## **Explanation for Immunization Compliance Rates (October, 2012)**

This document will accompany all release of immunization compliance rates

It is important to understand the nature of the immunization rates compiled by the North Carolina Immunization Program (NCIP) during the annual assessment of local health departments (LHDs). These rates are compliance rates. They are not **immunization coverage rates**.

For the purposes of this annual assessment, a compliance rate is defined as the percentage of a distinct, eligible population with <u>documented</u> protection against specific vaccine-preventable diseases. These rates reflect how well a LHD has complied with the NCIP's requirement that all immunization data be recorded in the North Carolina Immunization Registry (NCIR).

The compliance rates only refer to the population that is encompassed by them. The population for any given LHD or county includes the children 24 to 35 months of age (as of October 1, 2012) who have received immunizations from the LHD or who have client information in the NCIR and have their county of residence listed as that county.

Compliance rates are calculated using all data that has been recorded in the NCIR. Children may have received immunizations at the LHD or elsewhere, but if the information has not been entered into the NCIR, it will not be reflected in the LHD or county compliance rate.

Compliance rates do not reflect how well a population is protected against disease and should not be mistaken for immunization coverage rates.

Compliance rates for the 2012 annual assessment represent the percentage of children who have documentation of the 4-3-1-3-3-1 immunization series (4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB and 1Varicella by 24 months of age).

Due to the population definition stated above, LHD and county level immunization compliance rates **DO NOT** reflect:

- Full immunization coverage for all children in the county,
- Full immunization coverage for all two-year-olds in the county,
- 4-3-1-3-3-1 immunization coverage for all two-year-olds in the county\*\*,
- 4-3-1-3-3-1 immunization coverage for all two-year-olds who have received immunizations at the LHD. \*\*

\*\* This is what immunization rates aim to reflect. Although LHDs are working hard at their tracking and data entry efforts, in most situations all information has not been entered into the NCIR and therefore the immunization compliance rates do not reflect the population defined to that level of specificity.

In addition to the limitations put forth by the definition of the population, the resulting rates may be distorted by data entry and processing issues. If immunization dates are omitted or entered incorrectly or if active clients and/or the county of residence are not identified properly, the resulting rate will be distorted.

Also, because the majority of children in North Carolina receive their immunizations from private provider offices, at this time most of the immunization data in the NCIR is a result of the tracking efforts of LHD staff to identify children, obtain their shot records and enter them into the system.

For these reasons, immunization compliance rates are subject to limited interpretation. Due to the data used to calculate immunization compliance rates, the data collection methodology and the subsequent population definition, few interpretations may be drawn as to the significance of the data.

## Inferences that may be drawn based on LHD or county compliance rates:

- ❖ The efforts a health department is making to assure immunization compliance in their county. (However such inference must also take into consideration the resources of the health department, and the size of the county when making judgments based on the compliance rate.)
- ❖ The resources available to the county for immunization tracking, and areas where technical support is needed.

## <u>Inferences that may **NOT** be drawn based on LHD or county compliance rates:</u>

- ❖ The susceptibility of the 2 year old population to vaccine preventable diseases.
- ❖ The immunization coverage or compliance rate for 2 year old children who do not have client information in the NCIR.
- \* Pockets of need in the state or areas where immunization coverage is low.