Recommended vaccines in the United States

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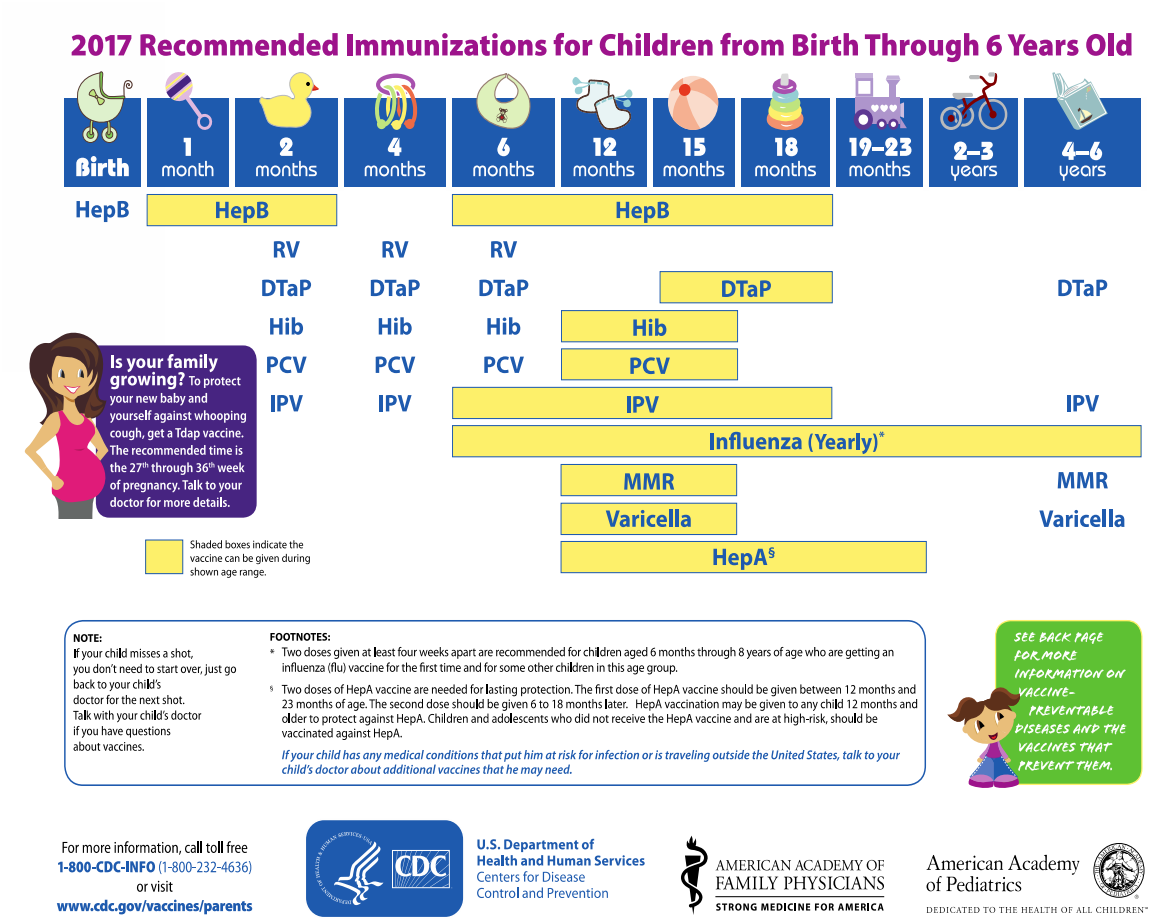
September 23, 2017

