Centers for Disease Control and Prevention

National Center for Immunization and Respiratory Diseases



ACIP General Best Practice Guidelines for Immunization – Background and Posted Revisions since April 2017

Andrew Kroger, MD MPH

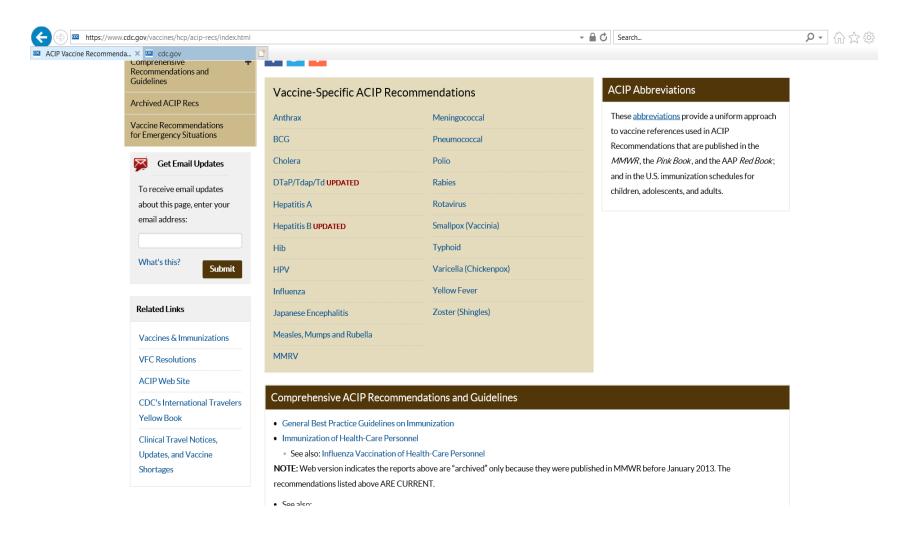
Medical Officer

Centers for Disease Control and Prevention – U.S.A.

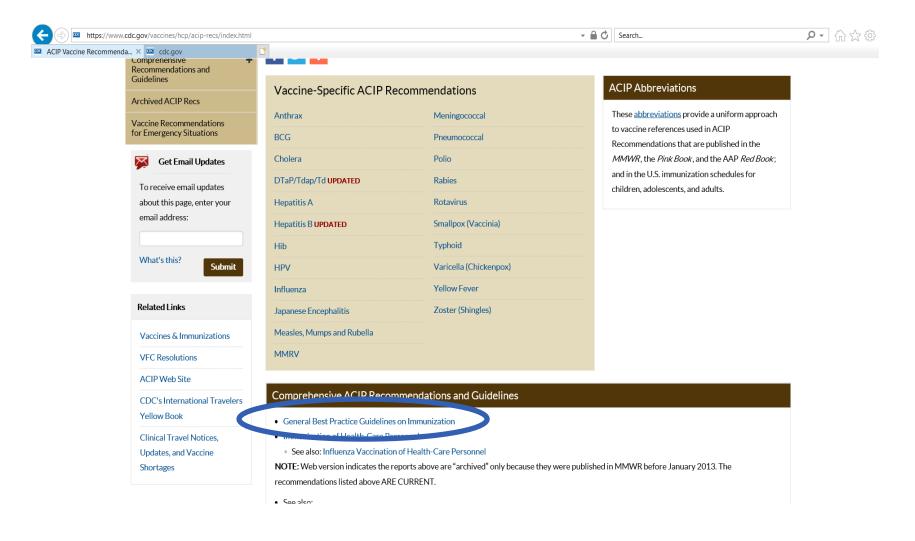
Advisory Committee on Immunization Practices
October 25, 2018
Atlanta, GA

