Excerpt from "The Immunization Encounter: Critical Issues" satellite broadcast, originally broadcast June 27, 2002.

Written by Donna Weaver, RN, MN, Judy Schmidt, RN, EdD, and William Atkinson, MD, MPH, with contributions by Jean Popiak and Robert Pless, MD, National Immunization Program, Centers for Disease Control and Prevention

Patient Screening Segment

ATKINSON:

Screening is an important part of the immunization encounter. This activity should include eligibility screening as well as medical screening. If your office or clinic is enrolled in the Vaccines for Children Program, or VFC, then it's important to screen children and adolescents for VFC eligibility.

Children, birth through 18 years of age, are eligible for VFC vaccines if they are: eligible for Medicaid; or have no health insurance; or are Native American or Alaska native. Children who ave health insurance, but immunization is not a covered benefit are eligible if they go to a Federally Qualified Health Center. Depending on your state immunization program, other children may also qualify.

There's a VFC eligibility screening form that should be completed by the parent and kept as part of the child's permanent medical record. This is what it looks like. This eligibility form does not need to be completed at each visit, but should be updated if there are any changes in the child's eligibility. If you have questions about a patient's eligibility, then we recommend that you contact your state immunization program for clarification. There is also general information about the VFC program for both parents and providers available on the NIP website.

Another important aspect of patient screening is screening for contraindications and precautions to vaccination. Donna, would you tell us more about medical screening?

WEAVER:

Bill, not only does thorough screening provide an opportunity to prevent possible adverse reactions, but it also provides an opportunity to build rapport with the patient and parent, address their concerns, and answer any questions.

The first information you will want to obtain is the patient's prior immunization history. This information should be located on

one page in the patient's medical record. If not, encourage parents or patients to bring their personal record so that you can include this information in each person's chart. A verbal history of previous immunizations is not sufficient evidence. You should accept as valid only immunizations that are documented in writing and dated.

If a written record isn't immediately available, we recommend that you consider giving the vaccines that are indicated at that visit based on the person's age. This avoids a missed opportunity while the patient or parent continues to search for the immunization records.

Once you have the immunization history, it's time to screen for medical contra- indications or precautions. When the setting allows, we recommend that you provide patients or parents with the screening questionnaire, and the Vaccine Information Statement, or VIS, while they are waiting to be seen. The VIS includes information that will help the patient or parent respond to questions on the screening form. We'll talk more about VISs in a few minutes.

The key to reducing the risk of a serious adverse reaction is SCREENING. Every person who administers vaccines should screen EVERY patient for contraindications and precautions before giving the shot. Effective screening isn't difficult or complicated. It can be accomplished with just a few questions.

Many states have developed screening questionnaires for use in their clinics. You can develop your own sheet, or you can adapt one that has already been developed. The Immunization Action Coalition has developed a good one page screening sheet for children and another for adults.

It's important for you to understand the reasons for the questions on the screening form. We asked Doctor Deborah Wexler, Executive Director of the Immunization Action Coalition, to review the screening form with us, and explain the rationale for the questions.

WEXLER:

The key to reducing the risk of a serious adverse reaction is to identify contra indications and precautions to vaccination BEFORE giving the shot. Contraindications to vaccination can change from one dose of a vaccine to the next dose. So everyone should be screened prior to EVERY dose, even if they were screened during a prior visit. Screening for contraindications and precautions isn't difficult or complicated. This is the screening form we developed for children and teens. We suggest you use a standardized screening form like this one, so you ask the same questions every time. Let's go through the 9 screening questions and talk about why you are asking them.

ANNOUNCER:

Is the child sick today?

WEXLER:

The first question addresses whether the child has a moderate or severe acute illness, which is a precaution to vaccination. If the child has been examined, this question may not be necessary, or already may have been answered. There's no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events. But with moderate or severe acute illness, vaccines should be delayed until the illness has improved. This avoids confusing a symptom of the illness - such as fever - with a vaccine adverse event, or vice versa. Mild illnesses, such as otitis media or an upper respiratory infection, are NOT contraindications to vaccination. Nor is taking antibiotics a reason to withhold a vaccine in a person who is otherwise not very sick.

ANNOUNCER:

Does the child have allergies to medications, food, or any vaccine?

WEXLER:

A severe allergic reaction to a vaccine or vaccine component is a contraindication to subsequent doses of that vaccine, or to a vaccine containing that component. An anaphylactic reaction to eggs is a contraindication to influenza vaccine, and an anaphylactic reaction to yeast is a contraindication to hepatitis B vaccine. We suggest you inquire about allergies in a generic way, rather than read the parent a list of every component of every vaccine. Most parents won't recognize most of these components names anyway. But they WILL know if the child has ever had an allergic reaction severe enough to seek medical attention, which is what you're getting at. If you do identify a person who has had a severe allergic reaction to a product that may be in a vaccine, the next challenge is to figure out which vaccines might contain that product. To make this task easier, you need a listing of vaccine contents. A comprehensive table of vaccine components is available free from the National Immunization Program website. Remember that a local reaction, such as redness or swelling at the site of injection, is NOT a

contraindication to subsequent doses of that vaccine.

ANNOUNCER:

Has the child had a serious reaction to a vaccine in the past?

