

Tri-County Health Department 2016 School Based Immunization Clinics



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Why Provide Immunizations at School?

Evidence shows it helps remove barriers:

- 1) **“Thus, complementary settings, such as schools, shopping malls, and pharmacies, and immunization through sports teams should be evaluated [59, 60].”** Pickering, L. K., Baker, C. J., Freed, G. L., Gall, S. A., Grogg, S. E., Poland, G. A., & ... Orenstein, W. A. (2009). Immunization programs for infants, children, adolescents, and adults: clinical practice guidelines by the Infectious Diseases Society of America. *Clinical Infectious Diseases: An Official Publication Of The Infectious Diseases Society Of America*, 49(6), 817-840. doi:10.1086/605430
- 2) **“Offering the vaccine in settings outside the traditional medical home, such as schools and pharmacies, could increase use.”** McRee, A., Reiter, P. L., Pepper, J. K., & Brewer, N. T. (2013). Correlates of comfort with alternative settings for HPV vaccine delivery. *Human Vaccines & Immunotherapeutics*, 9(2), 306-313.
- 3) **“...64% would accept these vaccines in a public health clinic, and 45% in a school setting.”** Pyrzanowski, J., Curtis, C. R., Crane, L. A., Barrow, J., Beaty, B., Kempe, A., & Daley, M. F. (2013). Adolescents' Perspectives on Vaccination Outside the Traditional Medical Home: A Survey of Urban Middle and High School Students. *Clinical Pediatrics*, 52(4), 329-337. doi:10.1177/0009922813475703
- 4) **“In the current study, we found that a school-located vaccination program increased the likelihood of receipt of Tdap, MCV4, and HPV vaccines. The increase in immunization rates was likely a consequence of removing access barriers for uninsured students, raising awareness of needed vaccines through materials sent to families, and creating a convenient setting for vaccination.”** Daley, M. F., Kempe, A., Pyrzanowski, J., Vogt, T. M., Dickinson, L. M., Kile, D., & ... Shlay, J. C. (2014). School-located vaccination of adolescents with insurance billing: Cost, reimbursement, and vaccination outcomes. *Journal Of Adolescent Health*, 54(3), 282-288. doi:10.1016/j.jadohealth.2013.12.011
- 5) **“Aurora School District partners with Tri-County Health Department (TCHD) to host an annual back-to-school event two weeks prior to the start of the school year.”** *Promising Practices and Innovative Partnerships for Delivering Childhood Immunizations in Colorado* (pp. 1-13, Issue brief). (2016). Aurora, CO: Colorado Children's Immunization Coalition.