Background

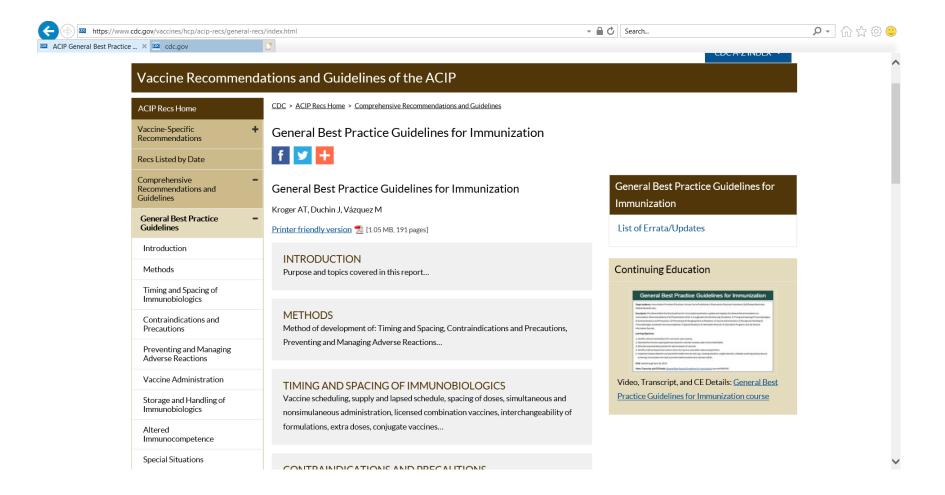
https://www.cdc.gov/vaccines/hcp/acip-recs/index.html



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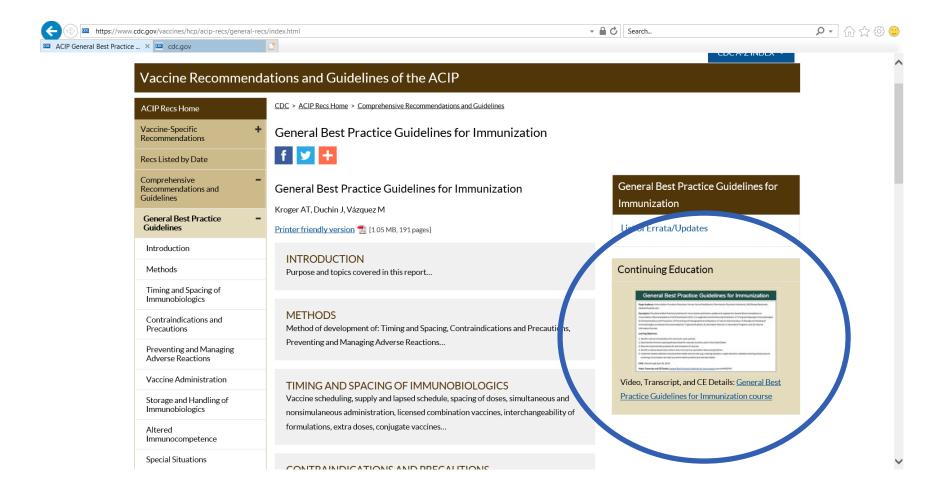
https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html



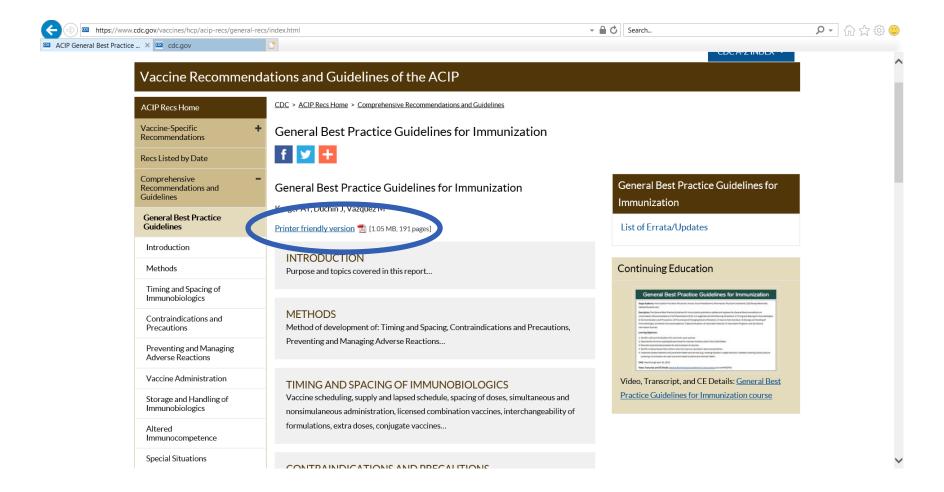
General Best Practices: Topics

- Introduction
- Methods
- Timing and spacing of immunobiologics
- Contraindications and precautions
- Preventing and managing adverse reactions
- Reporting adverse events after vaccination
- Vaccine administration
- Storage and handling of immunobiologics
- Altered immunocompetence
- Special situations
- Vaccination records
- Vaccination programs
- Vaccine information sources

