also law enforcement in Oregon)
- All persons 6 months–24 years
- Persons 25–64 years with health conditions putting them at higher risk for complications



ACIP Priority groups for H1N1 Pandemic flu vaccine (2009-10)

- High risk 25–64 year olds:
 - Long-term aspirin Rx for 6mo–18 yrs
 - Chronic pulmonary disease (includes asthma)
 - Cardiovascular, renal, hepatic, hematological, or metabolic (includes diabetes) disorders
 - Immunosuppression (including meds or HIV)
 - Cognitive dysfunction, spinal cord injuries, seizures or neuromuscular disorders that affect respiratory function and increase risk for aspiration

www.cdc.gov/h1n1flu/vaccination/acip.htm

Who gets sick from pandemic H1N1?



High hospitalization rate

Lookin' good



Most often ill

Target Populations in Oregon

Pregnant women
60,509

Persons between 6 months
and 24 years of age
1,223,424

People who live with or care
for children younger than
6 months of age
68,427

Health care and emergency
medical service personnel
155,467

People age 25 through 64 years who are at a higher risk for novel H1N1
because of chronic health disorders or compromised immune systems
387,071

Total 1,894,898

Estimated population numbers

Oregon's Vaccine Distribution Plan

Option #1

Receive and manage entire allocation

Can either administer all vaccine (with or without help from contracted staff or companies) or act as a depot to distribute vaccine to approved and enrolled providers

Option #2*

Agencies register to receive requested portion of area allocation and recruit for enrollment other providers to registers as H1N1 providers. Other providers can include any licensed immunizer and must be approved by Agency to enroll

* School based health clinics in this group

Biweekly H1N1 Vaccine Dose Availability Schedule (changing)

8/19/09 Estimate (subject to change)	Inactivated, subunit			LAIV	Total	
	Pre-filled syringes (PFS)			Multidose vials (MDV)		Intranasal sprayers
	Infants (6-35m)	Pediatric (3-5yr)	Preg Wo. & School Age (>5)			
9/30/2009			189,990	21,110	119,694	330,794
10/15/2009			99,217	460,198	63,963	623,378
10/31/2009	41,165	27,443	73,885	144,604	105,550	392,646
Total	41,165	27,443	363,092	625,912	289,207	1,346,818

Note: No decision has been made regarding 9/30 release of vaccine. Vaccine not released late September would be released with the mid-October vaccine (i.e. total 45,200,000)

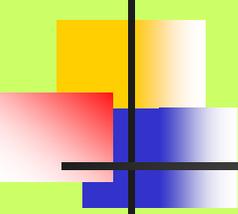
After 10/15/09, on average 20,000,000 doses will be available per week. Bi weekly amounts will increase starting November

H1N1 Influenza vaccines for 2009-10

FDA approved 9/15/09 link:

www.fda.gov/biologicsbloodvaccines/vaccines/approvedproducts/ucm181950.htm

Manufacturer	Presentation	Age	Dosage	Type
CSL limited	0.5 pre-filled syringe (thimerosal free) 5 ml multi-dose vial	≥18 yrs	One 0.5 ml dose	Inactivated Route: IM
Novartis	0.5 pre-filled syringe (thimerosal free) 5 ml muti-dose vial	≥4 yrs	Two 0.5 ml doses for 4–9 yrs One 0.5 ml dose ≥10 years	Inactivated Route: IM
Sanofi Pasteur	0.25 ml pre-filled (thimerosal free) 0.5 ml pre-filled (thimerosal free) 0.5 single- dose vial (thimerosal free) 5 ml multi-dose vial	≥6 months- 35 months ≥36 months ≥6 months	Two 0.25 ml dose 1 month apart 6–35 months Two 0.5 ml dose 1 month apart 36 months –9 yrs One 0.5 ml dose for ≥10 years	Inactivated Route: IM
MedImmune	0.2 prefilled single dose intranasal sprayer	2–49 years	Two 0.2 ml doses 1 month apart 2–9 yrs One 0.2 ml dose 10–49 yrs	LAIV Route: Intranasal spray



Common Q & A's about Administering H1N1 vaccine

Q: Can you administer seasonal LAIV and H1N1 LAIV at same visit?