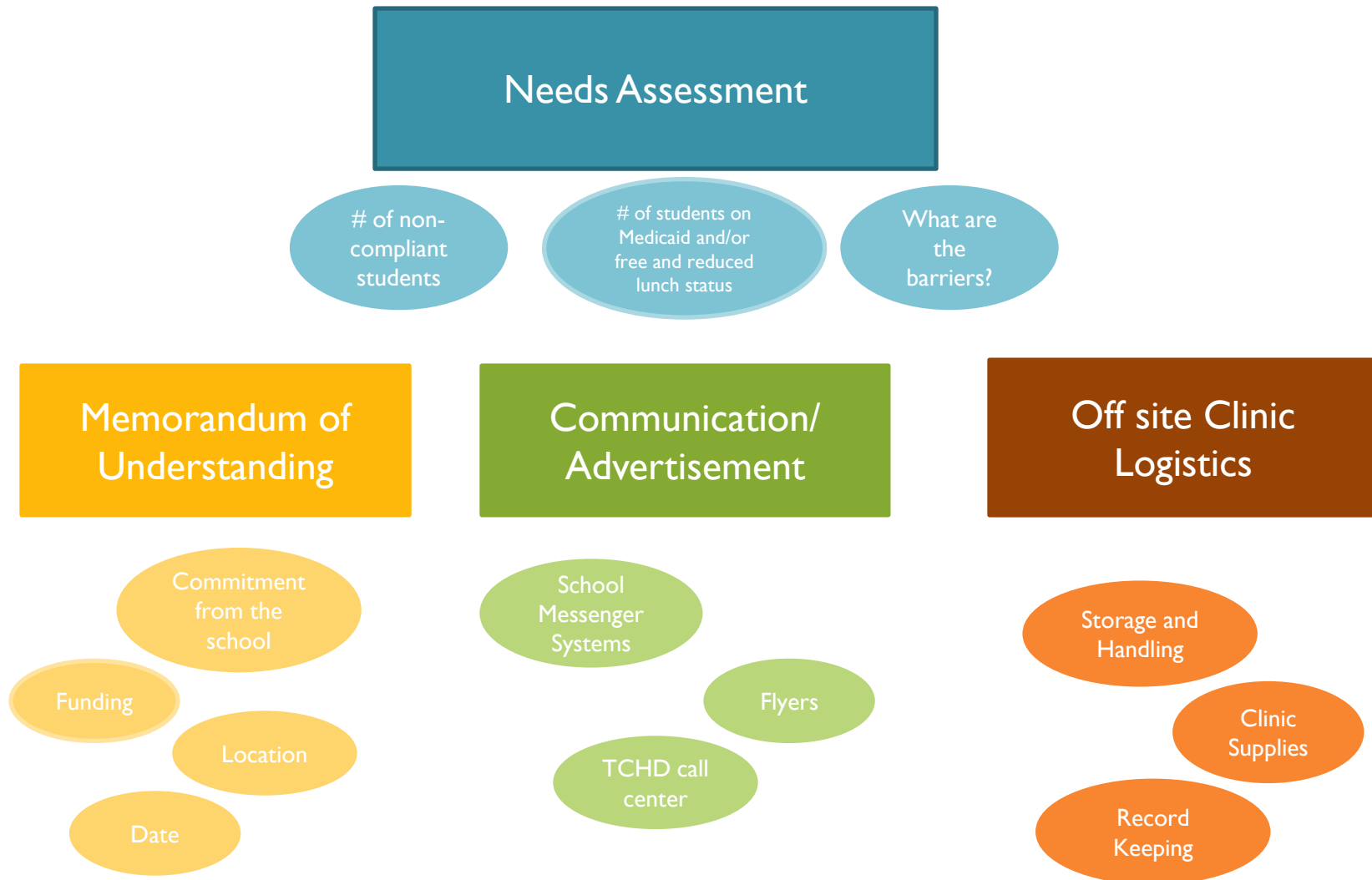
Why Provide Immunizations at School?

Continued:

6) 2015 National Foundation for Infectious Diseases: Clinical Vaccinology Course Presentation Titled: *Alternative Locations for Vaccine Delivery*

