# Pregnancy and Protests: Tear Gas, Pepper Spray & Other Worries

As a teratogen information specialist, I provide the most up-to-date information about exposures during pregnancy, breastfeeding, before pregnancy or in cases of adoption. Over the years, I have been asked questions about hair dye, heroin, and lots of things in between. I never thought I would be getting questions from multiple people about tear gas and pepper spray exposure during pregnancy. But here we are.

Protests happening in many cities in the United States right now are resulting in some exposure to riot control agents such as tear gas and pepper spray. Even if women who know they are pregnant do not participate in a protest, about 50% of pregnancies in the US are unplanned. This means some women who are participating in the protests may not even know they are pregnant at the time of exposure.

***Common protest-related exposures that we have been asked about include:***

## Tear Gas

There are multiple chemicals in tear gas. It can cause tearing of the eyes, irritation of mucous membranes, cough, difficulty breathing and irritation to the skin. A common chemical in tear gas is called 2-chlorobenzalmalononitrile (also called o-chlorobenzylidene malononitrile or CS for short).

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. Based on the very limited information we have, exposure to CS gas is not expected to increase the chance of birth defects over the background risk. A report looking at CS exposure found no major increases in miscarriages, stillbirths, or birth defects.

## Pepper Spray

The active ingredient in pepper spray is capsaicin, a chemical that comes from chili peppers. Effects from pepper spray exposure can include irritation of the eyes, skin, and mucous membranes, coughing, and trouble breathing or speaking. Like tear gas, there is very limited information on the use of capsaicin in pregnancy and from what we do know, it is not expected to increase the chance of birth defects over the background risk. Please see our fact sheet on capsaicin for more information.

The Centers for Disease Control and Prevention (CDC) has more information on riot control agents such as tear gas and pepper spray, as well as tips on how you can protect yourself and what to do if you are exposed.

## Trauma

Trauma can be caused by physical injury, such as being hit (by a hand or fist or by objects such as a baton or a rubber bullet) or falling. Trauma can also be psychological, which can stem from violence or from mental/emotional stress. There are individual reports of babies born with and without birth defects following trauma. Pregnancy outcomes may differ based on the type of trauma experienced and based on the severity of the trauma. Our fact sheet on trauma has more information.

## Stress

For most of us, stress is a part of "normal" life. However, the world is anything but normal right now. While it is unlikely that stress alone will increase the chance of birth defects, being under a lot of stress over time can affect your health and well-being. Stress can increase the chance for developing conditions such as high blood pressure or depression. If you already have medical problems, stress may make them worse. If stress is causing you to have any medical problems, it's suggested that you talk to your healthcare provider. More information about stress during pregnancy and breastfeeding can be found in our fact sheet.

## COVID-19

As crowds gather, it's important to practice social distancing and other safety techniques to prevent the spread of COVID-19. Please visit our MotherToBaby Fact Sheet on COVID-19 in pregnancy for recent information.

Of course, it's suggested for women who are pregnant to minimize these exposures as much as possible. However, sometimes it's unavoidable. Just know that even during these troubled times, if you have questions for us at MotherToBaby, we are here to answer them as best we can.

We're all in this together. Please be safe out there.

**Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org**.

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