



# GUNS & BABIES

Pre Pregnancy

Women's Outdoor News

The Well Armed Woman

Laser Max

Everything Covert

## Guns and Babies: Part 1 — Pre Pregnancy

By Stacy Bright

Are you considering starting a family, already pregnant, or have you just had a new baby? If you have questions or concerns about shooting while pregnant, or other issues associated with firearms prior, during or after pregnancy, keep reading!

In this first of a 3-part series, we'll take a closer look at shooting issues to consider before you become pregnant.

### Pre Pregnancy

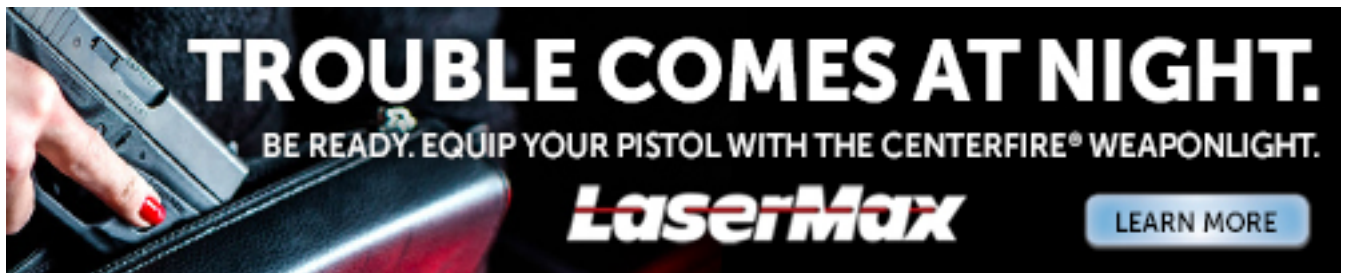
Two of the most common risks that are mentioned in conjunction with shooting and pregnancy are heavy metals (lead and mercury) and noise levels. In this first installment, I'll be discussing lead and other chemical hazards; the next segment will dive into the topic of noise and when fetal sound development begins.

An extensive body of research shows that lead exposure is harmful to fetuses. Lead crosses the placenta and is transmitted from the mother to the fetus [1]. Lead exposure during pregnancy has been associated with serious complications, including spontaneous abortion, premature membrane rupture, preeclampsia, pregnancy hypertension [3] and neurobehavioral effects in infants and children [1]. Even at low levels, lead exposure has been associated with preterm delivery; congenital abnormalities [4]; and decreased birth weight, length and head circumference [2]. In her report, "[Shooting While Pregnant](#)," Julie Golob writes, "The CDC warns how 'lead can cross the placental barrier, which means pregnant women who are exposed to lead also expose their unborn child. Lead can damage a developing baby's nervous system. Even low-level lead exposures in developing babies have been found to affect behavior and intelligence. Lead exposure can cause miscarriage, stillbirths, and infertility.'" [5]

Julie Golob took a break from shooting while pregnant, but got back into competition after she had her lovely baby.

After speaking to my OB, Dr. Kristy McCall, here's what she had to say about lead and pre-conception: "What I would recommend to patients desiring to be pregnant: If they have a job or hobby that has significant potential lead exposure, see your OB, discuss your exposure risks and

have a blood lead level (BLL) drawn. At levels lower than 10mcg/dL, risks are small. At levels between 10 and 20mcg/dL or greater, there is an increased risk of miscarriage. Also important is male factor. At levels below 10mcg/dL there is potential for sperm abnormalities, and at levels between 20 and 30mcg/dL there can be altered testicular function and decreased sperm count. The good news is that lead levels tend to drop to safe ranges when exposure is eliminated. Therefore people with work exposure—police officers, for example, or firing range indoor/outdoor workers—or hobbyists, although requiring a change in work situation or hobby, can reduce lead levels to safe ranges. In summary, if you have a job or hobby that exposes you to lead, see your doctor for blood lead level testing for both male and female patients pre-conceptually."



This pregnancy series is part of the Armed and In Charge lineup, sponsored by LaserMax.

