

Harlem Pharmacy Newsletter



Difference between TDAP, DTAP, TD Vaccine

There are a number of combination vaccines such as **DTaP**, **Tdap** (Tetanus, Diphtheria, Pertussis) and **Td** (Tetanus, Diphtheria) used to prevent against three potentially deadly infectious diseases: diphtheria, pertussis and tetanus.

Diphtheria is a respiratory disease that can cause breathing problems, paralysis, heart failure, and death. It's highly contagious and is spread by coughing and sneezing.

Tetanus, or lockjaw, is caused by a bacterium often found in the soil. Tetanus enters the body through cuts, scratches, or wounds and can release a toxin that attacks the nervous system, causing muscle spasms and death if left untreated.

Pertussis (whooping cough) is also a highly contagious infection that causes severe coughing spasms in infants that makes it difficult to eat, drink, or even breathe. It can lead to pneumonia, seizures, brain damage, and death.

Tdap and Td vaccines

Tdap and Td vaccines are licensed for use in older children and adults. Tdap is given once per lifetime, whereas Td is given every 10 years, and more often if needed.

These vaccines can be used in three ways: 1) as catch-up for people who did not get all their doses of DTaP or DTP when they were children, 2) as a booster dose every 10 years, and 3) for protection against tetanus infection after a wound.

CDC Recommendations: Use Tdap instead of Td

While pertussis was thought to have been eradicated from the United States, in recent years this highly contagious respiratory tract disease has made a comeback and has resulted in permanent disabilities and fatalities, particularly in infants. Therefore, the Center of Disease Control (CDC) recommends that the Tdap should replace a single dose of Td for adults 19-64 years of age who have not received a dose of T-dap previously regardless of last tetanus or tetanus-diphtheria vaccine.

Tdap

Boostrix® (GlaxoSmithKline)
Ages 10-18 years



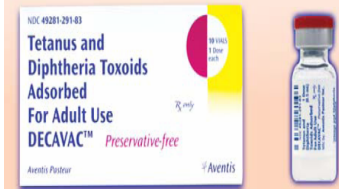
DTaP

Infanrix® (GlaxoSmithKline)
Ages 6 weeks up to 7 years



Td

Td (sanofi pasteur, formerly Aventis Pasteur)
Ages 7 years and older



Dtap

Dtap is the infant combination vaccine used to protect from Tetanus, Diphtheria and Pertussis. It is given in a series of 5 doses; children should get one dose at each of the following ages: 2, 4, 6, and 15-18 months and 4-6 years.

Tdap or Dtap Mix Ups- Check you vials

The Institute for Safe Medication Practices (ISMP) Medication Errors Reporting contains hundreds of cases of accidental mix-ups between adult and pediatric products used to immunize patients.

Due to similar sounding names and uses, it is easy to confuse Tdap and Dtap. An easy way to remember can be to use the brand name. For Tdap, BOOSTRIX sounds like booster, a booster shot. It can be remembered that BOOSTRIX is for adults because infants and children should not take the booster shot. For Dtap, INFANRIX sounds like infant so it should be used in infants.

ISMP recommendations to prevent vaccine mix-ups:

- Separate the pediatric and adult formulations in storage areas
- Encourage prescribers to order the vaccines by brand name, not vaccine abbreviation.
- **There are two licensed versions of Tdap:** ADACEL and BOOSTRIX.
- **There are currently 3 licensed Dtap vaccines:** DAPTACEL, Tripedia and INFANRIX.
- Include parents/ caregivers by making them aware of the names of or hand the patient a printed sheet that also details the purpose of each vaccine.
- Employing a "time out" procedure before dispensing and administering these vaccines.

FDA: Limits Use of 80^{mg} Simvastatin

Simvastatin (ZOCOR®) is a HMG-CoA reductase inhibitor used to lower cholesterol in the blood. It has been proven to lower ones risk of heart attack and stroke.

Recently, the Food and Drug Administration (FDA) is recommending limited use of Simvastatin 80mg which according to studies, increases risks of myopathy (muscle disease).

If a patient has taken Simvastatin 40mg and there is no effect on their cholesterol, they should take another cholesterol lowering agent.