Apple Time

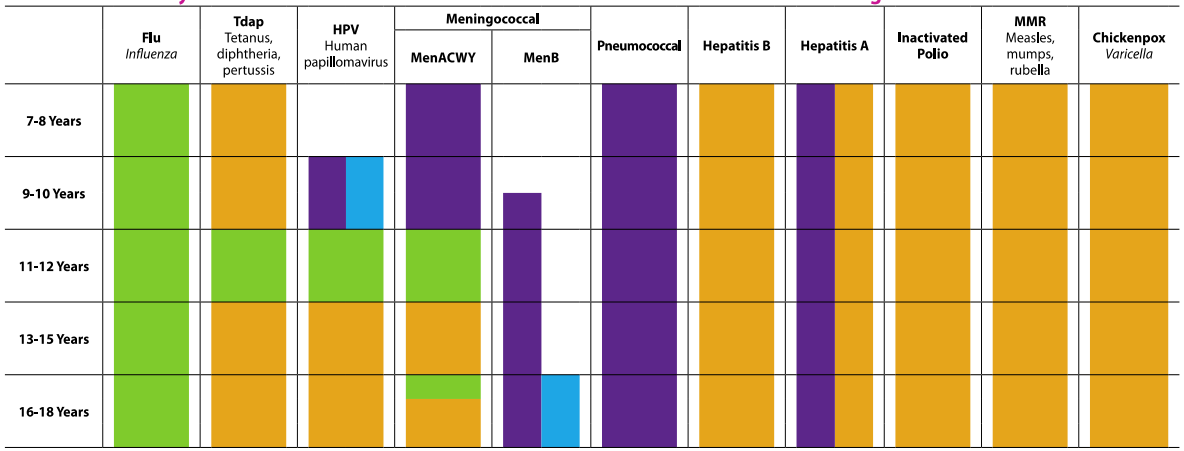
Recommended Vaccines
0 to 6 years old



Recommended Vaccines 7 to 18

INFORMATION FOR PARENTS | **2017 Recommended Immunizations for Children 7-18 Years Old**

Talk to your child's doctor or nurse about the vaccines recommended for their age.



More information:	Preteens and teens should get a flu vaccine every year.	Preteens and teens should get one shot of Tdap at age 11 or 12 years.	All 11-12 year olds should get a 2-shot series of HPV vaccine at least 6 months apart. A 3-shot series is needed for those with weakened immune systems and those age 15 or older.	All 11-12 year olds should get a single shot of a quadrivalent meningococcal conjugate vaccine (MenACWY). A booster shot is recommended at age 16.	Teens, 16-18 years old, **may** be vaccinated with a MenB vaccine.

These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.

These shaded boxes indicate the vaccine should be given if a child is catching-up on missed vaccines.

These shaded boxes indicate the vaccine is recommended for children with certain health or lifestyle conditions that put them at an increased risk for serious diseases. See vaccine-specific recommendations at www.cdc.gov/vaccines/pubs/ACIP-list.htm.

This shaded box indicates the vaccine is recommended for children not at increased risk but who wish to get the vaccine after speaking to a provider.

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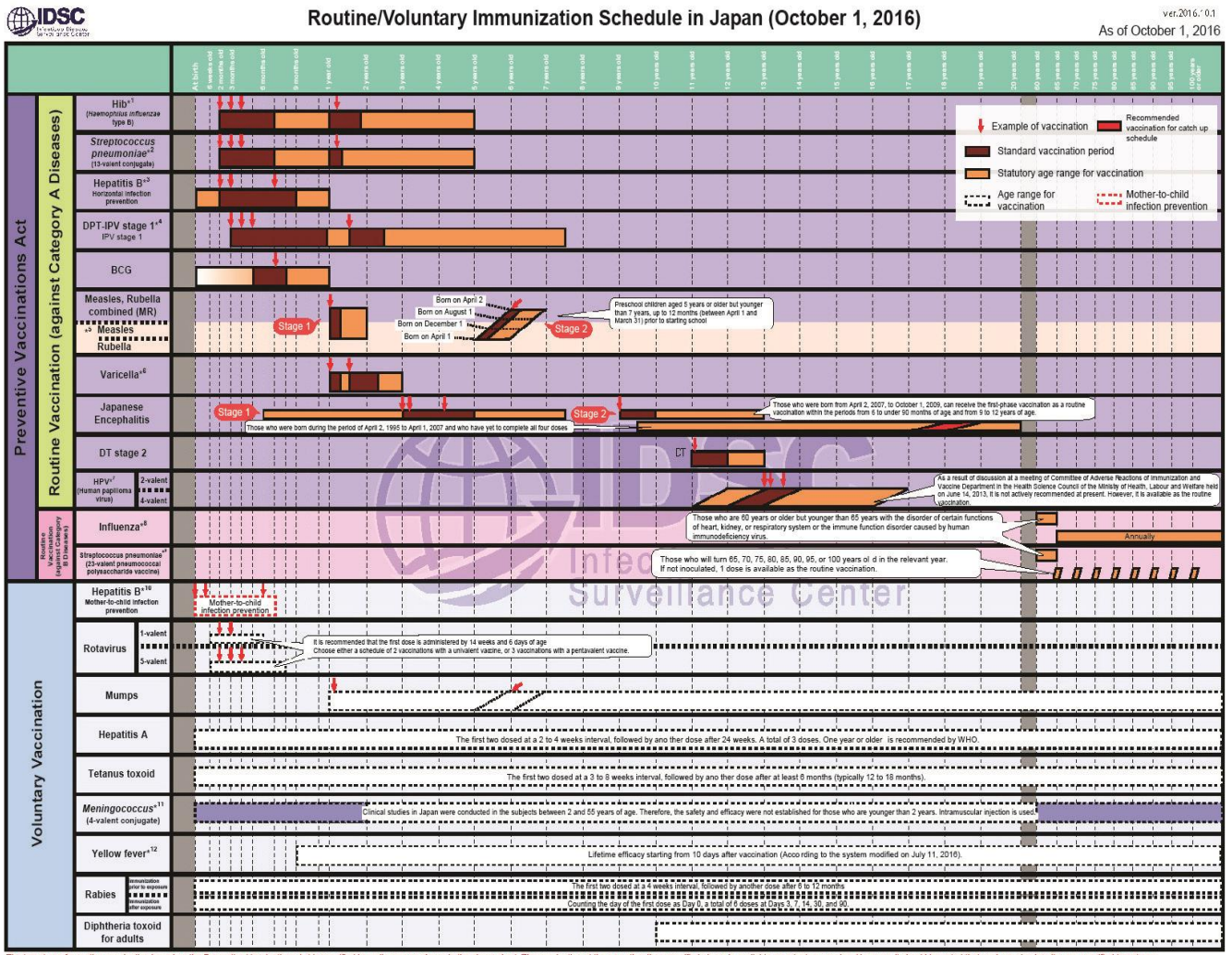
Vaccine schedule in Japan