A: NO

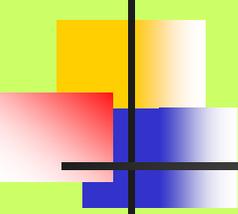
Q: Can you administer the inactivated seasonal and the live H1N1 vaccine together?

A: YES

Q: Can a breastfeeding mother receive H1N1 vaccine?

A: YES; both seasonal and H1N1 flu shots or nasal spray can be given to breastfeeding mothers

http://www.cdc.gov/h1n1flu/vaccination/pregnant_qa.htm



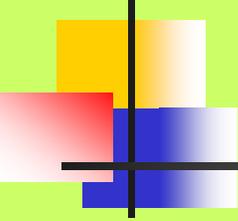
Common Q & A's about Administering H1N1 vaccine

Q: What is the recommended interval between the 1st and 2nd dose of H1N1 for children <10 yrs?

A: CDC recommends that the 2 doses be separated by 4 weeks. However, if the 2nd dose is given at least 21 days after the 1st dose it can be considered valid.

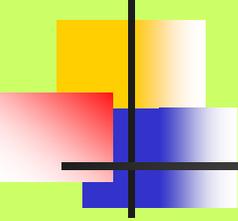
http://www.cdc.gov/h1n1flu/vaccination/public/vaccination_qa_pub.htm

October 5, 2009



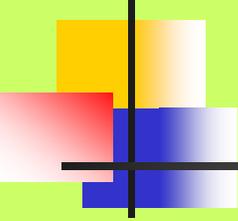
Updated Polio ACIP Recommendations (6/09)

- The 4 dose IPV series should continue to be given at 2, 4, 6-18 months and at 4-6 yrs of age.
- The final IPV dose should be administered at age ≥ 4 years regardless of # of previous doses
- Minimum interval from dose 3 to 4 now six months (not 4 weeks)
- Minimum interval from dose 1 to 2 and from dose 2 to 3 remains at 4 weeks.



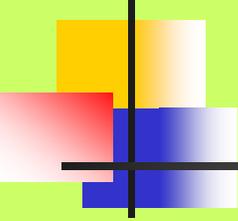
Tdap for High-risk populations

- ACIP recommended minimum interval from last Td = 2 years
 - Post-partum women
 - Health-care workers working with infants <12 months
 - Persons caring for or living with infants <12 months



Boostrix (Tdap) now for older adults and teens

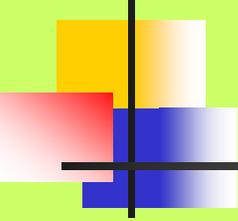
- Boostrix age range: 10 through 64 years
- Adacel age range: 11 through 64 years



What's with the catch-up schedule and Td/Tdap?

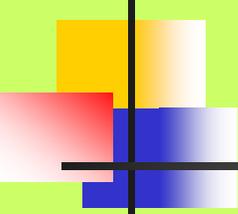
What are the rules for catch-up Td/Tdap in 8 and 9 year olds?

What about Td/Tdap for 11-18 yr olds?



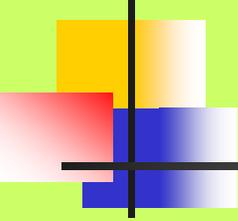
Rules for Td and Tdap catch-up schedule for 7–18 yr olds

- Individuals who received their 1st DTaP dose <12 months of age will need 3 additional doses (4 total) of tetanus-diphtheria containing vaccine to complete the primary series.
- Minimum interval between dose 2 and 3 is 4 weeks
- Minimum interval between dose 3 and 4 is 6 months.



Rules for Td and Tdap catch-up schedule for 7-18 yr olds

- Individuals who received their 1st tetanus-diphtheria containing vaccine ≥ 12 months of age will only need 2 additional doses (3 total) to complete the primary series.
- Minimum interval between dose 2 and 3 is 6 months.