https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html



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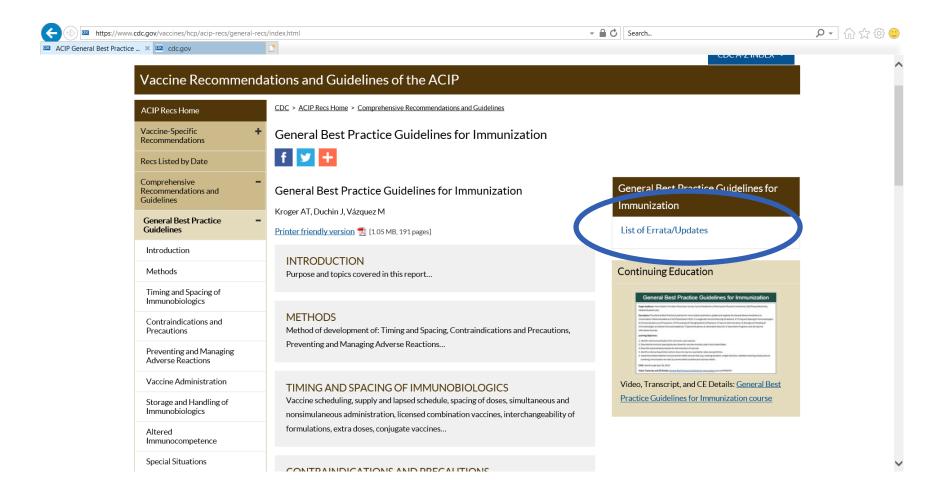


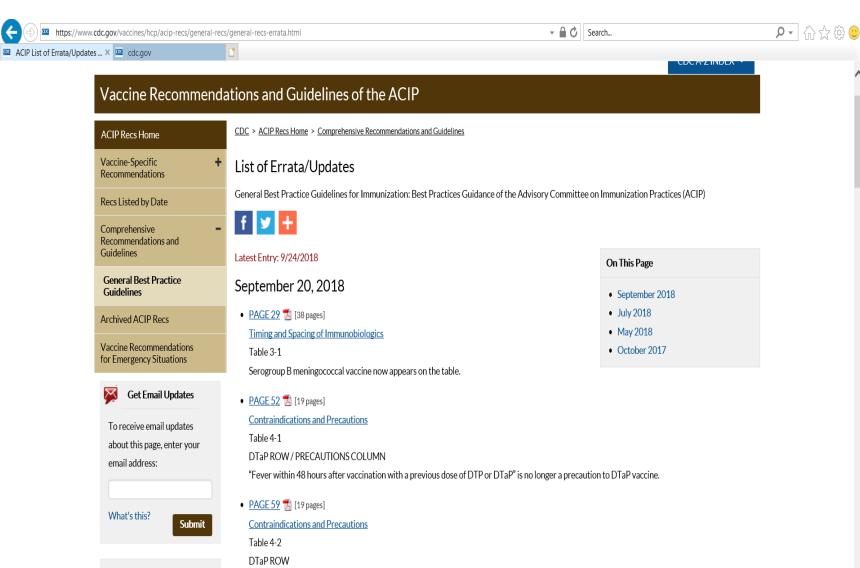
General Best Practice Guidelines for Immunization

Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP)

Kroger AT, <u>Duchin</u> J, Vázquez M

https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html





"Fever within 48 hours after vaccination with a previous dose of DTP or DTaP" is no longer a precaution to DTaP vaccine.

