

Newborn Screening to Save More Babies

The purpose of the Department of Health's Newborn Screening (NBS) Program is to prevent death and disability in babies. Housed at the Public Health Laboratories in Shoreline, the program partners with health care providers across the state to ensure every baby receives a newborn screen.

The NBS Program is comprised of laboratory, follow-up and operations teams, each playing critical roles in the receipt and processing of specimens, call-out of results and support of systems to ensure smooth functioning of the work. Blood specimens from newborns are collected at hospitals, birthing centers, laboratories and homes and dried on special filter paper kits that are sent to the NBS laboratory. Upon arrival, the blood is tested for 32 congenital disorders that can cause death or permanent disability if undetected. The blood is tested during the first days of life because the best chance for intervention is before the baby presents with symptoms of disease.

Over the past few years, the NBS Program has been approached, independently, by staff from the Hawaii Department of Health and the Idaho Department of Health and Welfare about providing NBS services for their babies. Neither state has a birth population large enough to justify purchasing the expensive equipment needed to run a NBS laboratory, so they contract out those services. In October 2019, the NBS Program began providing laboratory testing and support to the Hawaii follow-up team. The program further expanded on April 1, 2021, by adding laboratory

and follow-up services for babies born in Idaho. It has been an exciting challenge to bring this extra work to the NBS Program. The increased revenue from the new contracts provided additional funding that was used to change the program's organizational structure. New positions were added, including two chemists, a lab assistant, two follow-up positions, an assistant laboratory quality assurance position, a second laboratory supervisor, a data specialist, a program manager and an epidemiologist. The new staff joined the 31 existing employees and together, they are already making an impact by providing improved service to save more babies in Washington, Hawaii and Idaho.

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Practice Guidelines

The following practice guidelines have been developed by the Clinical Laboratory Advisory Council. They can be accessed at the [LQA website](#).

Acute Diarrhea	Lipid Screening
Anemia	PAP Smear Referral
ANA	Point-of-Care Testing
Bioterrorism Event Mgmt	PSA
Bleeding Disorders	Rash Illness
Chlamydia	Red Cell Transfusion
Diabetes	Renal Disease
Group A Strep Pharyngitis	STD
Group B Streptococcus	Thyroid
Hepatitis	Tuberculosis
HIV	Urinalysis
Infectious Diarrhea	Wellness
Intestinal Parasites	

Reporting Requirements for Blood Lead Testing

Blood lead has been a Notifiable Condition in the state of Washington since 2000. All blood lead test results, including elevated and non-elevated for both children and adults, must be reported to the Department of Health (DOH).

High levels of lead in adults and children can cause damage to the kidneys and central nervous system. Young children, especially those under 6 years of age, are particularly sensitive to lead poisoning. Exposure to lead can seriously harm a child's health, including permanent damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems. Young children often put toys, fingers, and other objects in their mouth as part of their normal development. This may put them in contact with lead paint or dust. No safe blood lead level in children has been identified and most children with lead in their blood have no symptoms. A blood lead test is often the only way to find out if a child is being exposed to lead.

The Notifiable Condition Rule (WAC 246-101-201) requires that laboratories report elevated blood lead results to DOH within two business days and non-elevated results within 30 days. Clinics using point of care (POC) lead screening devices such as the Magellan Lead Care II devices have the same reporting requirements as laboratories. Test result data

may be reported to DOH via Electronic Lab Reporting (ELR) or by submitting an Excel Blood Lead Test Report Form to the DOH Childhood Lead Poisoning Prevention Program. The results are entered into the state database. More information is available at [Blood Lead Reporting :: Washington State Department of Health](#).

Reporting complete information on all blood lead levels is vital. Your lab result report is the first step that triggers DOH to create a case referral to local health jurisdictions to help the family find and remediate the lead exposure. Without the lab result, the child is not referred for public health action. Our partners in the Labor & Industries Adult Blood Lead Epidemiology and Surveillance (ABLES) program use these results to investigate elevated cases for occupational exposure. Additionally, DOH sends CDC quarterly reports on all lab results and maintains a Lead Registry at DOH that houses these data. Our epidemiology staff uses the data (both elevated and non-elevated) in frequent data analysis. Having a denominator of the number of children tested is critical in determining rates. For instance, with your lab results, we review county-specific testing and elevated rates and run analysis on race and ethnicity to address health inequities. All of this requires having complete information on all tests results – both elevated and non-elevated.

If your lab or clinic has any questions, please contact the Childhood Lead Poisoning Prevention Program at Lead@doh.wa.gov or call (360) 236-4280.

Together we will continue to make strides in reducing lead exposure in our state. Thank you for contributing to the surveillance of blood lead in Washington!

Childhood Lead Poisoning Prevention Program Contact Information
lead@doh.wa.gov | 360-236-4280 | 800-909-9898 | FAX 360-236-3059

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RESERVE THE DATE

**CLINICAL LABORATORY
CONFERENCE**

NOVEMBER 8, 2021

**More details to follow in next issue of
Elaborations**

Calendar of Events

Training Classes:

2021 Joint Spring Seminar
Sponsored by ASCLS-WA, ASCLS-OR, ASCLS-AK
April 21-23 Virtual Event

2021 Northwest Medical Laboratory Symposium
October 6-9 Virtual Event

2021 Clinical Laboratory Conference
November 8 Tukwila

Contact information for the events listed above can be found on page 2. The Calendar of Events is a list of upcoming conferences, deadlines, and other dates of interest to the clinical laboratory community. If you have events that you would like to have included, please mail them to ELABORATIONS at the address on page 2. Information must be received at least one month before the scheduled event. The editor reserves the right to make final decisions on inclusion.



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