Td catch-up for 7–9 year olds Recommendations

Persons ≥ 7 years old without childhood DTaPs generally need 3 doses of adult Td-containing vaccine to complete a series

Any previous DTaP dose should be counted toward the 3 dose series

If the 3 dose tetanus-diphtheria-containing series is completed before age 10 years then wait 5 years from last Td to administer a Tdap booster

Using Catch-up schedule for teens

Does Madison get a Td or Tdap today?

10 year old Madison: BD 1/6/99

No Imm Hx of DTaPs as infant

Date	8/7/06	9/3/07	3/18/09
Age	(7 yrs)	(8 yrs)	appears in clinic today
Vaccine	Td #1	Td #2	Tdap Or Td

Rules: 1) If 1st diphtheria-tetanus containing vaccine is given ≥ 12 months of age the total series is 3 doses

2) Minimum interval between Td#2 and Td#3 = 6 mo.

Using the Catch-up Schedule for Teens

Q: What diphtheria-tetanus containing vaccine is George due for today?

Q: When is he due back for his next diphtheria-tetanus containing vaccine?

8 year old George: BD 4/1/2001

Date	6/5/01	8/9/01	4/1/09
Age	(2 mo)	(4 mo)	appears with dad in clinic today
Vaccine	DTaP #1	DTaP #2	Td 5 years

Rules: 1) If 1st DTaP given <12 months of age the total series is 4 doses.

2) Td is the only diphtheria-tetanus containing vaccine available for kids between 7 and 10 years of age.

2009 Adolescent Schedule

Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2009

For those who fall behind or start late, see the schedule below and the catch-up schedule

Vaccine ▼	Age ►	7-10 years	11-12 years	13-18 years
Tetanus, Diphtheria, Pertussis ¹		see footnote 1	Tdap	Tdap
Human Papillomavirus ²		see footnote 2	HPV (3 doses)	HPV Series
Meningococcal ³		MCV	MCV	MCV
Influenza ⁴	NEW !!	Influenza (Yearly)		
Pneumococcal ⁵		PPSV		
Hepatitis A ⁶		HepA Series		
Hepatitis B ⁷		HepB Series		
Inactivated Poliovirus ⁸		IPV Series		
Measles, Mumps, Rubella ⁹		MMR Series		
Varicella ¹⁰		Varicella Series		

-  Range of recommended ages
-  Catch-up immunization
-  Certain high-risk groups

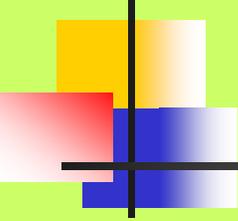
Meningococcal Vaccine

New ACIP Recommendations

dosage intervals for High-Risk (6/24/09)

Dose	Received 1st dose of MCV4 or MPSV4	ACIP Revax recommendation**
1	2 through 6 yrs	3 years after 1 st dose*
1	>7 years	5 years after 1 st dose*

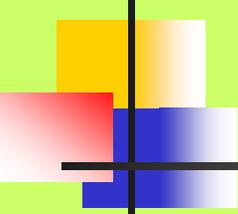
* If remain at increased risk for mening disease.
** MCV4 is preferred for revax, but MPSV3 acceptable



High-risk conditions for meningococcal disease

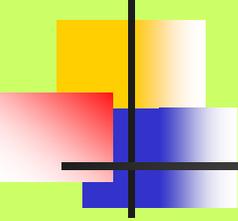
- Functional or anatomic asplenia
- Terminal complement deficiency*
- HIV infection
- Travelers or residents of countries where n.meningitidis is epidemic (African meningitis belt)

* inherited or chronic deficiencies such as C3, properdin, factor D, or late complement components



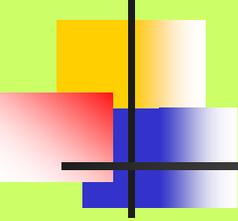
PPV23 Expanded ACIP Recommendations for High Risk conditions (2009)

- Persons 19–64 yrs with
 - Asthma
 - Cigarette smokers (cessation counseling encouraged)
- Only Alaska Natives or American Indian persons 50–64 yrs living in areas with high risk for invasive pneumococcal disease
 - routine use of PPV23 not recommended for AN and AI <60 yrs or for AN and AI children 2 thru 4yrs of age unless living in areas of increased risk.



