Temperature Excursion Reporting
Miranda Baumgartner

Background:
Proper vaccine storage and handling is critical to ensure the viability of vaccines, and temperature excursions can be costly. The North Dakota Department of Health (NDDoH) requires providers to submit data logger temperatures monthly. Providers should immediately contact the NDDoH and vaccine manufacturers when temperature excursions occur to determine viability of vaccines.

Objectives:
To assess whether North Dakota Vaccines for Children (VFC) enrolled providers are reporting and responding to temperature excursions. To evaluate whether providers should be required to continue to submit data logger temperatures monthly.

Methods:
Data logger temperature logs are reviewed by NDDoH staff looking for temperature excursions. Data was collected on the frequency of excursions, vaccine viability, revaccination and whether the excursions were reported to the NDDoH.

Results:
Since October 2016, North Dakota VFC providers reported 61 temperature excursions resulting in 999 doses of wasted vaccine for a total of $50,402. Through monthly review of data logger temperatures, 68 unreported temperature excursions were identified by the NDDoH. The unreported temperature excursions resulted in 502 doses of vaccine being wasted for a total of $19,429. There were five VFC providers that needed to revaccinate patients due to unreported temperature excursions and nonviable vaccine being administered to patients. 104 patients needed to be revaccinated due to nonviable vaccine, to-date only 56 of these patients have been fully revaccinated.

Conclusion:
VFC providers are not always reporting temperature excursions when they occur. This means some VFC providers are not reviewing data logger temperatures or responding to temperature excursions as they occur. Wasted vaccine and revaccination results in excess cost to the VFC Program, the provider, and the patient. Although it is resource intensive, the NDDoH will continue monthly review of temperature logs to ensure that nonviable vaccine is not being administered to patients.
Achieving Compliance with Vaccines for Children Program Storage Unit and Thermometer Requirements
Melissa Mickle-Hope, Arianne Ramautar-Kupchand, Georgia Elysee, Amy Metroka

Background:
The Centers for Disease Control and Prevention (CDC) mandated that by January 2018 all Vaccines for Children (VFC) program providers must have stand-alone or pharmaceutical-grade vaccine storage units monitored with Digital Data Logger (DDL) thermometers. To achieve and maintain compliance among nearly 1,300 active VFC sites, the New York City (NYC) Bureau of Immunization (BOI) needed to develop a strategy for collecting timely information on storage units and thermometers to identify non-compliant sites for outreach and assistance. Information collected at VFC site visits, conducted every other year for each site, was out-of-date for many sites.

Setting:
New York City

Population:
1,300 active NYC VFC provider sites

Project Description:
In June 2017, BOI released a new Web-based Vaccine Inventory Management (VIM) system in the Online Registry of the Citywide Immunization Registry (CIR), NYC’s immunization information system. BOI required VFC providers to use VIM to order and manage VFC vaccines at the dose level. Further, BOI required providers to enter information about all vaccine storage units and thermometers when ordering vaccines. The required information includes storage unit and thermometer type, DDL model, and thermometer certificate of calibration expiration date. Providers update the information in VIM after acquiring new storage units and DDLs. BOI uses this information to target sites for outreach and assistance.

Results/Lessons Learned:
Information entered in VIM as of 10/25/2017 showed 40% (493/1,222) of sites who had ordered VFC vaccines had non-compliant storage units and 44% (532/1,222) had non-compliant thermometers. NYC staff assisted non-compliant sites via site visit, telephone, and email. Preliminary data as of 12/15/2017 show 30% (389/1,296) of sites who had ordered VFC vaccines had non-compliant storage units and 39% (506/1,296) had non-compliant thermometers. Requiring storage unit and thermometer information at the time of ordering vaccines has enabled BOI to improve compliance among VFC providers with VFC’s new storage unit and thermometer policy.