Besides lead, there are other, similar, risks that pregnant women can be exposed to on a regular basis that you might not realize. Training with firearms exposes the shooter to other metals, including barium, antimony, copper and arsenic [6]. Another source of chemical hazards related to firearms are the cleaning products, which contain organic solvents. Some of these solvents are known to be teratogenic [7], which is defined as, "any agent that can disturb the development of an embryo or fetus. Teratogens may cause a birth defect in the child, or may halt the pregnancy outright." Lead also continues to exist in large quantities in paint, dust, dirt, drinking water, food and tableware. It has also been found in varnishes and pigment inks, hair dyes, anti-fouling paints, waterproofing materials, insecticides, solder, gasoline in certain foreign countries, pipes, plumbing fixtures, traditional folk remedies and cosmetics, according to a Centers for Disease Control and Prevention (CDC) report, "[Preventing Lead Poisoning in Young Children.](#)"

According to the CDC, "A large number of studies provide evidence that prenatal lead exposure impairs children's neurodevelopment. Some prospective studies have included children with low levels of prenatal lead exposure and continue to detect inverse associations with neurodevelopment, although these data are less consistent than those related to the high levels of lead exposure." [8] The study goes on to say that some of the risk factors include:

- Living near lead mines, smelters or battery recycling plants
- Working in an industry that uses lead (eg, lead production, battery manufacturing, paint manufacturing, shipbuilding, ammunition production or plastic manufacturing).
- Using alternative or complementary substances, herbs or therapies traditionally used by East Indian, Indian, Middle Eastern, West Asian and Hispanic cultures
- Renovating or remodeling older homes without lead hazard controls in place
- Consumption of lead-contaminated drinking water—women whose homes have leaded pipes or source lines with lead

There are many ways to be exposed to lead and other toxic chemicals, and it is recommended that you take precautionary measures, such as wearing latex gloves, make sure of proper air ventilation at indoor shooting ranges, and even having someone else clean the firearms when possible. Be careful to wash your hands and face with cool water as soon as possible after shooting, and don't consume food or drink until you have washed. When you get home, take off your shoes and outer layers of clothing before entering the house, if possible. That will help prevent tracking lead all over the house. Wash any clothes that were worn at the firing range separately from the rest of the family's clothing. Wearing a mask while shooting will protect you even further. And when possible, conduct all firearm-cleaning activities outdoors or in very well ventilated areas. These tips are pretty easy to follow, and will help limit how much lead you're exposed to.



This series is underwritten, in part, by Everything Covert.

The question that every new mother asks is, "Is it safe?" Just as each family should do their due diligence to decide what's best for them regarding shooting while pregnant, you must also evaluate safety if you decide to have firearms in your home. You've planned ahead by purchasing a crib and car seat and stocking up on diapers; you'll also want to think through the aspects of securing your firearms. Don't blink: That newborn will be crawling and getting into things before you know it! If you

already have children in the home, hopefully you've already purchased a good gun safe to lock up firearms. Make sure the safe is in a location where kids can't get to it, and that the keys are kept separately. Educate everyone in your family about firearms safety. Visit the [Project ChildSafe website](#) for safety information and to find out where to get a free firearm safety kit in your area.

As NSSF president and CEO Steve Sanetti says, “Nearly all firearm accidents in the home can be prevented when gun owners take simple precautions, and proper storage is the number one way to help prevent accidents. Anyone who is going to own a firearm should respect it and secure it when not in use to help prevent firearm accidents and misuse.” Every mother should be well informed and make an educated decision for herself and her baby. Always consult your doctor before deciding to shoot or clean your guns, before or during pregnancy.

Stay tuned for the second part of this series, when we'll discuss noise issues involved with shooting as well as carrying a firearm while pregnant.

## RESOURCES:

- [1]. Gardella C. Lead exposure in pregnancy: a review of the literature and argument for routine prenatal screening. *Obstet Gynecol Surv.* 2001;56(4):231-238 MEDLINE
- [2]. Osman K, Akesson A, Berglund M, Bremme K, Schutz A, Ask K, et al. Toxic and essential elements in placentas of Swedish women. *Clin Biochem.* 2000;33(2):131-138 MEDLINE
- [3]. Winder C. Lead, reproduction and development. *Neurotoxicology.* 1993;14(2-3):303-317 MEDLINE
- [4]. O'Halloran K, Spickett JT. The interaction of lead exposure and pregnancy. *Asia Pac J Public Health.* 1992-93;6(2):35-39 MEDLINE
- [5] United States. Centers for Disease Control and Prevention. "Health Problems Caused by Lead." [cdc.gov](http://cdc.gov). Web.
- [6]. Dams R, Vandecasteele C, Desmet B, Helsen M, Nagels M, Vermeir G, et al. Element concentrations in the air of an indoor shooting range. *Sci Total Environ.* 1988;77(1):1-13 MEDDLING
- [7] Fabrice Czarnecki. M.D. [From Clinics In Occupational and Environmental Medicine](#) Volume 3, Issue 3, Pages 641-648 (August 2003)
- [8]. Modified from Centers for Disease Control and Prevention. Guidelines for the identification and management of lead exposure in pregnant and lactating women. Atlanta (GA): CDC; 2010. Available at: <http://www.cdc.gov/nceh/lead/publications/leadandpregnancy2010.pdf>.