TO: Local Health Department Immunization Staff
FROM: Beth Rowe-West, R.N., B.S.N., Immunization Branch Head
SUBJECT: Immunization Assessment Process Using the North Carolina Immunization Registry (NCIR)
DATE: May 25, 2007

The purpose of this memo is to outline the 2007 annual immunization assessment process and to provide information necessary for tracking this year’s cohort. This year’s assessment in the Local Health Departments (LHDs) will examine the immunization records of children who are active in your LHD as well as those who reside in your county and were born between 11/1/2004 and 10/31/2005. The assessment will evaluate the percentage of children who are up-to-date (UTD) with the complete 4-3-1-3-3-1 series (DTPaP, 3IPV, 1MMR, 3Hib, 3HepB, and 1VAR).

On November 2, 2007, all data that has been entered into the NCIR will be used to determine the number of children who have received the required vaccines. In order for the results of the assessment to provide an accurate measure of all children’s protection against vaccine-preventable diseases, it is extremely important that each child has a complete immunization history documented in the NCIR.

As was described in your 2007 LHD agreement addendum, you will be provided with an overall county assessment rate as well as an organization (LHD) assessment rate. All children with dates of birth between 11/1/2004 and 10/31/2005 who have your county recorded as their county of residence will be included in your overall county assessment rate. To determine your organization rate, all children with dates of birth between 11/1/2004 and 10/31/2005 who have an “active” status recorded within your organization will be assessed.

Children may be made “inactive” for your LHD using the client status field under the Client Information tab if they fall into one of the following three categories: Moved or Going Elsewhere, Unable to Locate, or Deceased.

Please see the included document entitled “Exclusion (Inactive Clients) Criteria Requirements using the NCIR” for information about which children to exclude (by making them “inactive”). Also when excluding a child please consider the following:

- Be sure that the exclusion criteria requirements explanation is the standard used by all staff in your agency, as staff from different programs (including WIC, CSC, etc.) may use this field.
- Please note that if a client’s immunization history is updated by your staff after the client has been coded as inactive, the client’s status will automatically become active again for your LHD.
The Immunization Branch will utilize the Centers for Disease Control and Prevention's (CDC) Comprehensive Clinic Assessment Software Application (CoCASA) to calculate each LHD and each county annual age-appropriate immunization rate. CoCASA software also has several valuable reports which are helpful for identifying children who are not up-to-date. You can obtain CoCASA software from the CDC’s website which is http://www.cdc.gov/nip/cocasa. A data extract obtained from the NCIR can be used within CoCASA to view the immunization histories of children who are included in this year’s annual assessment cohort.

The Vaccine Administered Log (VAL) is another resource that can still be used to assist LHDs with their tracking efforts. The information recorded on these forms should only be used to update existing client records within the NCIR. You should not be creating “new” clients using the information from the VALs. If you cannot identify the child using the name and date of birth on the VAL you should contact the provider for additional information. When using VALs to update the NCIR, it is very important to obtain the child’s complete immunization history. Entering only 2nd, 3rd, or 4th doses in a series of shots does not create a complete record, and therefore will not increase your assessment rates. Until all providers in your county have access to the NCIR, we will continue to send you copies of VALs. By helping private providers learn to use the NCIR to track their active clients who reside in your county, your overall county rate will steadily increase.

Accompanying this memo is information about the assessment process, the requirements for each of the exclusion (inactive) categories, information about age specific immunization assessment options using the NCIR, and an explanation of some helpful CoCASA reports that can be used to monitor and improve your assessment rates.

If you have any questions, please contact your Regional Immunization Nurse. As always, the Immunization Branch appreciates your commitment to assuring the health of North Carolina’s children.

Enclosures (3)

CC: Immunization Central Office Staff  Dennis Harrington
    Regional Immunization Consultants  Joy Reed
    SMT
Local Health Department
Information for the 2007 Annual Age-Appropriate Immunization Compliance Rate Assessment

The 2007 Age-Appropriate Immunization Compliance Rate Assessment for LHDs will be calculated using data obtained from the North Carolina Immunization Registry (NCIR). In order to enhance the accuracy of the assessment, we are continuing to provide the opportunity to identify children who should be excluded from the assessment as well as those who require additional tracking and follow-up.

The following information is intended to help in completing this task. Please make sure that all appropriate staff has an opportunity to review this information.

Assessment Date:
The final review date for each county’s immunization assessment will be November 2, 2007. On that date, the Immunization Branch will obtain data from the NCIR which will be used for calculating the number of children up-to-date for the following vaccines: 4 DTaP; 3 Polio; 1 MMR; 3 Hib; 3 HepB; and 1 Varicella. Any clients and any immunizations added prior to this time will be included in the assessment. Clients and immunizations added after this time will not be included in the assessment.