Related Links

Vaccines & Immunizations

Errata/Updates

Pertussis Containing Vaccines

■ DTaP (Dose 3 – Dose 4) minimum intervals (10/23/2017)

- Prospective 6 months
- Retrospective 4 months
- 4 day grace period can be applied to 6 month interval prospectively
- 4 day grace period can be applied to 4 month interval retrospectively

Four precautions to DTaP removed

- Fever ≥ 105° F within 48 hrs following a dose of DTaP (09/20/18)
- Persistent, inconsolable crying lasting ≥ 3 hrs within 48 hrs following a dose of DTaP (07/18/18)
- Collapse or shock-like state with 48 hrs following a dose of DTaP (07/18/18)
- Seizure within 72 hrs following a dose of DTaP (07/18/18)

Serogroup B Meningococcal Vaccine (09/20/18)

TABLE 3-1. Recommended and minimum ages and intervals between vaccine doses(a),(b),(c),(d)

Vaccine and dose number		Recommended age for this dose	Minimum age for this dose	Recommended interval to next dose	Minimum interval to next dose
	MenB-1	Healthy adolescents: 16-23 years	16 years	MenB-4C: 4 weeks MenB-FHbp: 6 months ^(c)	MenB-4C: 4 weeks MenB-FHbp: 6 months ^(c)
		Persons at increased risk: ≥10 years	10 years	MenB-4C: 4 weeks MenB-FHbp: 1-2 months ^(c)	MenB-4C: 4 weeks MenB-FHbp: 1 month
	MenB-2	Healthy adolescents: 16-23 years (+1 month)	16 years (+1 month)	_	_
		Persons at increased risk: ≥10 years (+1 month)	10 years (+1 month)	MenB-4C: — MenB-FHbp: 4-5 months ^(c)	MenB-4C: — MenB-FHbp: 4 months ^(c)
	MenB-3 ^(t)	Persons at increased risk: ≥ 10 years (+ 6 months ^(c))	10 years (+ 6 months	_	_

Hepatitis A (07/18/18)

- Dosages of Immunoglobulin (IG) updated (no need to adjust interval to MMR or Varicella vaccines)
- IG and Hepatitis A should be administered in different limbs
 - Joins two other couplets
 - TIG and tetanus-containing vaccines
 - HBIG and hepatitis B vaccines

Varicella Vaccine

Contraindication (10/23/17)

 Family history of altered immunocompetence – with footnote explaining the concern is with congenital immunodeficiencies and the intervention is to screen through histories of first-degree relatives or use of laboratory evidence if available

Precaution

- Use of aspirin or aspirin-containing products (actually a recommendation to delay the medicine 6 weeks after giving the vaccine (07/18/18)
- Receipt of specific antiherpesvirus antiviral drugs 24 hours before vaccination (avoid use of these antiherpesvirus drugs for 14 days after vaccination) (10/23/18)

Zoster (RZV) Vaccine (07/18/18)

Vaccine Administration

- Only 0.5 cc's should be withdrawn from a vial even if the vial is overfilled
- Does NOT apply to other vaccines (recommendation to withdraw the entire contents)

Live Attenuated Influenza Vaccine (LAIV) (10/23/18)

Contraindication

• Influenza antiviral medications within the previous 48 hours



May Health Care Personnel with Labeled Contraindications and/or Precautions Administer Vaccine?

- There is no current discussion of this in the General Best Practices
- There is a well known vaccine-specific recommendations (LAIV)
- General Recommendations Work Group debated if this could be generalized

Literature Review

- Health care personnel
- Risk of adverse reactions based on administration of vaccine
- Potential outcomes (withholding vaccine vs administering vaccine)

