

New CDC Lead and Pregnancy Recommendation Report 2010

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC - safer, healthier people.

[Rosland Martin] The Centers for Disease Control and Prevention released a new *Lead and Pregnancy Recommendation Report* in 2010. The report has important information for physicians and others who are concerned about the negative effects that exposure to lead can have on pregnant women and their developing fetuses, as well as on infants and children. CDC's Advisory Committee on Childhood Lead Poisoning Prevention convened a Lead and Pregnancy work group to look at the scientific evidence related to these issues. Dr. Mary Jean Brown, Chief of CDC's Healthy Homes and Lead Poisoning Prevention Program is here to discuss the highlights of the *Lead and Pregnancy Recommendation Report*. Thank you for joining us, Dr. Brown.

[Dr. Mary Jean Brown] I'm happy to be here.

[Rosland Martin] A recent National Health and Nutrition Examination Survey found that about 600,000 women between 15 and 44 years old have high blood lead levels. This means a person's blood lead level is greater than or equal to five micrograms per deciliter. Environmental policies have improved and major reductions in U.S. average blood lead levels have resulted. Dr. Brown, why is lead exposure still a concern for pregnant and breastfeeding women?

[Dr. Mary Jean Brown] Not all women experience the risk factors for lead exposure. Women who work with lead, women who are recent immigrants from parts of the world where environmental lead levels are higher than those in the United States, and women in other specific ethnic and racial groups are more likely to be exposed to lead. Also, women who practice pica, which is the craving to eat nonfood items, such as dirt, paint chips, and clay have a greater risk of exposure. Regrettably, guidance for clinicians for screening and managing pregnant and breastfeeding women exposed to lead has not kept pace with the scientific evidence. The lack of national recommendations about testing pregnant women and managing those identified with high blood lead levels has created confusion. In fact, only three places in the United States—New York State, New York City, and Minnesota— have issued lead screening guidelines and follow-up requirements for pregnant women by physicians or other medical providers.

[Rosland Martin] The report states that the Advisory Committee on Childhood Lead Poisoning Prevention found convincing evidence that prenatal lead exposure impairs children's neurodevelopment, placing them at increased risk for developmental delay, reduced IQ, and behavioral problems. Would you provide our listeners with a summary of additional conclusions from this report?

[Dr. Mary Jean Brown] The Advisory Committee found research that suggests, although it is not conclusive, that fetal lead exposure at levels found in the United States results in low birth weight or negative health conditions, such as high blood pressure, in adults who were exposed to lead in the womb. Further research is needed to address several biomedical issues.

[Rosland Martin] What guidance does the Advisory Committee offer health care professionals regarding blood lead testing and follow-up care for pregnant and breast feeding women with high blood lead levels?

[Dr. Mary Jean Brown] For pregnant women, the report recommends follow-up activities and interventions begin at blood lead levels greater than or equal to five micrograms per deciliter. A blood lead level greater than or equal to five micrograms per deciliter in pregnant women flags the occurrence of previous or ongoing lead exposure above background levels, which may not otherwise be recognized. It also allows parents and public health programs to ensure that the baby comes home to a lead-safe environment. There is good evidence that children exposed to lead in the womb but who are not re-exposed will do much better in school than children who are exposed both in the womb and then as infants or toddlers.

[Rosland Martin] Dr. Brown, because CDC doesn't recommend blood lead testing for all pregnant women in the United States, what course of action does CDC suggest for reaching populations most at risk?

[Dr. Mary Jean Brown] Routine blood lead testing of pregnant women *is* recommended in clinical settings that serve populations with specific risk factors for lead exposure. To reach populations most at risk, state or local public health departments should identify populations at higher risk for lead exposure. Next, they should give clinicians community-specific risk factors to guide them in determining the need for population-based blood lead testing. Assessment for lead exposure, based on risk factor questionnaires or blood lead testing, should take place during the earliest contact with the pregnant patient.

[Rosland Martin] The Report advises that the best way to manage pregnant women who have high blood lead levels is to remove the lead source, stop the exposure, or avoid the lead-containing chemical or activity. Give us some more detail on this recommendation.

[Dr. Mary Jean Brown] If a pregnant or breastfeeding woman's blood lead level is greater than or equal to five micrograms per deciliter, the source of lead exposure needs to be identified, in partnership with the local health department. Her diet should be assessed for adequacy and she should be provided with prenatal vitamins and nutritional advice. In certain circumstances where the maternal or neonatal blood lead level exceeds 44 micrograms per deciliter, chelation therapy during pregnancy or early infancy may be warranted. Chelation would only be undertaken after consultation with a doctor who is an expert in chelation therapy for lead poisoning. Breastfeeding mothers with higher blood lead levels are encouraged to pump and discard their breast milk until their blood lead levels drop below 40 micrograms per deciliter.

[Rosland Martin] Should pregnant and breastfeeding women discuss potential lead exposure with their health care providers as a routine part of their care?

[Dr. Mary Jean Brown] It is very important that pregnant and breastfeeding women discuss potential exposures to lead sources, such as lead that they may use at work, or home renovations that have disturbed lead paint, or if they've recently immigrated from a country where there are

higher environmental levels of lead than found in the United States. It's also very important that clinicians discuss with women whether or not they may have been exposed to any of these lead sources or to other chemicals in their environment.

[Rosland Martin] Dr. Brown, thank you for taking the time to discuss the *Lead and Pregnancy Recommendation Report* findings with our listeners.

[Dr. Mary Jean Brown] This is an important step toward reaching our goal of eliminating elevated blood lead levels in children. Thank you for inviting me.

[Rosland Martin] For more information about lead, visit www.cdc.gov/nceh/lead.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.