Children to be assessed:
Any child that has client information in the NCIR and whose date of birth is between 11/1/2004 and 10/31/2005 will be included in the 2007 Annual Immunization Compliance Rate Assessment. Local Health Departments now have the capability to generate their own client specific reports to use in tracking this year’s cohort.

The Immunization Branch suggests using the new CoCASA software which can be downloaded from the CDC’s website. Please see the attached document titled “Using the new NCIR Request CASA Extract”.

Each LHD will be evaluated on the immunization status of all children in their respective organization and county (as documented in the NCIR). Therefore, it is important to ensure that each child has a complete immunization history in the NCIR. This includes immunizations administered by other providers. Documentation of historical immunization data will result in a higher immunization rate for your organization, as well as for your county.

Reports:
After the assessment process has been completed, your Regional Immunization Nurse will provide a report that will indicate the number of two year old children in the NCIR associated with your county, as well as your organization and the percentage of those children who are up-to-date. The Regional Immunization Nurse will provide this information no later than February 28, 2008.
Exclusion (Inactive Clients) Criteria Requirements

using the NCIR

For the 2007 Annual Immunization Compliance Rate Assessment, children may be excluded from your local health department (LHD) assessment cohort by having their client status set to ‘inactive’ or ‘permanently inactive-deceased’.

Using the client status field on the NCIR “Client Information” screen, you may set the client’s status to “inactive” for your organization if he/she fits into one of the following categories:

**Deceased**: (set NCIR status to “permanently inactive-deceased”) any child the LHD has confirmed as deceased. This must be documented in the patient’s medical record.

**Moved or Going Elsewhere**: (set NCIR status to “inactive”) any child the LHD has confirmed as receiving all immunization services elsewhere. This must be documented in the patient’s medical record. The documentation must include the date of documentation and the new service provider (as specific as possible).

**Unable to locate**: (set NCIR status to “inactive”) the expectation is that LHDs will make reasonable efforts to locate a child who may be in need of immunizations. However, tracking resources should be allocated in an efficient manner. Therefore a LHD may identify a child as “unable to locate” if all three of the following conditions are met.

1. The child has not received a service from the LHD in the last 6 months.
   AND
2. All available telephone numbers, if any (primary and emergency) are no longer valid for the patient (either the phone is disconnected, or the family no longer resides at that number).
   AND
3. A postcard or letter has been returned and no other address is known; or a certified letter is returned; or a home visit validates that this person does not live at the assumed address; or there is no address entered for the child, in which case the LHD has no adequate means of contacting the child.

Clients whose status is “inactive” on the date of the assessment will not be included in calculating the LHD assessment rate.

All clients with the corresponding county of residence (regardless of their client status within your organization) will be included in calculating the county assessment rate.
Age specific Immunization Assessment Options
Using the new NCIR

Request CASA Extract

The North Carolina Immunization Branch uses the Request CASA Extract function in the NCIR to assess and measure immunization rates. Assessment of immunization rates is required by the Federal Government which provides funding for NC’s Universal Childhood Vaccine Distribution Program (UCVDP). Immunization rates can be further classified as being either immunization coverage rates or immunization compliance rates.

- An Immunization "Coverage" rate refers to the percentage of a specific defined population that has protection (either by vaccination or natural immunity) against vaccine preventable diseases.
- An Immunization "Compliance" rate refers to the percentage of a defined population that has documented protection against vaccine preventable diseases.

If all necessary information is documented for the specified population, then the immunization coverage rate and the immunization compliance rate are equivalent. If all information is not documented then it is impossible to obtain a true immunization coverage rate, and therefore impossible to determine who is at risk for becoming ill with a vaccine preventable disease.

For help understanding immunization rates, please contact your Regional Immunization Nurse, or Assessment Coordinator, Beth Quinn at 919-707-5580.

NCIR Authorized personnel within each organization have the ability to generate certain immunization rates.

Local Health Department (LHD) personnel can generate rates:
1). for clients who are “active” within their specific organization,
2). for clients who reside within their specific county (as indicated by county of residence),
3). or for a combination of their organization’s active clients and clients who reside within the county.

Private Provider personnel can only generate rates:
1). for their specific organization.

In order to produce a report to see the immunization rate for a specified sample of children, we recommend using the new CoCASA software which can be downloaded from the CDC’s website, http://www.edc.gov/nip/cocasa.

Please also see the document, Using the new NCIR Request CASA Extract for more information.
The Request Reminder Report

NCIR Authorized personnel within each organization also have the ability to generate a reminder/recall request. One of the most useful features of this report is the ability to generate letters or postcards for clients who are or will be in need of immunizations.

Please NOTE: any child who does not have a "responsible person" documented in the client information screen will be considered "omitted" from reminder/recall. If you generate the report and see "omitted clients" as a link, those clients need additional responsible person address information in order for a reminder letter to be created. Please update this information.