The target age for routine vaccination based on the Preventive Vaccinations Act is specified by ordinance as shown in the above chart. The vaccination at the age other than specified above is available as voluntary vaccine. However, it should be noted that each vaccine has its own specified target age.
A down-pointing arrow (⇩) represents an example. The vaccination schedule must be determined in consultation with your primary care doctor or a local government officer in consideration of your child's physical condition, living environment and presence/absence of underlying disease.

Vaccines in Japan

Routine Vaccination for Children:

- BCG
- PCV(Pneumococcal Vaccine)
- DTP-IPV(Diphtheria, Tetanus and Pertussis and Injectable Polio)
- MR(Measles and Rubella)
- Japanese Encephalitis
- Chickenpox
- Hib
- HPV
- Hepatitis B

http://japanhealthinfo.com/child-health-and-childcare/vaccination/

Vaccines in Japan

- **Routine vaccinations** are all free of charge with coupons from city health centers.
- Shots are available at the time of group baby checkup or local pediatric clinics/hospitals.
- Local health center post-mail free coupons to your house.
- Take the coupons and Mother and Child Book to your vaccination appointments.

Vaccines in Japan

Voluntary Vaccination for Children:

- Seasonal Influenza, Mumps, Hepatitis A, Rotavirus, Meningococcus
- Voluntary vaccinations are not free and costs vary depending on the shot. You can have those shots at local pediatric clinics.
- For your information, Japanese vaccination schedule chart link from National Institute of Infectious Disease.

http://japanhealthinfo.com/child-health-and-childcare/vaccination/

BCG vaccine

- **BCG**, or bacille Calmette-Guerin, is a **vaccine** for tuberculosis (TB) disease. Many foreign-born persons have been **BCG-vaccinated**. **BCG** is used in many countries with a high prevalence of TB to prevent childhood tuberculous meningitis and miliary disease.Sep 12, 2016

CDC | TB | Fact Sheets - BCG Vaccine

- https://www.cdc.gov/tb/publications/factsheets/prevention/bcg.htm

Japanese Encephalitis Vaccine

- Japanese encephalitis (JE) is a serious infection caused by the Japanese encephalitis virus. It occurs mainly in rural parts of Asia. It is spread through the bite of an **infected** mosquito.

Japanese Encephalitis

Recommended for:

Travelers planning on spending over one month in an endemic area during the JE virus transmission season. This includes long-term travelers, recurrent travelers, or expatriates who will be based in urban areas but are likely to visit endemic rural or agricultural areas during a high-risk period of JE virus transmission.

Vaccine should also be considered for the following:

- Short-term (less than 1 month) travelers to endemic areas during the transmission season, if they plan to travel outside an urban area and their activities will increase the risk of JE virus exposure. Examples of higher-risk activities or itineraries include: 1) spending substantial time outdoors in rural or agricultural areas, especially during the evening or night; 2) participating in extensive outdoor activities (such as camping, hiking, trekking, biking, fishing, hunting, or farming); and 3) staying in accommodations without air conditioning, screens, or bed nets.
- Travelers to an area with an ongoing JE outbreak.
- Travelers to endemic areas who are uncertain of specific destinations, activities, or duration of travel.
- JE vaccine is not recommended for short-term travelers whose visits will be restricted to urban areas or times outside a well-defined JE virus transmission season.