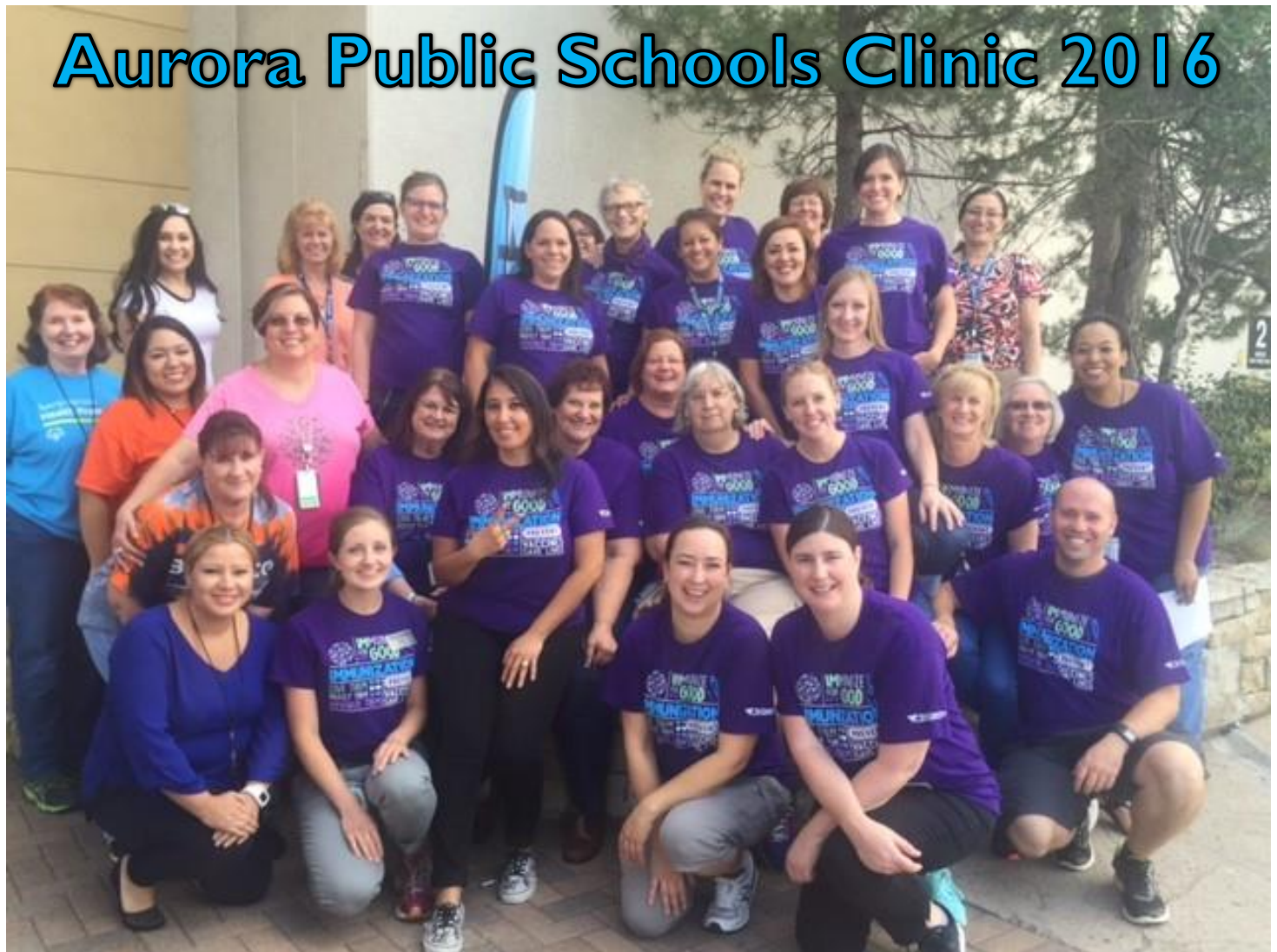


From Start to Finish - The Basic Process



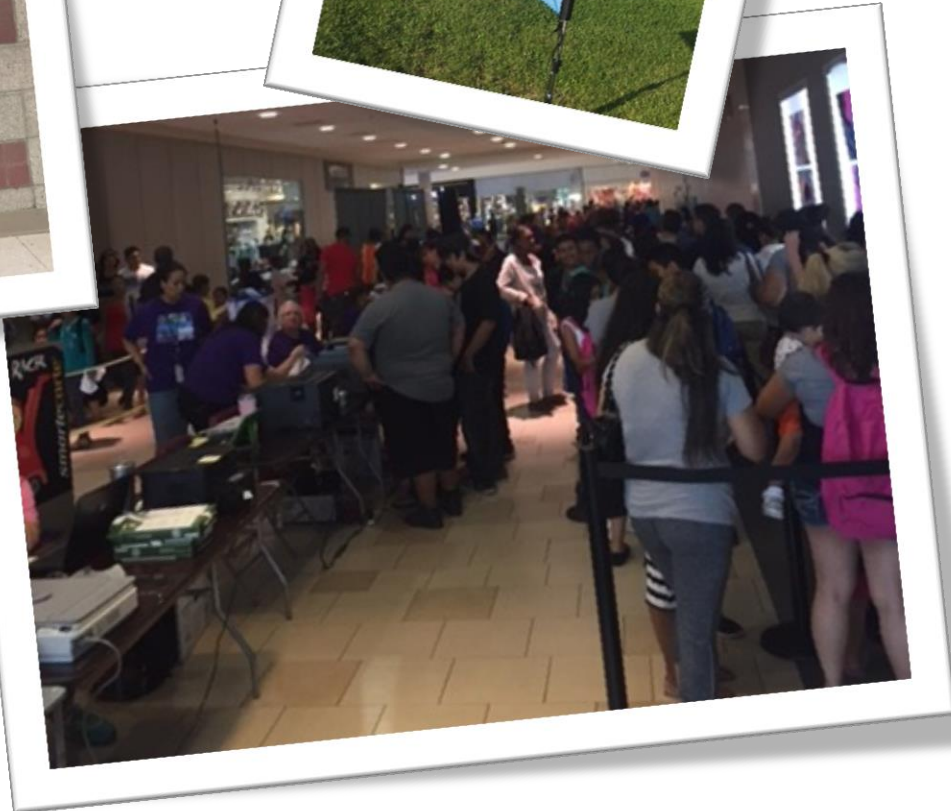
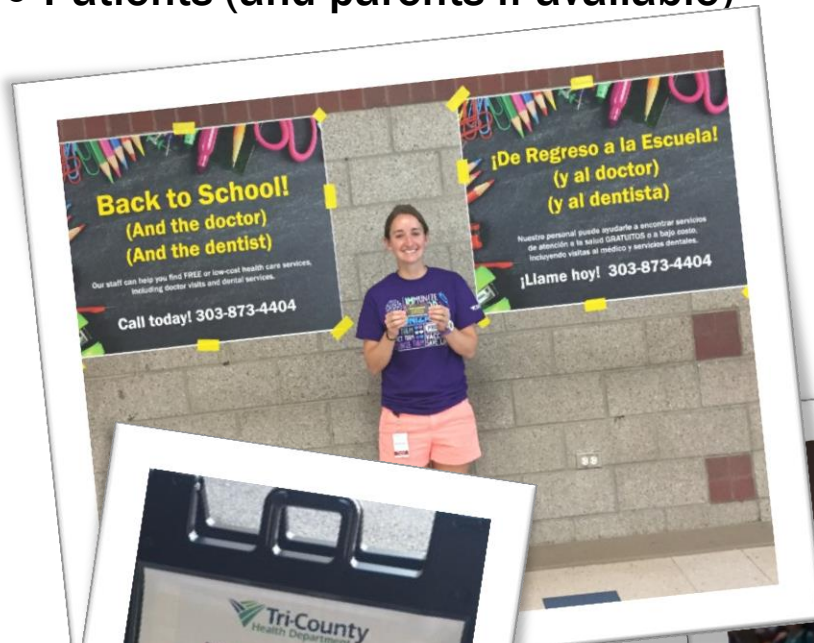
Common Barriers to School Vaccinations

- Buy-In and support (Internal and External)



Common Barriers to School Vaccinations

- Patients (and parents if available)