Why are persons with asthma at increased risk for pneumococcal disease?

- Exact mechanism for increased susceptibility unknown. Hypotheses:
- Persons with asthma may have
 - disrupted physical barrier of the airway lining
 - increased mucous production
 - alterations in immune response
- Asthma medications (corticosteroids) may suppress the immune system

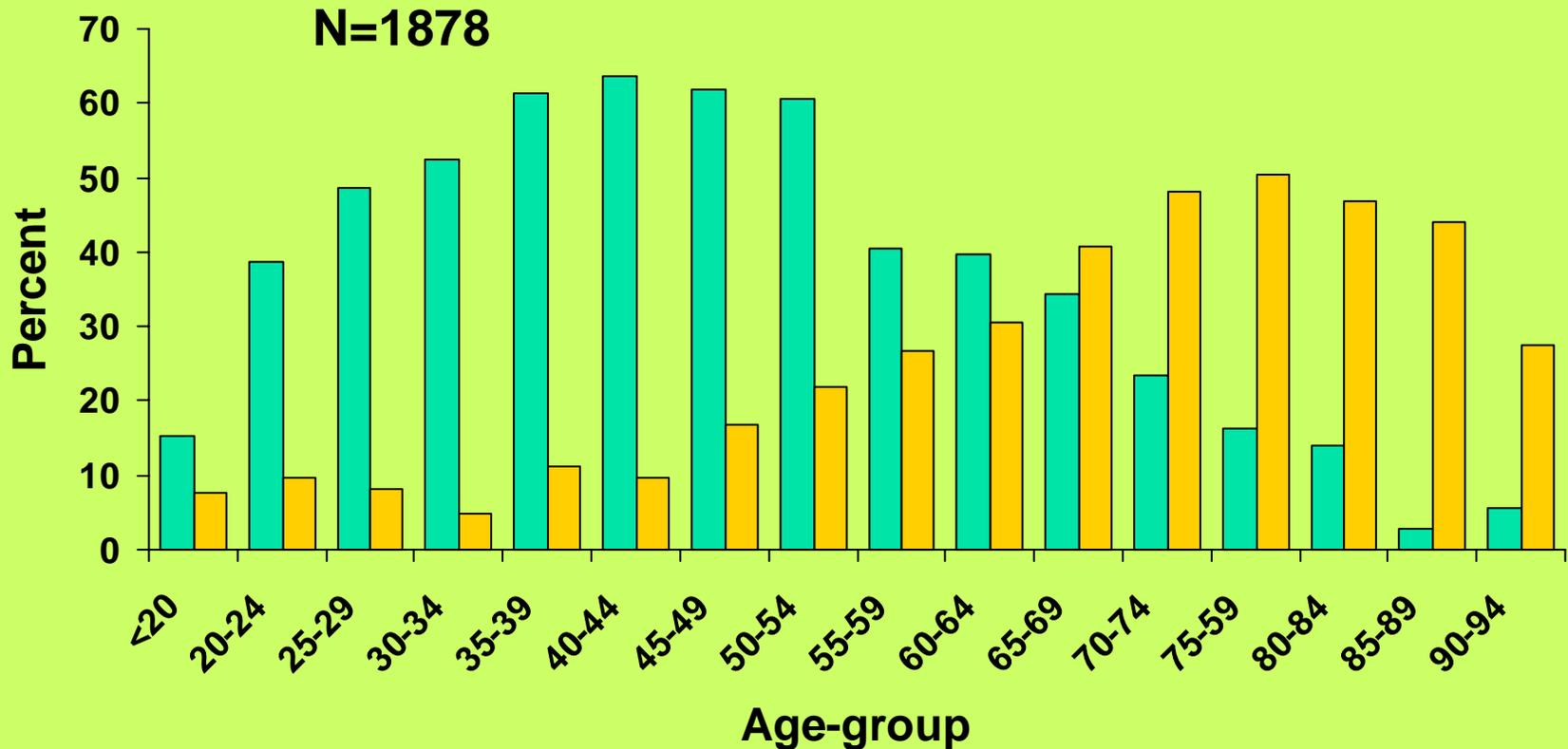


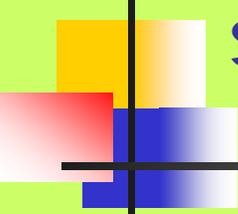
ACIP recommendation

- Asthma is an independent risk factor for IPD
- The ACIP recommends that asthma should be included among the chronic pulmonary diseases (such as COPD and emphysema) that are indications for PPSV23 in adults aged 19 through 64 years.
- Wording of the revised recommendation:
"Persons aged 19 through 64 years who have asthma should receive a single dose of PPSV23."

Prevalence of current and former smoking among IPD cases by age 2001-2003

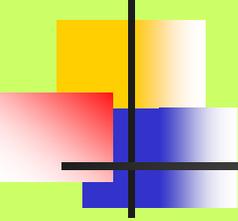
■ Current smoker, N=727 ■ Former smoker, N=528





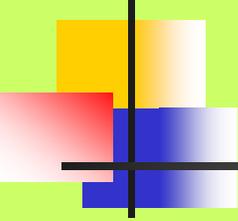
The ACIP's rationale for making cigarette smoking an indication for PPSV23

- Approximately half of adults aged ≤ 65 years who develop severe pneumococcal disease are smokers
- Cigarette smoking is a particularly strong risk factor for severe pneumococcal disease
- Cigarette smoking is a risk behavior that is easy to identify among patients in clinical practice
- Many adults who smoke cigarettes and develop pneumococcal disease also have another condition for which PPSV23 is already recommended
- Smoking cessation should be part of the therapeutic plan regardless of immunization