HPV vaccine and Influenza Vaccine


SHOULD I
GET THE
HPV VACCINE
!??

What is HPV?

- HPV is **human papilloma virus.**
- HPV can cause
  - Wart: oral and genital
  - Cancer(papillomas): cervical, vaginal, and vulvar, penile and oral cancers.

How common is HPV infection?

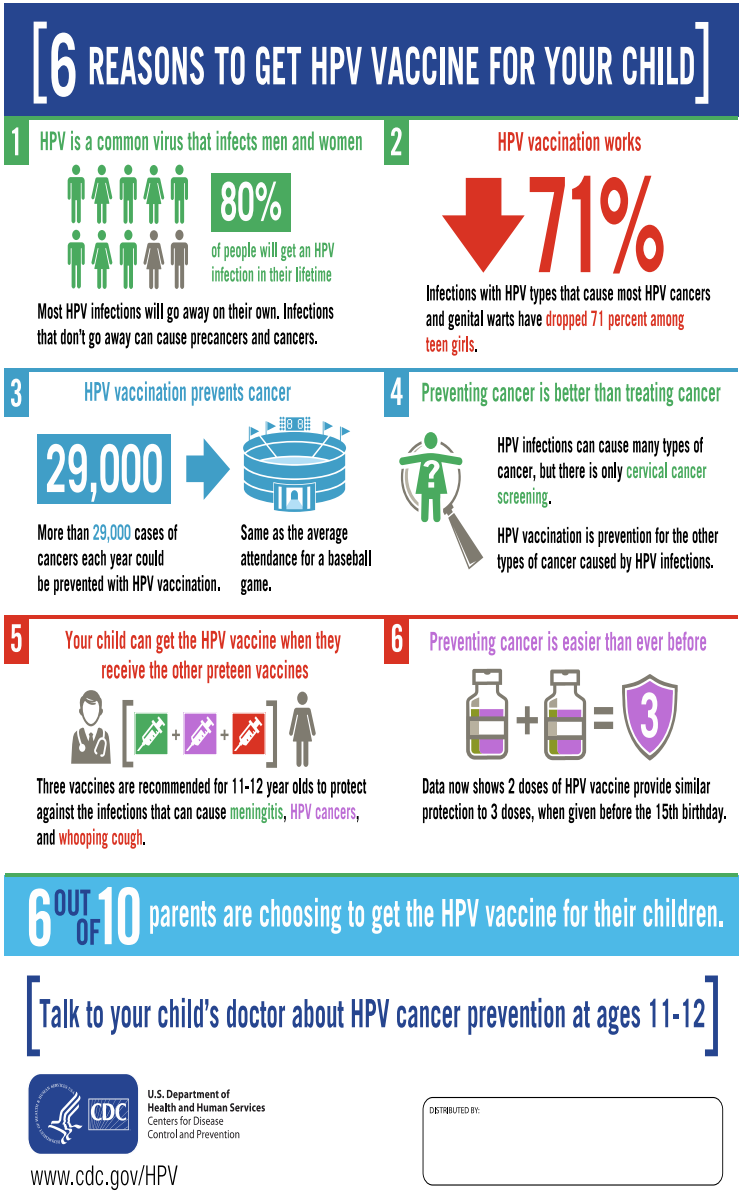
Almost everyone will get exposed to at least one type of HPV at some point in their lives.

Most people never know that they have been infected and may give HPV to a sex partner without knowing it.

About 79 million Americans are currently infected with some type of HPV. About 14 million people in the United States become newly infected each year.

https://www.cdc.gov/hpv/parents/questions-answers.html

Why is HPV vaccine important



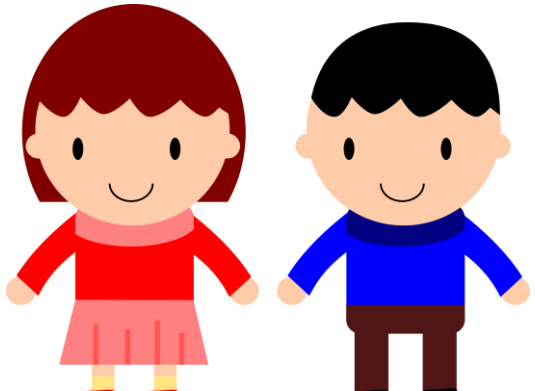
Who should get HPV vaccine?