Common Barriers to School Vaccinations

- Location, Location, Location



Common Barriers to School Vaccinations

- Technology and staff competency with technology

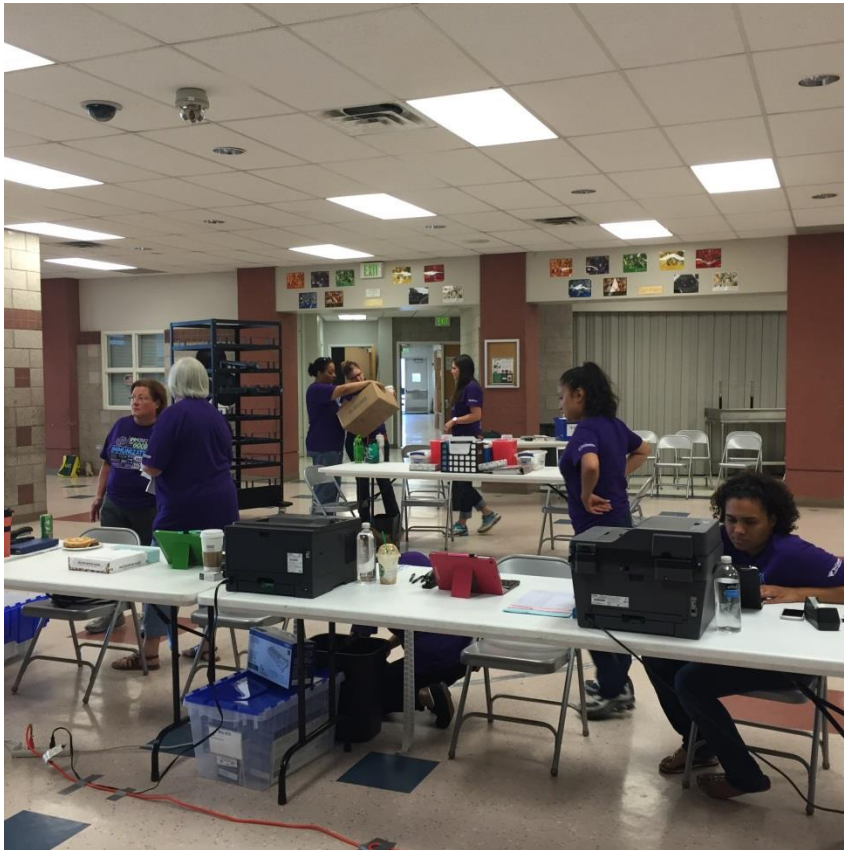


Equals:



Common Barriers to School Vaccinations

- Technology and staff competency with technology - continued:



Common Barriers to School Vaccinations

- Resources

- Cost:

 - Staff Time (usually long days, and often times after hours)

 - Food and Snacks

 - Technology Equipment

 - Specific Off-site items

- Other items:

 - Copy paper / toner

 - Pens, clipboards, stamps,

 - Epi Kits, juice for syncope,

 - yoga mats, vaccine, syringes, etc...



School Required Immunizations 2016-17

- Diphtheria/Tetanus/Pertussis
Tetanus/Diphtheria/Pertussis
- Polio
- Measles/Mumps/Rubella
- Varicella
- Hepatitis B

MINIMUM NUMBER OF DOSES REQUIRED FOR CERTIFICATE OF IMMUNIZATION
Kindergarten through 12th grade: 2016-17 SY - Required for School Attendance