- Databases searched:
 - Embase. Cinhal, Scopus, PsycInfo, and Medline

Literature Review – 82 Unique Items

Database	Strategy	Run Date	Records
Medline (OVID) 1946-	vaccinator* OR (administrator* adj5 vaccin*) OR (administering adj5 vaccin*) AND (occupational health OR occupational safety OR occupational injur* OR occupational risk* OR occupational hazard* OR occupational disease* OR occupationally-acquired OR workplace injur* OR workplace illness* OR work-related injur* OR work-related illness* OR work-related disease* OR precaution* OR contraindicat* OR needlestick injur*)	7/13/2018	53
Embase (OVID) 1947-	vaccinator* OR (administrator* adj5 vaccin*) OR (administering adj5 vaccin*) AND (occupational health OR occupational safety OR occupational injur* OR occupational risk* OR occupational hazard* OR occupational disease* OR occupationally-acquired OR workplace injur* OR workplace illness* OR work-related injur* OR work-related disease* OR precaution* OR contraindicat* OR needlestick injur*)	7/13/2018	-42 duplicates =23 unique items
Psycinfo (OVID) 1967-	vaccinator* OR (administrator* adj5 vaccin*) OR (administering adj5 vaccin*) AND (occupational health OR occupational safety OR occupational injur* OR occupational risk* OR occupational hazard* OR occupational disease* OR occupationally-acquired OR workplace injur* OR workplace illness* OR work-related injur* OR work-related illness* OR work-related disease* OR precaution* OR contraindicat* OR needlestick injur*)	7/13/2018	2 -2 duplicates =0 unique items
CINAHL (Ebsco)	vaccinator* OR (administrator* N5 vaccin*) OR (administering N5 vaccin*) AND ("occupational health" OR "occupational safety" OR "occupational injur*" OR "occupational risk*" OR "occupational hazard*" OR "occupational disease*" OR occupationally-acquired OR "workplace injur*" OR "workplace illness*" OR "work-related injur*" OR "work-related illness*" OR "work-related disease*" OR precaution* OR contraindicat* OR "needlestick injur*")	7/13/2018	5 -4 duplicates =1 unique items
Scopus	TITLE-ABS-KEY(vaccinator* OR (administrator* N5 vaccin*) OR (administering N5 vaccin*)) AND TITLE-ABS-KEY("occupational health" OR "occupational safety" OR "occupational injur*" OR "occupational risk*" OR "occupational hazard*" OR "occupational disease*" OR occupationally-acquired OR "workplace injur*" OR "workplace illness*" OR "work-related injur*" OR "work-related injur*" OR "work-related illness*" OR "work-related disease*" OR precaution* OR contraindicat* OR "needlestick injur*")	7/13/2018	-5 duplicates =20 unique items

Literature Search – 3 Articles Relevant to Topic

- Centers for Disease Control and Prevention. Recommendations for using smallpox vaccine in a prevent vaccination program: supplemental recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR 2003;52(No. RR-7):1-18.
- Leira HL, Baalsrud KJ. Fish vaccinology. In: Gudding R, Lillehaug A, Midtlyng PJ, Brown F, eds. Dev Biol Stand, Basel: Karger; 1997.
- Windsor PA, Bush R, Links I, Eppelston J. Injury caused by self-inoculation with a vaccine of a Freund's complete adjuvant nature (Gudair™) used for control of ovine paratuberculosis. Australian Veterinary Journal April 2005;83(4):216-20.

Language for Discussion – To Be Placed in Vaccine Administration Section

- Health Care Provider Exposure to Vaccine Antigen
- Providers are sometimes concerned when they have the same contraindications or precautions as their patients from whom they withhold or defer vaccine. For administration of routinely recommended vaccines, there is no evidence of risk of exposure of vaccine antigen to the health care provider, so conditions in the provider labeled as contraindications and precautions to a vaccine antigen are not a reason to withdraw from this function of administering the vaccine antigen to someone else.

Language for Discussion – To Be Placed in Vaccine Administration Section

• Historic concerns about exposure to vaccine antigen are limited to non-parenteral vaccines in which some degree of environmental exposure is unavoidable (LAIV), situations in which adverse reactions from allergy or self-inoculation is likely due to reduced attenuation of vaccine virus (Smallpox), or the technical process of administration is complicated by vaccine recipients that struggle vigorously, leading to needle stick injury and reactions due to allergy or self-inoculation (veterinary vaccinology).

ACIP General Recommendations Work Group

ACIP

Paul Hunter

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- Charles (Chad) Rittle (ANA)
- Pam Rockwell (AAFP)
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