1.Boys and Girls who are 11 or 12 years old:

Two shots of HPV vaccine six to twelve months apart.

2. If under 15 years old, can get 2 shots 6 months apart.

3. HPV vaccine is recommended for young women through age 26, and young men through age 21.



Why Target Preteens?

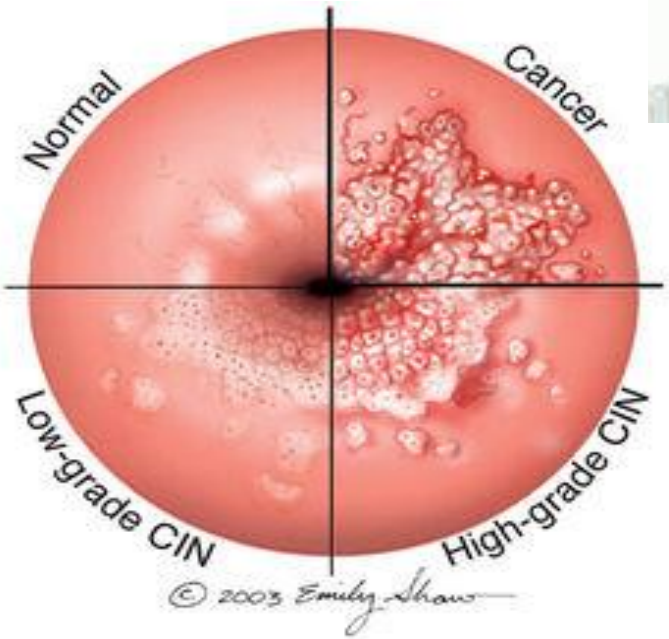
Why is HPV vaccine recommended at age 11 or 12 years?

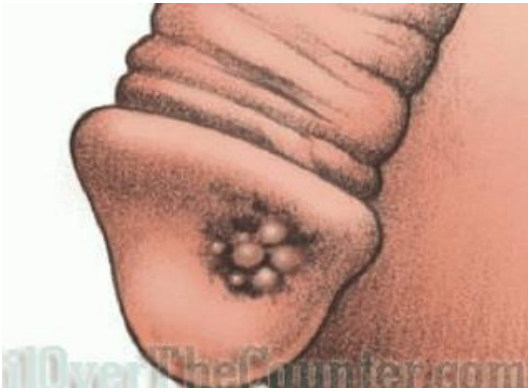
- A: For HPV vaccine to be most effective, the series should be given prior to exposure to HPV. There is no reason to wait to vaccinate until teens reach puberty or start having sex. Preteens should receive all recommended doses of the HPV vaccine series long before they begin any type of sexual activity.

https://www.cdc.gov/hpv/parents/questions-answers.html

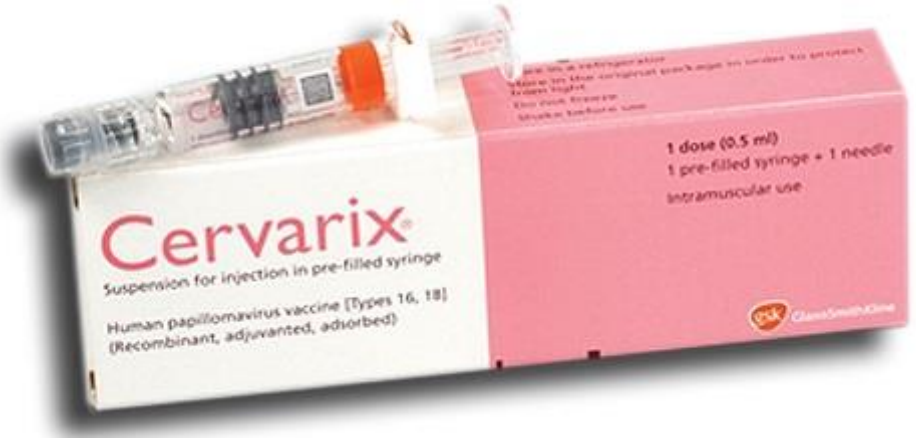
HPV Vaccine

- This is a vaccine that prevents CANCER and formation of genital warts.





3 types of HPV vaccine



HPV vaccine safety

- Numerous research studies have been conducted to make sure that HPV vaccines are safe.
- CDC and FDA have reviewed the safety information available for HPV vaccines and determined they are safe.

