Shooting While Pregnant

A RESOURCE FOR EXPECTING MOMS
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SHOULD I SHOOT WHILE I AM PREGNANT?

SHORT ANSWER:

Consult with your doctor and your partner to make the right decision for you and your baby.

There is not exactly a wealth of information out there on the subject of whether or not to shoot while you are pregnant. Why? Women who shoot and hunt aren't exactly the most studied demographic. Females in this group who happen to be pregnant represent an even smaller segment. Despite the limited information specific to female shooters, there are resources that can help pregnant shooters make educated decisions on shooting while pregnant, especially with regard to exposure to lead, noise, and other contaminants.

LEAD EXPOSURE

All shooters should be aware of the dangers of lead exposure. It is not something to take for granted -- especially if you shoot a lot, do not follow simple washing procedures and/or spend a significant amount of time in a range environment. The two main ways people are exposed to lead in the United States are through lead-based paint and lead-contaminated dust. The latter specifically applies to shooters.

Lead poisoning is tough to detect and those suffering from it can even seem healthy.

SYMPTOMS OF LEAD POISONING IN ADULTS:

- High blood pressure
- Decline in mental functioning
- Pain, numbness, or tingling of the extremities
- Muscular weakness
- Headache
- Abdominal pain
- Memory loss
- Mood disorders
- In men, reduced sperm count and/or abnormal sperm

Because the symptoms from lead poisoning are so broad, people may not even realize they have it. At the very least, the affect of these symptoms on a shooter means he or she is unlikely to achieve optimal performance on the range. For competition shooters, their abilities to train effectively and compete at top levels are compromised.

Lead exposure is even more serious for children. Americans became aware of the dangers of lead poisoning and how it affects children decades ago. Before the 1950s, popular toys like small American soldier figurines were made of lead alloy. Because of public fears regarding lead exposure, plastic became the preferred material.

SAFETY NOTE:

Avoid letting children play with antique toys that may be made of lead or painted with lead-based paint.

As with adults, the symptoms of lead poisoning in children can point to a number of ailments.

SYMPTOMS OF LEAD POISONING IN CHILDREN:

- Irritability
- Loss of appetite
- Weight loss
- Sluggishness and fatigue
- Abdominal pain
- Vomiting
- Constipation
- Learning difficulties

Considering the impact on adults and children, lead exposure also is a concern for pregnant women and newborns. Pregnant women with lead poisoning could suffer miscarriages or premature births. Newborns and babies who are exposed to lead before birth may experience learning difficulties and slowed growth.

The government has made efforts to protect pregnant women in the work environment, as well as unborn babies and young children, from lead poisoning. In 1988 the United States passed the Lead Contamination Control Act that authorized the Centers for Disease Control and Prevention (CDC) to initiate program efforts to eliminate childhood lead poisoning throughout the country. [1]

Other government agencies also have issued warnings about lead exposure. According to the Environmental Protection Agency (EPA), "The effects of lead exposure on fetuses and young children can be severe. They include delays in physical and mental development, lower IQ levels, shortened attention spans, and increased behavioral problems. Fetuses, infants, and children are more vulnerable to lead exposure than adults since lead is more easily absorbed into growing bodies, and the tissues of small children are more sensitive to the damaging effects of lead. Children may have higher exposures since they are more likely to get lead dust on their hands and then put their fingers or other lead-contaminated objects into their mouths."

The CDC also 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." [3]

The Occupational Safety and Health Administration (OSHA) created a Lead Standard that states "the physician may recommend special protective measures or medical removal for an employee who is pregnant or who is planning to conceive a child when, in the physician's judgment, continued exposure to lead at the current job would pose a significant risk."[4]

WAYS TO REDUCE EXPOSURE TO LEAD:

- Avoid using and eating products that may contain lead.
- Avoid using containers, cookware, or tableware to store or cook foods or liquids that are not shown to be lead free.
- Remove recalled toys immediately from children. Check Lead Recalls list that the CDC has on their site.
- Use only COLD water from the tap for drinking, cooking, and for making baby formula.
- Shower and change clothes after finishing a task that involves working with lead-based products, such as stained glass work, bullet making, or using a firing range.
- Eat and/or drink in areas where lead or lead-containing products are not being handled or processed.