VACCINE	Number of Doses	Grades K-12 (4-18 Years of Age) Vaccines administered \leq 4 days before the minimum age are valid
Diphtheria/Tetanus/ Pertussis <i>DTaP or DT only licensed through 6 yrs of age. (Tdap can be given as early as 7)</i>	5 to 6	5 DTaP or DT (if dose 4 was administered on or after the 4 th birthday, the requirement is met). The final dose of DTaP must be given no sooner than 4 years of age. Tdap is required at 6 th grade entry and through 12 th
Tetanus/Diphtheria/ Pertussis <i>For students 7 years of age or older who did not have full series of DTaP or DT</i>	3 or 4	3 or 4 appropriately spaced tetanus/diphtheria containing vaccines (DTaP, DT, Td, Tdap). Intervals between doses include 4 wks between first 2 (or 3) doses and 6 mos between last 2 doses. (Note: if 1 st dose is given before 1 year of age, the student will need 4 doses).
Polio (IPV)	3 to 4	4 IPV (or 3 doses if 3 rd dose is given on or after 4 th birthday). Students who were compliant with 3 or 4 doses prior to August 7, 2010 have met the requirement if at least 4 weeks between doses.
Measles/Mumps/Rubella (MMR)	2	The 1 st dose cannot be administered more than 4 days before the 1 st birthday. 2 doses are required for students entering Kindergarten. (2 doses are required through 12 th grade).
Varicella (Chickenpox)	2	The 1 st dose cannot be administered more than 4 days before the 1 st birthday. 2 doses are required for students entering Kindergarten. (2 doses are required through 12 th grade). Note: no vaccine required if there is documentation of chickenpox disease by a health care provider.
Hepatitis B	3	The 2 nd dose must be administered at least 4 weeks after the first dose. The 3 rd dose must be administered at least 16 weeks after the 1 st dose and at least 8 weeks after the 2 nd dose. The final dose must be administered no sooner than 24 weeks of age. Note: there is a specific 2-dose series is for ages 11-15 years only.

Diphtheria/Tetanus/Pertussis

5 to 6 doses

- 5 DTaP or DT required at Kindergarten entry
- 4 DTaP or DT if dose 4 administered on or after the 4th birthday
- The final dose of DTaP must be given on or after the 4th birthday
- Tdap is required at 6th grade entry and through 12th grade

Tetanus/Diphtheria/Pertussis

For students 7 years of age or older who did not have a full series of DTaP or DT

3 or 4 doses

- 3 or 4 appropriately spaced tetanus/diphtheria containing vaccines (DTaP, DT, Td, Tdap)
- 4 week intervals between doses 1, 2/3 and 6 months between the last two doses
- If 1st dose is given before the first birthday the student will need 4 doses

Polio (IPV)

3 to 4 doses

- 4 IPV doses
- 3 doses if dose 3 administered on or after the 4th birthday
- The final dose of IPV must be given on or after the 4th birthday*
- Students who were compliant with 3 or 4 doses prior to August 7, 2010 have met the requirement if at least 4 weeks between doses

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MMWR
Weekly
August 7, 2009 / 58(30):829-830

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Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) Regarding Poliovirus Vaccination

This report updates Advisory Committee on Immunization Practices (ACIP) recommendations for routine poliovirus vaccination. These updates aim to 1) emphasize the importance of the booster dose at age ≥ 4 years, 2) change the minimum interval between dose 3 to dose 4 from 4 weeks to 6 months, 3) add a precaution for the use of minimum intervals in the first 6 months of life, and 4) clarify the poliovirus vaccination schedule when specific combination vaccines are used.

On June 17, 1999, ACIP recommended that all poliovirus vaccine administered in the United States be an inactivated poliovirus vaccine (IPV) beginning January 1, 2000. This policy was implemented to eliminate the risk of poliomyelitis, a rare condition that has been associated with use of the live oral poliovirus vaccine (OPV). Since 1999, no OPV has been distributed in the United States. Under these ACIP recommendations, the routine IPV series in the United States consists of 4 doses administered at ages 2 months, 4 months, 6–18 months, and 4–6 years with the minimum interval between all IPV doses as 4 weeks (1,2).

Since the ACIP recommendation was made 10 years ago, three different combination vaccines containing IPV have been licensed for routine use in the United States (Table). Because of potential confusion in using different combination vaccines, ACIP recommends the following:

- The 4-dose IPV series should continue to be administered at ages 2 months, 4 months, 6–18 months, and 4–6 years.
- The final dose in the IPV series should be administered at age ≥ 4 years regardless of the number of previous doses.
- The minimum interval from dose 3 to dose 4 is extended from 4 weeks to 6 months.
- The minimum interval from dose 1 to dose 2, and from dose 2 to dose 3, remains 4 weeks.
- The minimum age for dose 1 remains age 6 weeks.