Safety of HPV vaccine

CDC uses three systems to monitor vaccine safety:

- The Vaccine Adverse Event Reporting System (VAERS) – an early warning system that helps CDC and FDA monitor problems following vaccination. Anyone can report suspected vaccine reactions and issues to VAERS.
- The Vaccine Safety Datalink (VSD) – a collaboration between CDC and several health care organizations that allows ongoing monitoring and proactive searches of vaccine-related data.
- The Clinical Immunization Safety Assessment (CISA) Project – a partnership between CDC and several medical centers that conduct clinical research on vaccine-associated health risks in certain groups of people.

Safety profile of HPV vaccines

- In 2014, CDC published a report analyzing health events reported to VAERS following Gardasil vaccination from June 2006 through March 2014. About 92% of the Gardasil reports were classified as non-serious.
- The most common adverse events reported were:
- Syncope (fainting)
- Dizziness
- Nausea
- Headache
- Fever
- Injection site reactions (pain, swelling, and redness)

- Human Papillomavirus Vaccination: Recommendations of the Advisory Committee on Immunization Practices (ACIP)
- *Recommendations and Reports*
- **August 29, 2014 / 63(RR05);1-30**

HPV vaccine: side effects

- Injection site swelling, pain
- Dizziness, fainting, nausea or headache

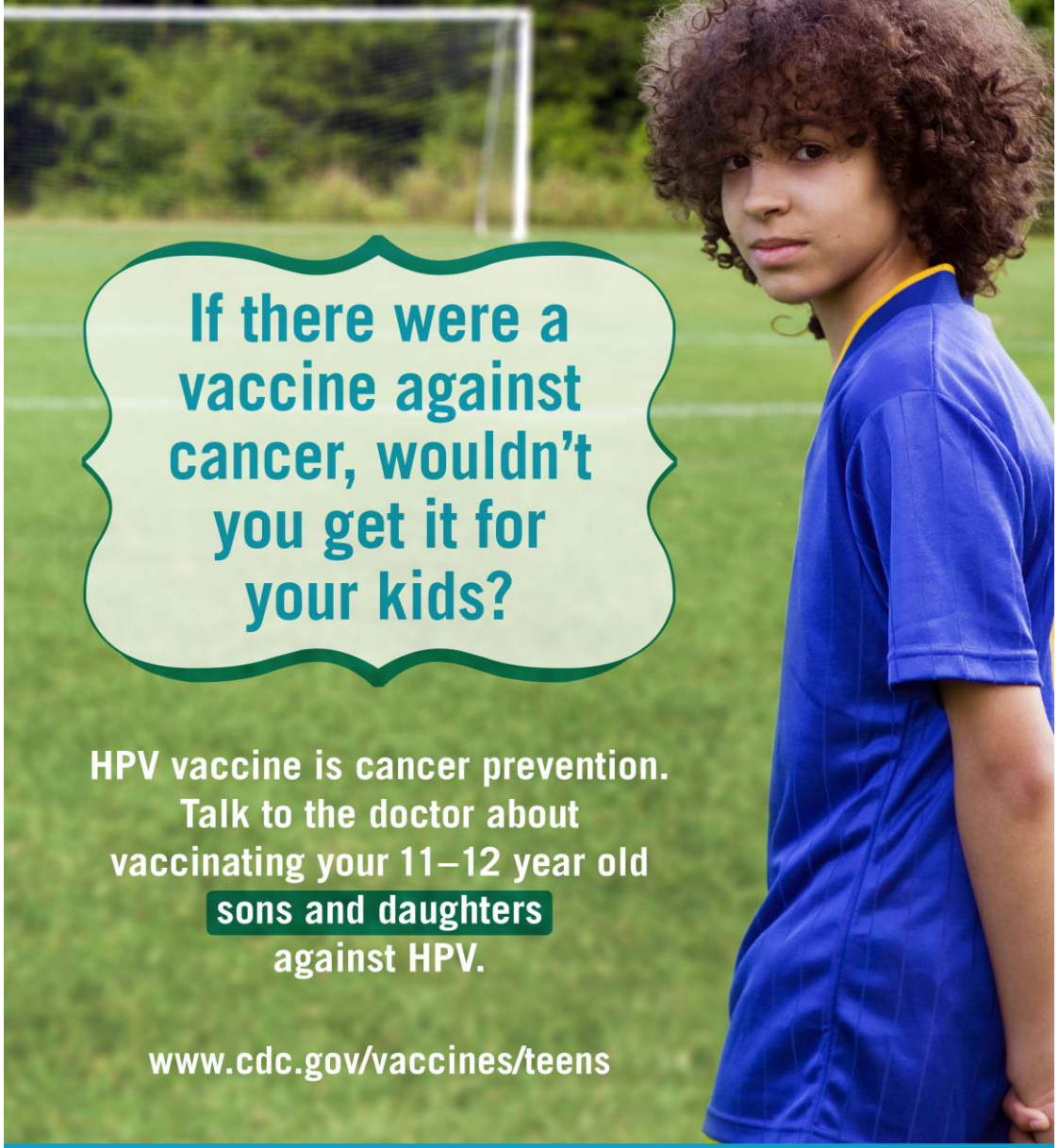
-fainting spells are common after a painful procedure like a shot, especially in teenagers.