WEXLER:

This open ended question is intended to identify allergic reactions following previous vaccine doses. It can also help identify conditions following pertussis vaccine. Under normal circumstances, vaccines are deferred when precautions are present. But situations may arise when the benefit of the vaccine outweighs the risk. For instance, a child who had a temperature of 105 following a prior dose of DTP or DTAP might still be vaccinated if there were an outbreak of pertussis in the community.

ANNOUNCER: Has the child had a seizure or a brain problem?

WEXLER:

DTAP is contraindicated in children who have a history of encephalopathy within 7 days following whole cell DTP or DTAP vaccine. An undiagnosed neurologic problem is a precaution to the use of DTAP. For children with a STABLE neurologic disorder, including seizures, unrelated to vaccination, or for children with a family history of seizure, you should vaccinate as usual. In these children, you should consider the use of acetaminophen or ibuprofen to minimize the fever.

ANNOUNCER:

Does the child have cancer, leukemia, AIDS, or any other immune system problem?

WEXLER:

Live virus vaccines, such as MMR and varicella, are usually contraindicated in persons with severe immunodeficiency. However, MMR and varicella are recommended for persons infected with HIV who do not have evidence of severe immunosuppression. Varicella vaccine is contraindicated in persons with cellular immunodeficiency, but may be administered to persons with humoral immunodeficiency. All inactivated vaccines may be given to immunosuppressed persons, although the response to the vaccine may be suboptimal. Also remember that having an immunosuppressed person in the household is NOT a contraindication to vaccination of a healthy child.

ANNOUNCER:

Has the child taken cortisone, prednisone, other steroids, or anticancer drugs, or had x-ray treatments in the past 3 months?

WEXLER:

High daily doses of corticosteroids for more than 14 days can cause significant immunosuppression and increase the chance of an adverse reactions following a live vaccine. Live vaccines should not be administered for at least one month following prolonged high-dose steroid therapy, or for at least 3 months following cancer chemotherapy.

Persons receiving aerosolized steroids, such as inhalers for asthma, topical preparations, or low or moderate daily or alternate- day doses of steroids for fewer than 14 days can receive live vaccines during treatment. For those receiving high dose daily or alternate day courses for fewer than 14 days, the American Academy of Pediatrics recommends that live vaccines be deferred until steroid therapy is discontinued. Similar to other immunosuppressive conditions or therapies, inactivated vaccines may be administered to a person receiving high dose steroid therapy, although the response to the vaccine could be reduced.

ANNOUNCER:

Has the child received a transfusion of blood or blood products, or been given a medicine called immune or gamma globulin in the past year?

WEXLER:

Passively acquired antibody may reduce the effectiveness of MMR and varicella vaccines. MMR and varicella vaccines generally should not be given to people who have recently received antibody containing blood products. Depending on what product was administered, and the dose, it may be necessary to defer MMR and varicella vaccines for up to 11 months after the blood product. The 2002 General Recommendations on Immunization includes a table that lists the most commonly used antibody containing preparations in the United States. It also lists the recommended waiting period between the blood product and administration of MMR or varicella vaccine. Every office should have a copy of this table, which can be obtained from the National Immunization Program. This question might also uncover unreported illnesses that might not have been revealed in earlier questions, since blood products are usually given for specific indications.

ANNOUNCER:

Is the child or teen pregnant, or is there a chance she could become pregnant during the next month?

WEXLER:

This question should be asked of all women of child bearing age, including young adolescents. MMR and varicella vaccines are contraindicated shortly before and during pregnancy due to the theoretical risk of virus transmission to the fetus. Sexually active women who receive MMR or varicella vaccine should be instructed to practice careful contraception for one month following receipt of either vaccine. Inactivated vaccines generally may be given to pregnant women when indicated. On the other hand, it's not necessary to inquire about pregnancy in household contacts. Having a pregnant woman living in the household is NOT a contraindication to administration of ANY vaccine to other household members.

ANNOUNCER:

Has the child received any vaccinations in the past 4 weeks?

WEXLER:

The intent of this last question is to identify persons who recently received a live virus vaccine. The Advisory Committee on Immunization Practices recommends that two live virus vaccines not given on the same day be separated by at least 28 days. If the vaccine given recently was an INACTIVATED vaccine, such as DTAP or hepatitis B vaccine, it's not necessary to defer ANY vaccine. In addition to the child and teen screening form, we have also developed a screening form for adults. It contains the same questions that are on the child and teen form, except for the question about a history of seizures. The seizure question is included on the child and teen form to identify potential precautions for pertussis vaccine. Since pertussis vaccine is not given to people older than 7 years of age, it isn't needed on the adult form.

Both these screening forms, as well as other vaccine related material for providers and patients are available free from the Immunization Action Coalition website. But whether you use our form, or some other form, the important thing is that you to ask these questions before administering vaccines to people of any age. Your patients are depending on you to make vaccines as safe as they can be. Screening every patient is one way to do this.

ATKINSON:

Thanks, Donna. There are several excellent patient education resources available to you, including websites, videos, books, and information sheets for your office. We also have a video devoted solely to vaccine safety and risk communication that you may want to consider for staff orientation and training. More information on all these resources is included on the broadcast resources web page.

####