CDC

NOISE

Another concern for pregnant shooters is how the noise from gunfire can affect an unborn child. An article from the American Academy of Pediatrics, titled "Noise: A Hazard for the Fetus and Newborn," lists studies that indicate risks to unborn babies exposed to noise and concludes that, "exposure to excessive noise during pregnancy may result in high-frequency hearing loss in newborns, and may be associated with prematurity and intrauterine growth retardation." [6]

The Tennessee Tech University website hosts an article called "Shooting While Pregnant: Dangerous or Not," by Elizabeth Kennedy and Fabrice Czarnecki, M.D., that addresses hearing development in an unborn child. In the article the authors explain what is both known and unknown: "One thing we do know is that fetal response to sounds begins at about 16 weeks, and the ear is structurally complete by 24 weeks. It would appear that even though the structures are all in place, the sense is not fully developed until birth. We also don't know at what point the fetus is most susceptible to noise damage of the ear, whether it's during the first trimester, second or third."

From The Policies Study Council website, in an article titled "The Pregnant Officer," Czarnecki also discusses noise toxicity and safe noise levels established by OSHA as compared to the noise from various firearms. "Noise usually is considered to be detrimental during pregnancy. In most European countries, health regulations forbid pregnant women from working in surroundings with a continuous noise level greater than 80 dB or a rapid-impulse noise level greater than 40 dB, which is much less than the noise of a firearm. In the United States, the Occupational Safety and Health Administration permissible exposure limit for rapid-impulse noise is 140 dB, with additional regulations for continuous noise. The sound levels of firearms are about 125 to 140 dB for rimfire rifles; 140 to 150 dB for rimfire pistols; and 150 to 160 dB for centerfire rifles, pistols, and shotguns."

The article cites studies in both humans and ewes that compare intrauterine measurements and the levels of protection against loud noises. This data gets compared to the amount of protection offered by foam ear plugs. [8]

CONTAMINANTS

A third concern is exposure to contaminants. The aforementioned "Shooting While Pregnant: Dangerous or Not?" article also addresses cleaning solvents. "Toxicity from other chemicals and heavy metals besides lead, shooting and cleaning a firearm exposes you to other chemicals, including cleaning solvents, and other heavy metals, including barium, antimony, copper and arsenic. . . . Most of the experts agree that pregnant women should not clean their guns, to reduce exposure to chemicals. Guns should be cleaned by other people, away from the pregnant woman."

MEDICAL EXPERT OPINION

I interviewed Dr. Czarnecki for my book, SHOOT^[9]. He is a leading authority on the matter. Aside from being a respected medical doctor, Czarnecki has also served as Medical Director of Public Safety Medicine of the Northwestern Memorial Physicians Group; Chairman of the Police Physicians Section of the International Association of Chiefs of Police; and Vice-Chair of the Public Safety Section of the American College of Occupational and Environmental Medicine. I asked him to address the dangers of lead, noise, and contaminant exposure for both pregnant women and breast-feeding moms.

In "SHOOT," Czarnecki advises, "Pregnant women should avoid lead exposure. Lead exposure during pregnancy is associated with serious complications for both the fetus and the mother, including miscarriage. Children who were exposed to lead before they were born may have lower IQ and impaired mental development. Even at low levels, lead exposure has been associated with preterm delivery, congenital abnormalities, and decreased birth weight. Current research suggests that there is no safe lead exposure threshold for children, infants, or fetuses."

He even warns about lead for women who are breastfeeding: "Lead is transmitted from the mother to the fetus, and is excreted in breast milk. For women who are breastfeeding, it is best to avoid unprotected firearms training. Wearing an appropriate respirator and careful hand hygiene should allow most breastfeeding women to safely train with firearms, especially if using lead-free ammunition."

With regard to noise, Czarnecki shares how "Noise exposure during pregnancy has been associated, in human studies, with several adverse outcomes, including miscarriage, intrauterine growth retardation, preterm delivery, hearing loss in babies and children, and hypertension in pregnancy."

"I recommend that, during pregnancy, women not shoot firearms at all, unless in self-defense." Fabrice Czarnecki, M.D.