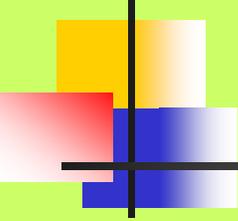
PPV23 Expanded ACIP Recommendations for High Risk situations

- Previous recommendation for revaccination of high-risk children was 3–5 yrs after initial vaccination.
- Now “a 2nd dose of PPV23 is recommended 5 yrs after the 1st dose for persons >2 yrs. who are immunocompromised, have sickle cell disease, or functional or anatomic asplenia”.



CDC reinstates Hib booster 7/09

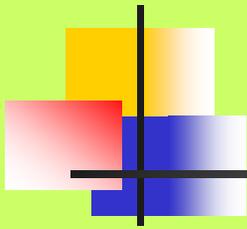
- As of 7/14/09 all Oregon infants should receive their primary Hib series at 2, 4, 6 months, and Hib booster dose at 12-18 months of age
- Older children with deferred boosters should receive Hib booster at next routine visit or medical encounter
- Hiberix (GSK) recently licensed in US for limited use for 4th and final Hib to help clinics catch up with deferred booster doses.



Hepatitis A - Close contacts of recently adopted children

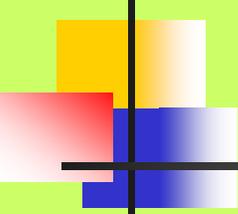
ACIP voted in 2/09 to recommend Hep A vaccination for:

- All previously unvaccinated people who anticipate close personal contact with international adoptee from Hep A endemic country
- Grandparents, caregivers, healthcare providers
- 1st dose planned no later than 2 weeks prior to arrival of adoptee.



Questions?





Resources

- Seasonal flu orders and H1N1 flu orders at:
<http://oregon.gov/dhs/ph/imm/provider/stdgorder.shtm>
- VIS for Live H1N1 flu :
<http://www.cdc.gov/vaccines/pubs/vis/downloads/vis-laiv-h1n1.pdf>
- VIS for Inactivated H1N1 flu:
<http://www.cdc.gov/vaccines/pubs/vis/downloads/vis-inact-h1n1.pdf> H1N1 Flu Vaccination Resources
- CDC H1N1 Resources
<http://www.cdc.gov/h1n1flu/vaccination/>