Measles/Mumps/Rubella (MMR)

2 doses

- 1st dose cannot be administered more than 4 days before the 1st birthday
- 2 doses are required for students entering Kindergarten
- 2 doses are required through 12th grade

Varicella (Chickenpox)

2 doses

- 1st dose cannot be administered more than 4 days before the 1st birthday
- 2 doses are required for students entering Kindergarten
- 2 doses are required through 12th grade
- No vaccine required if there is documentation of chickenpox disease by a health care provider

Hepatitis B

3 doses

- The 2nd dose must be administered at least 4 weeks after the first dose
- The 3rd dose must be administered at least 16 weeks after the 1st dose and at least 8 weeks after the 2nd dose
- The final dose must be administered no sooner than 24 weeks of age
- Merck Recombivax HB 1.0ml - there is a specific series for adolescents age 11-15 years, two doses (1.0ml) given 4-6 mo apart is considered a complete series

Recommended Vaccines

- Influenza **1 to 2 doses**
 - Children 6 months of age and older
 - 2 doses initially if under 9 years of age, then 1 dose annually
- Meningococcal (MCV4 and Men B)
 - MCV4 **1 to 2 doses** age 11-18
 - Men B **2 to 3 doses** age 16 – 23
- HPV 3 doses
 - Adolescents 11-18 years old
- Hepatitis A 2 doses
 - All children 1 year of age and older

From a nurses perspective... critical updates for 2016-17

- Grade level requirement verses age requirement
- Updated exemption process
- New rate reporting requirement

Grade level requirement verses age requirement

- Kindergarten entry
- 6th grade entry
- 2 doses of Varicella for all ages/grades

Updated exemption process - July 1, 2016

- Non-medical exemptions must be submitted once per year for students in grades K-12
- Non-medical exemptions expire every year on June 30 (medical exemptions do not expire)
- Exemption form can be downloaded and submitted to the school and/or can be submitted online for inclusion in CIIS

<https://www.colorado.gov/pacific/cdphe/vaccine-exemptions>

- Immunization Education Module

https://docs.google.com/presentation/d/IT_j7H3g5CTvK0dlqvHZreXmrnHYTC7WCGY_u9Plhvwvg/pub?start=true&loop=false&delayms=60000#slide=id.p3

New rate reporting requirement – Dec. 1, 2016

- Schools and licensed child care providers are required to report immunization rates and exemptions to CDPHE
- Online reporting tool will be available sometime in October
- Initial reporting is due Dec. 1, 2016 and every year thereafter

2016 Back To School Clinic Results

School District	Clinic Hours	# Pt.'s Screened	# Pt.'s Vax.	Ave. Pt.'s / Nurse	# of Vax.	Average Vax. / Pt.
Adams 12	4	98	57	8.90	136	2.39
Aurora	2.5	233	149	17.92	422	2.83
Cherry Creek	5	150	142	12.5	400	2.82
SFT&T's	3	62	56	12.4	134	2.39
2016 TOTAL	14.5	543	404	12.93	1,092	2.60

Take Away Data Points:

- 37.44 patients screened per clinic hour
- 27.86 patients vaccinated per clinic hour
- 75.3 injections administered per clinic hour
- Approximately 13 patients per nurse at these clinics (range 9-18)

2016 Back To School Tips

- Keep the clinic location, and event it is tied to the same from year to year
- Advertise as much as possible (web, fliers, community, school info boards, newsletters, reminder calls, etc.)
- Take help from whom-ever is offering it (line control, exit stations, check-in)
- Technology is vital for fast and accurate info
- Practice, Practice, Practice, and incorporate into your Emergency Preparedness training of staff
- Don't get stuck in the numbers. The experience, service, and barriers we break are immeasurable



Questions?

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~Thank You~