HPV vaccines: they work!

- In the 4 years since the vaccine was recommended in 2006, HPV infection among girls decreased by 56%.
- Fewer teens are getting genital warts.
- HPV vaccines provide long lasting protection.
- Data state that the protection from the vaccines will continue beyond 10 years.

HPV vaccine: recommended for boys

- HPV vaccine (Gardasil) is recommended for boys.
- Can help boys from getting genital warts and cancer of the mouth/throat/penis and anus.
- Will prevent boys from passing to their partners in the future.



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YOU ARE THE KEY TO HPV CANCER PREVENTION

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HPV vaccine- Japan

- In Japan, the HPV vaccine *Cervarix* (GlaxoSmithKline) was approved in 2009; the vaccine *Gardasil* (Merck & Co) was approved in 2011.
- Controversy over human papillomavirus (HPV) vaccination in Japan has led to much confusion among healthcare professionals and parents, with the result that vaccination rates have plummeted, from around 70% to only 1%.

http://www.medscape.com/viewarticle/866405

HPV vaccine in Japan

- The Japanese government withdrew its recommendation for the HPV vaccine in 2013, after highly publicized cases of alleged adverse events in girls who had been vaccinated. He also says that the side effects are "a psychosomatic reaction" and that the whole controversy was started by an anti-HPV vaccination group.
- Dr Konno recalls, "In March 2013, just before the start of a national HPV vaccination program in Japan, there was a major report without any medical evidence that some girls had suffered from severe and chronic pain as a result of the HPV vaccination."

http://www.medscape.com/viewarticle/866405


笑顔と未来を私たちに！
Keep Hope Alive
HPV ワクチン薬害訴訟東京原告団・弁護

Anti HPV media campaigns

HPV-Japan

- That report, which appeared in the Japanese daily newspaper *Asahi Shimbun*, gave details of about 50 girls who suffered from complex regional pain syndrome and 100 girls who were absent from school after receiving the HPV vaccine.
- this report "was based on information that came from an anti-HPV vaccination group called Vaccine Victims.... These so-called victim girls were put at the forefront of the TV cameras and seen by a large audience."
- The story became sensationalized and was repeated on television news programs and then on Internet websites by victim groups

HPV-Japan

- A few months later, in June 2013, the Japanese Ministry of Health, Labor and Welfare (MHLW) withdrew its recommendation for the HPV vaccine because of these reports of serious side effects associated with vaccination, but the vaccines were not withdrawn from the market.
- The Minister of Health has said that girls can be vaccinated if parents understand the risks and benefits of the vaccine, but the vaccines could not be actively promoted
- In the meantime, Japan has put in place a scheme to deal with chronic symptoms after HPV vaccination.

HPV-Japan

- The health ministry has decided to withhold recommendation of the HPV vaccination because they noticed 176 adverse events. And the health ministry agrees that there probably isn't a causal relationship between the vaccine and the events.
- In other words, 0.0019% of cases, or about 1.9 events in 100,000 vaccinations, a number so small that it's pretty close to impossible to affix any statistical significance to it, and probably is significantly below the rate observed in the general population in controlled epidemiological studies.

HPV vaccine rates drop

"HPV Vaccination Controversy in Japan, Rates Plummet to 1%"

**Japanese girls and women are now at a much higher risk for developing cervical cancer in their future"*

HPV Vaccination Controversy in Japan, Rates Plummet to 1% - Medscape - Jul 20, 2016.

Influenza Vaccine

Why is influenza vaccine important?

- Helps to prevent the flu.

