Objectives

The Montgomery County Lead Task force (LTF) was established in 2019 as a subcommittee of the Montgomery County Maternal and Early Childhood Consortium. LTF is a collaboration of Montgomery County health services offices and community partners. An important LTF goal is to increase the number of children in Montgomery County who receive at least one, and preferably two, blood lead tests by the age of 2 years. According to the Pennsylvania Department of Health’s 2017 Lead Surveillance Report, only 30% of Montgomery County children were tested for lead in 2017.

To better understand child lead screening and testing in the county, the LTF developed the Montgomery County Pediatrician Lead Screening Practices Survey to collect data on:

1) Current lead screening and testing practices of pediatrician offices in Montgomery County, and
2) Possible barriers facing parents and caregivers that may limit the number of Montgomery County children receiving recommended blood lead screening and testing.

Study Design

LFT staff identified and contacted 38 pediatrician offices in Montgomery County to administer the confidential telephone survey. A total of 19 pediatrician offices participated in the survey (response rate of 50%). Of these, 63% (n=12) were private practices and 37% (n=7) were practices affiliated with hospital networks of Abington-Jefferson Health, Children’s Hospital of Philadelphia (CHOP), Doylestown Health, Einstein Health, and Nemours Health. For 95% of pediatrician offices surveyed, a nurse or office manager responded to the survey questions.
Results

Survey responses from 19 primary care pediatrician offices were included in the data analysis. The findings are as follows:

- 58% (n=11) reported their child patients are low risk for lead poisoning because most housing was built after 1978 or because they rarely see children with elevated blood lead (>5 micrograms/deciliter).
- 68% (n=13) reported using a screening tool or questionnaire to assess the risk of childhood lead poisoning and whether follow-up blood lead testing is recommended.
- 32% (n=6) reported recommending lead testing to all children under the age of two years.
- 47% (n=9) reported being able to test for blood lead at their office.
  - Of these 9 offices, 67% (n=6) offer capillary testing and 33% (n=3) offer venous testing. Capillary tests are sent to an off-site lab for analysis or analyzed at the pediatrician’s office. Venous tests are sent to an off-site lab for analysis.
- 84% (n=16) reported following up on uncompleted lead testing by phone call or the child’s next well visit.

The pediatrician offices were asked about barriers parents and caregivers face when having their child tested for lead. The findings are as follows:

- 37% (n=7) reported no barriers to child lead testing.
  - Of these 7 offices, almost 50% (n=3) offer blood lead testing at the pediatrician’s office.
- 63% (n=12) reported the most common barrier is parental/caregiver lack of knowledge about childhood lead poisoning.
- 37% (n=7) reported having educational materials on childhood lead poisoning available to parents and caregivers either as handouts or displays in the office.
- 79% (n=15) reported being aware of case management services offered by Montgomery County Office of Public Health (OPH) to families with a child with elevated blood lead.

Conclusions

Based on the 19 pediatrician offices who responded to the survey, the findings indicate that:

1. Most pediatrician offices believe their children clients are not at risk for lead poisoning and provide only a screening assessment or questionnaire to determine the need for blood lead testing.
2. While almost half of pediatrician offices can provide childhood blood lead testing, only one-third recommend childhood lead testing for all of their clients.
3. Of offices that provide childhood blood lead testing, most offer capillary testing as opposed to venous testing. Research shows that capillary testing yields higher rates of false positive results compared to venous testing.
4. In 2017, only 30% of Montgomery County children were tested for blood lead. Possible reasons are that parents and caregivers are not complying with recommended testing, pediatricians are using screening tools in lieu of testing, and/or not all testing results are reported to the state. While the Pennsylvania Department of Health’s Childhood Lead Poisoning Prevention Program requires all labs that conduct blood lead testing for children under 16 to report their results to the state, pediatricians are not required to report results of capillary testing conducted in their office unless they are 20 micrograms/deciliter or above.
5. While knowledge of childhood lead poisoning is a barrier for child testing, only 37% of pediatrician offices reported having educational materials in their office. Follow up with the participating offices represents an opportunity to increase parental knowledge about the value of childhood lead testing.