This information is not meant to scare expecting moms, but warnings and recommendations are in place to protect pregnant women and their babies by identifying such risks and addressing potential problems. Pregnant women are cautioned against consuming sushi, sunny-side-up eggs, and unpasteurized products and so, it is not surprising that there are recommendations out there to limit and even cease shooting activities. I have known pregnant women who have eaten runny eggs and raw fish, just as I have known several women who have shot throughout their pregnancies. These women have also delivered happy and healthy babies.

Pregnant women, who also are shooters, face the tough decision of if and when to stop shooting. Simply put, the best way to reduce exposure to the dangers is to avoid them all

together. That means, no shooting and avoiding ranges, especially indoor ranges where exposure to lead, noise, and contaminants is greater. If you and your doctor decide that it is safe for you to shoot during a portion of your pregnancy, then there are ways to help reduce the risks to you and your baby.

WAYS TO POTENTIALLY REDUCE EXPOSURE TO LEAD, NOISE, AND CONTAMINANTS:

- Use firearms with suppressors to limit noise exposure.
- Shoot lead-free ammunition. (Note: you may still be exposed to other harmful contaminants.)
- Use a respirator to limit inhaling lead dust.
- Limit range time exposure, especially in indoor ranges.
- Use commercial wipes designed to remove heavy metal dusts, dirt, grease, and oil from the skin.
- Immediately wash all exposed skin with soap and COLD water.
- Remove range clothes as soon as possible and wash them separately from the rest of the laundry.
- Ask someone you trust to clean your firearm to avoid exposing yourself to lead, solvents, and other contaminants.

EXPLORE OTHER OPTIONS

If you decide to avoid shooting and the range altogether, you can still work on your shooting skills while you are pregnant. Dry fire, also known as dry practice, involves going through the motions of shooting without ammunition. A dry fire regimen can help you not only maintain your existing skills, but by practicing good grip, stance, sight alignment and trigger control techniques, it also can help you build a solid foundation of fundamentals to bring to the range with you after your baby is born.

In addition, there are other options for pregnant women to consider. Airsoft guns look and often feel just like real firearms. Instead of shooting ammunition, these guns shoot small and round plastic projectiles. Airsoft guns offer minimal recoil and are very quiet to shoot in comparison to firearms. With reduced-sized targets at close range, pregnant shooters can work on gunhandling skills, the fundamentals, accuracy, and more.

Dry fire and airsoft shooting are ways that pregnant shooters can work on skills and enjoy shooting, while at the same time avoiding the risks of noise, lead, and contaminant exposure. Keeping in touch with fellow shooters, watching shooting videos and programs, and reading books about shooting are also ways pregnant shooters can feel connected to the sport while they take time off from the range.

In the section below, I have added links to the websites where I found information cited in this ebook. Please note that there may be additional statistical data and helpful information that may be more relevant and timely. Always consult your doctor, to make sure you have all the information you need to help you make the best decision for you and your family.

LINKS & RESOURCES

- [1] United States. Centers for Disease Control and Prevention. "Childhood Lead Poisoning Prevention Program." *cdc.gov*. Web.
- [2] United States. Environmental Protection Agency. "Health Effects of Exposure to Lead." epa.gov. Web.
- [3] United States. Centers for Disease Control and Prevention. "Health Problems Caused by Lead." *cdc.gov*. Web.
- [4] United States. Occupational Safety and Health Administration. "Lead Standard." osha.gov. Web.
- [5] United States. Centers for Disease Control and Prevention. "Lead Recalls List." cdc.gov. Web.
- [6] American Academy of Pediatrics. "Noise: A Hazard for the Fetus and Newborn." pediatrics.aappublications.org. Web.
- [7] Kennedy, Elizabeth and Fabrice Czarnecki, M.D. "Shooting While Pregnant: Dangerous or Not?" *iweb.tntech.edu*. Tennessee Tech University. Web.
- [8] Czarnecki, Fabrice M.D. "The Pregnant Officer." *theppsc.org.* The Police Policies Study Council. Web.
- [9] Golob, Julie. SHOOT: Your Guide to Shooting and Competition. New York: Skyhorse Publishing, 2012. Print.

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