Date: July 10, 2018
To: Local Health Directors
From: Ed Norman, MPH, Program Manager, Childhood Lead Poisoning Prevention Program
Prevention Program, NC Division of Public Health

Subject: Lead in Balguti Kesaria and other Ayurvedic medications

This notice is to alert clinicians and public health leaders about cases of lead poisoning in children in North Carolina due to Ayurvedic medicine and imported supplements commonly used in Southeast Asian Indian communities.

**Background:** On August 4, 2017 the US Food and Drug Administration (FDA) issued a safety alert that high levels of lead had been found in the Ayurvedic medicine called Balguti Kesaria (or Kesaria Balguti). The alert stemmed from a reported case of lead poisoning that occurred in North Carolina and from two cases in Michigan around the same time. In North Carolina, a 13-month old child with developmental delay was identified with a confirmed blood lead level of 22 µg/dL. An environmental investigation of the home was conducted by local health department staff. The home was built after 1978 and no lead-based paint hazards were identified. A risk assessment determined that the child had been taking Balguti Kesaria, a traditional Ayurvedic medicine imported from India; a sample tested positive for lead at 220 mg/kg. The case was reported by the NC Childhood Lead Poisoning Prevention Program to the FDA. Another case of lead poisoning of a child confirmed with a blood lead level of 16 µg/dL, was found in March 2018. The child was living in new housing with no lead paint hazards and had been taking Balguti Kesaria containing 3100 mg/kg of lead. This case has also been reported to the FDA. In Wake County, other Ayurvedic supplements have been found to contain high levels of lead. Other states have reported similar cases. Products made in India and brought to the US or purchased online are most often implicated.

No level of lead is considered safe, especially for children. The public health action level for children is 5 µg of lead /dL of blood.

**Recommendations:** Clinicians and environmental health specialists should inquire about the use of traditional and alternative medications especially Ayurvedic medicines, supplements, spices and ceremonial powders. Anyone found to be taking Balguti Kesaria (Kesaria Balguti) should be advised to stop consuming it. The public should be made aware of the possible risk of lead in any Ayurvedic products. All children should have a blood lead test at ages 1 and 2. Children with symptoms of concern including developmental delays and older children at higher risk for
lead exposure should also be tested. Additional information about products that may be contaminated with lead may be found at: http://nchealthyhomes.com/lead-poisoning/.

**Diagnostic testing and follow-up:** Any child under the age of 6 found to have a *confirmed* blood lead level ≥ 5 µg/dL should be referred to the county health department for an environmental health investigation and followed medically according to recommendations from the NC Childhood Lead Poisoning Prevention Program and the Centers for Disease Control and Prevention. Follow-Up Schedule guidelines are available at the following link: https://nchealthyhomes.com/files/2018/06/2018-06RevisedFollowupScheduleforLead.pdf

**Reporting:** Laboratories, including clinics using point-of-care lead testing devices, are legally required to report the result of all blood lead tests performed on a child under the age of six in North Carolina. To start reporting, see the “Childhood Lead Poisoning Prevention Program: Portable Blood Lead Analyzer User Information” webpage: https://ehs.ncpublichealth.com/hhccehb/cehu/lead/bloodleadanalyzers.htm.