In addition to generating a list of clients and mailing labels, the “Reminder Request Process Summary” that is created can also be used to determine how many clients are active within a specific organization and how many of those clients are in need of immunizations. LHD’s can also use this report to determine how many clients reside in their specific county and how many of those children are in need of immunizations.

To generate a request reminder for this year’s cohort:

1. Select the vaccine groups: DTaP; HepB; Hib; Polio; MMR; and Varicella.
2. Enter the date criteria using the birth date range from 11/01/2004 to 10/31/2005;

Note: To also include any clients who will be coming due for immunizations before the assessment date, enter 11/02/2007 in the Target date range To: option.

(See section 10 of the NCIR user manual, starting on page 10.4)

The NCIR Assessment Summary Report

You can now generate a report called the NCIR Assessment Summary Report, which is located under the reports menu and named “assessment report”. This report will enable you to view a summary of the immunization status of a particular group of clients, including clients who will be included in this year’s assessment cohort. To view the status of this year’s cohort, select the month and the year for the “Evaluation date”. Each time you generate this report use 11 as the month and use 2007 as the year. The first page of the report contains a table that shows the immunization status of clients in 4 different age groups. The 24-35 month age group corresponds closely with this year’s assessment cohort and the up-to-date status should be a good indicator of your clients’ up-to-date status. If you have questions about this report, please contact your Regional Immunization Nurse or the Assessment Coordinator, Beth Quinn at mailto:beth.quinn@ncmail.net.
Using the new NCIR Request CASA Extract

To obtain a data file containing names and immunization histories of children who are included in this year’s assessment cohort for use in the Comprehensive Clinic Assessment Software Application (CoCASA) you can request a CASA extract.

Local health departments now have the capability to generate requests for updated CASA files for all children born between 11/1/2004 and 10/31/2005, who have client information in the NCIR.

To obtain a text file to be used in CASA or CoCASA, select the request CASA Extract option in the Reports section of the NCIR.

(See section 10 of the NCIR user manual, page 10.13)

1. Change the “Common Review Date” to 10/31/2007
2. Change the “months” in the “Client will be at least:” to 24
3. Change the “months” in the “Client will be less than:” to 36

It’s recommended that you request and update your CASA extract at least monthly in order to include any clients who are added to the NCIR. To include clients for this year’s assessment cohort (with dates of birth between 11/01/2004 and 10/31/2005), you should always use the same information for the common review date (10/31/2007) and the same age range (24 to 36 months).

Once the file download is complete and you have saved it to your computer, you can then import the data into CASA or CoCASA.

For questions on how to use the NCIR CASA Extract or CoCASA please call Beth Quinn at 919-707-5580 or email Beth.Quinn@ncmail.net.
CoCASA Reports for the 4-3-1-3-3-1 Assessment

Once you have imported your data from the CASA extract file, the **CoCASA Summary Report** can be used to determine how many of your children have documentation of being up-to-date (UTD) for the 4-3-1-3-3-1 series of shots in the NCIR. This is an immunization compliance rate.

You can access this report by looking under the **STANDARD REPORTS TAB** and choosing the **Summary Report**.

1. Under the “Standard Report Criteria” for the series, choose **4-3-1-3-3-1**.
2. Choose “Compliance” by age and enter an age, or by date, and enter a date or let it default to the current date.
3. Choose RUN to execute the report and wait for the report to appear in a new window.

**Tracking Children for the complete 4-3-1-3-3-1 series—Using CoCASA Reports**

- The most useful report for tracking children who may be in need of an immunization is the **Missing Immunizations** report. This report can be generated to include the entire age range of children who are missing or past due for immunizations, or it can be narrowed (by changing the age range) to focus on a specific group. Narrowing the age range may make the list more manageable for tracking.

You can access this report by looking under the **STANDARD REPORTS TAB** and choosing **Lists**. Click the + sign to expand the options.

1. Under **Lists** choose **Missing Immunizations**.
2. Under the “Standard Report Criteria” for the series, choose **4-3-1-3-3-1**.
3. Choose “Compliance” by age and enter an age, or by date, and enter a date or let it default to the current date.
4. Choose RUN to execute the report.
5. Choose the option you wish to view and wait for the report to appear in another window.

- You can also choose to run a list of children who can be brought up-to-date with one additional visit, (the **Need One Dose** list). This list can help you identify those children who can most easily be brought UTD.

- You can also choose to run a list of children who may have received an invalid dose of an immunization, (the **Invalid Doses** list). This list can help you identify those children who may need to be recalled for an additional immunization due to a minimum age requirement or minimum interval recommendation not being met.

If you would like help using CoCASA please contact Beth Quinn at 919-707-5580 (or email [Beth.Quinn@ncmail.net](mailto:Beth.Quinn@ncmail.net)).