Restructuring the Lead Case Management program at the Vanderburgh County Health Department (VCHD)

Kelly Holzmeyer; Lynn Herr, RN, BSN, CPN; Dr. R. Kenneth Spear, MD

1. Problem:
In 2017, Vanderburgh County had 18 children receiving lead case management services. Currently, 410 Indiana Administrative Code (IAC) 29 requires case management begin at 10 micrograms per deciliter (µg/dL). However, the Center for Disease Control and ISDH currently recommend public health actions be initiated at blood lead levels of 5 µg/dL. If state law changes, there could have been 23 additional cases in 2017. With an anticipated change in state code, staff knew the overall number of cases for Vanderburgh County would substantially increase. This change in caseload presents obstacles in staff duties, data storage and retrieval, and communication among lead team members.

2. Process:
To address these obstacles, the VCHD initiated a quality improvement process to reorganize the lead case management team. Historically, public health nurses at the VCHD coordinated lead case management for children with elevated blood lead levels. After standard operating procedures were evaluated and it was decided that the Environmental Health Division would incorporate lead case management into their workflow.

2017 Potential New Cases 5 - 9.9 µg/dL
- 12 reports were confirmed results
- 11 reports were unconfirmed results

3. Objective:
The goal of restructuring is to provide timely lead case management and environmental lead inspections with a larger caseload. The intentions of the updated standard operating procedures is to streamline workflow, and strengthen communication among lead team members, ISDH, primary care providers, primary caregivers, and various community partners to improve client outcomes.

4. Methodology:
New standard operating procedures were developed streamlining lead team member responsibilities. Included in this update is the addition of administrative support staff who will be accountable for initiating follow-up blood-lead report activities, and test reminders. Collectively, the Environmental Health Specialists (EHS) will facilitate lead case management and environmental lead inspections. Laboratory staff will continue conducting blood lead testing at the health department, and in the patient’s home when required. Public health nurses will serve in a support role and remain consultants in emergent lead cases as needed. This allows public health nursing staff to focus on other aspects of public health. VCHD staff decided to integrate data storage and retrieval in their Electronic Medical Record (EMR). This will generate efficient charting and data collection for the VCHD lead team while still providing the required information to the ISDH. Quality assurance will be preformed by the Environmental Director or Lead Case Management Coordinator. This includes a quarterly case review to assess timeliness, completeness and effectiveness of case management interventions. Case managers will be notified of incomplete information via email. The Lead Case Manager will coordinate services that have not been provided, and complete data fields in a timely manner.

Key Findings:

According to the 2010 Census, 45% to less than 65% of the housing in Vanderburgh County was built before 1980. The graph shows the total number of blood lead test results by zip code area where children had a blood lead level of 10 µg/dL or greater in 2016.

Acknowledgments:
Indiana State Department of Health
Vanderburgh County WIC
Vanderburgh County Public Health Nursing

Contact Information:
Vanderburgh County Health Department
Kelly Holzmeyer
(812) 435-5082
kholzmeyer@vanderbughcounty.in.gov