- Reduce the risk of flu-associated hospitalization, including among children and older adults.
- Important preventive tool for people with chronic health conditions.
- Flu vaccination helps protect women during and after pregnancy. Getting vaccinated against the flu can also protect a baby from flu after birth. (A mother can pass antibodies onto the developing baby during pregnancy.)
- There are studies that show that vaccination of pregnant women can reduce their baby's risk of flu illness by up to half. This protective benefit was observed for up to four months after birth.
- Can make your flu illness milder if you do get sick.
- Getting vaccinated also protects people around you, including those who are more vulnerable to serious flu illness, like babies and young children, older people, and people with certain chronic health conditions.

https://www.cdc.gov/flu/protect/keyfacts.htm

Types of Influenza Vaccine

Fluzone Intradermal Quadrivalent[¶]	Sanofi Pasteur	0.1 mL single-dose prefilled microinjection system	18 through 64 yrs	NR	No	ID**
Inactivated Influenza Vaccine, quadrivalent, cell culture-based (ccIIV4), standard dose[†]						
Flucelvax Quadrivalent	Seqirus	0.5 mL single-dose prefilled syringe	≥4 yrs	NR	No	IM
Inactivated Influenza Vaccine, trivalent (IIV3), standard dose[†]						
Afluria	Seqirus	0.5 mL single-dose prefilled syringe	≥9 yrs[††]	NR	No	IM
		5.0 mL multi-dose vial	≥9 yrs[††] (needle and syringe) 18 through 64 years (jet injector)	24.5	No	IM
Fluvirin	Seqirus	0.5 mL single-dose prefilled syringe	≥4 yrs	≤1	Yes[§§]	IM
		5.0 mL multi-dose vial	≥4 yrs	25	No	IM
Adjuvanted Inactivated Influenza Vaccine, trivalent (aIIV3), standard dose[†]						
Fluad	Seqirus	0.5 mL single-dose prefilled syringe	≥65 yrs	NR	Yes[§§]	IM
Inactivated Influenza Vaccine, trivalent (IIV3), High Dose[¶¶]						
Fluzone High-Dose	Sanofi Pasteur	0.5 mL single-dose prefilled syringe	≥65 yrs	NR	No	IM
Recombinant Influenza Vaccine, trivalent (RIV3)* **						
Flublok	Protein Sciences	0.5 mL single-dose vial	≥18 yrs	NR	No	IM
Live Attenuated Influenza Vaccine, quadrivalent (LAIV4) †††						
FluMist Quadrivalent	MedImmune	0.2 mL single-dose prefilled intranasal sprayer	2 through 49 yrs	NR	No	NAS

Abbreviations: ACIP = Advisory Committee on Immunization Practices; ID = intradermal; IM = intramuscular; NAS = intranasal; NR = not relevant (does not contain thimerosal).

* Immunization providers should check Food and Drug Administration–approved prescribing information for 2016–17 influenza vaccines for the most complete and updated information, including (but not limited to) indications, contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm. Availability of specific products and presentations might change and differ from what is described in this table.

† Standard dose intramuscular IIVs contain 15 μg of each vaccine HA antigen (45 μg total for trivalents and 60 μg total for quadrivalents) per 0.5mL dose.

§ For adults and older children, the recommended site for intramuscular influenza vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh. Specific guidance regarding site and needle length for intramuscular administration may be found in the ACIP General Recommendations on Immunization, available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm.

¶ Quadrivalent inactivated influenza vaccine, intradermal: a 0.1-mL dose contains 9 μg of each vaccine HA antigen (36μg total).

** The preferred injection site is over the deltoid muscle. Fluzone Intradermal Quadrivalent is administered using the delivery system included with the vaccine.

†† Age indication per package insert is ≥5 years; however, ACIP recommends that Afluria not be used in children aged 6 months through 8 years because of increased risk for febrile reactions noted in this age group with Seqirus' 2010 Southern Hemisphere IIV3. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available for a child aged 5 through 8 years who has a medical condition that increases the child's risk for influenza complications, Afluria can be used;

Best timing to get the flu shot

- CDC recommends getting the vaccine by October.
- It takes 2 weeks for the immunity to build to protect against the flu.
- The titers will last for 6 months so its not too early to get the flu vaccine in the fall.

Egg allergy?

- the CDC recommends:
- Only hives after exposure to egg can get any licensed flu vaccine that is otherwise appropriate for their age and health.
- People who have symptoms other than hives after exposure to eggs, such as respiratory distress, or who have required epinephrine due to an allergic reaction, can also can get any licensed flu vaccine that is otherwise appropriate for their age and health, but the vaccine should be given in a supervised medical setting.