Pic: Simvastatin 80mg tablet

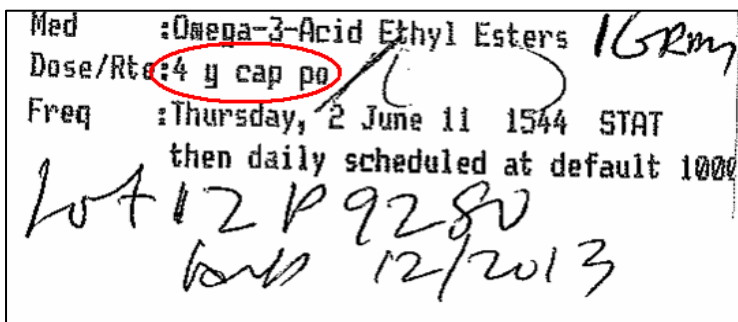
It is recommended that this dose (80mg) be used only if a patient has taken Simvastatin for over 12 months and experiences no adverse reactions. The same precaution applies to SIMCOR®, VYTORIN® and combination products containing Simvastatin, available in 80mg as well. At Harlem Hospital Center, Atorvastatin 80mg is now stocked as Non-Formulary medication in the Pharmacy This means that orders for the 80mg tablet will have to be accompanied with a completed Non-Formulary request form (e.g., with justification for use) in order to dispense the patient's medication.

LOVAZA Label Confusion: How Many Capsules Should the Patient Receive?

LOVAZA® (Omega-3-Acid Ethyl Esters) is a combination of ethyl esters of omega 3 fatty acids designed to lower the amount of triglycerides in the blood. Lovaza is available from the Harlem Hospital Pharmacy as a 1 gram (g) capsule.

Recently, it has been noted that the medication label for Lovaza creates a potential for dosing error. The drug label below gives the dose and route of Lovaza “4g capsule po (by mouth)”, however does not indicate that each LOVAZA capsule is only 1 gram. Therefore, for patient to receive a complete dose they must **take all four capsules**. The capsules have no marking for “1 gram”, therefore it can mistakenly be considered a “4g” capsule and patient may take or be given 1 capsule only, which would be an under-dose of medication.

Currently, the Department of Pharmacy and the Information Technology (IT) Department are working together to improve the label, so that the patient, nurse and or caregiver are aware of the appropriate amount of drug to consume. In the meanwhile, we are instructing Pharmacists to indicate on the medication label that each capsule is 1 gram.



MEDICATION MANAGEMENT UPDATE

The Department of Pharmacy will stock EVICEL® for the **operating room (OR) use only**. EVICEL is composed of BAC2 (Human clottable protein containing Fibrinogen & fibronectin) and Human Thrombin. This is supplied as a two separate package kit. EVICEL® is used as surgical sealant in the OR procedures to improve homeostasis, when other surgical techniques are insufficient.



Shelf life of EVICEL®

- Frozen vials – 2 years
- Un-opened refrigerated vials – up to 30 days
- Un-opened vials stocked at room temperature -25 hours

Do Not Re-freeze EVICEL Once it has been Thawed (Changed from frozen form to liquid form)

Do Not Refrigerate EVICEL Once at room temperature

EVICEL will be stocked in the Pharmacy Stockroom Freezer

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*Special Contributions by Brenda Cheung, Pharm.D Candidate,
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If you wish to contribute an article or commentary for Pharmacy Newsletter, contact H.Farooqi, Pharm.D. at hinnah.farooqi@nychhc.org no later than 15th of the month for the next issue.

Look -Alike Sound-Alike (LASA) Medication



TO PREVENT LOOK ALIKE, SOUND ALIKE MEDICATION ERRORS:

Phenytoin (Dilantin) is an anti-epileptic drug, also called an anticonvulsant. It works by slowing down impulses in the brain that cause seizures. Phenytoin is used to control certain types of seizures. Accidental overdose of Phenytoin can cause symptoms including twitching eye movements, slurred speech, loss of balance, tremor, muscle stiffness or weakness, nausea, vomiting, fainting, and slow or shallow breathing and can be fatal.

Metoprolol is in a group of drugs called beta-blockers. Beta-blockers affect the heart and circulation (blood flow through arteries and veins). Metoprolol is used to treat angina (chest pain) and hypertension (high blood pressure). It is also used to treat or prevent heart attack. Receiving it accidentally may cause a serious drop in blood pressure, shortness of breath, dizziness, weakness, or fainting.



TO PREVENT LOOK ALIKE, SOUND ALIKE MEDICATION ERRORS:

Separate locations of look alike medications.

Use look alike sound alike (LASA) auxiliary stickers on bins containing the medication

*Train staff to recognize LASA errors
For handwritten/oral prescriptions, do not make assumptions; call the prescriber to confirm medication.*

Check patient's profile & review medication list to prevent errors