

Paint

This sheet is about exposure to paint in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is paint?

In general, paint is made up of pigment particles (color) in a liquid base called the medium. There are two broad categories of paint: oil paints (oil/alkyd-based medium) or latex paints (water-based medium). Oil paints are thinned or cleaned with paint thinners including turpentine or mineral spirits. Latex paints are thinned or cleaned with soap and water. Most household paints are latex, vinyl, or acrylic compounds. Oil paints are sometimes used for trim work (such as around doors) in homes. There are many other mixtures of paints used for industry, the arts, and hobbies. Years ago, lead and mercury were used in paint.

How could I be exposed to the chemicals in paint?

Exposure to paint can happen by breathing in dust or fumes (inhalation), direct skin contact (absorption) or swallowing paint chips or dust (ingestion). Painters with high exposure by inhalation may have symptoms such as nausea, headaches, or loss of appetite. Painters with high exposure through absorption may have allergic reactions on their skin or eye irritation. Ingestion of paint can lead to stomach irritation, nausea, or vomiting. Ingesting lead-based paint is toxic.

Does the level of exposure to paint matter?

Like other exposures, the amount (level) and duration (time) are important when thinking about an increased chance for problems. However, the exact level of paint exposure is usually not known. In general, an ongoing exposure through a work setting would likely give a higher total exposure than a one-time household exposure. Smell is not a good measure of the level of exposure.

Does exposure to paint increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. It is not known if paint exposure increases the chance of miscarriage. Household painting with proper safety precautions is expected to result in a low level of exposure and is not likely to increase the risks to a pregnancy. As there can be many causes of miscarriage, it is hard to know if workplace exposure or other factors are the cause of a miscarriage.

Does using paint increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. It is not known if paint exposure increases the chance of birth defects above the background risk. Household painting with proper safety precautions is expected to result in a low level of exposure and is not likely to increase the risks to a pregnancy.

Does using paint increase the chance of other pregnancy-related problems?

It is not known if paint can cause other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

There have been reports of babies born with problems after prenatal exposure to toluene-containing paint. In these cases, the people who were pregnant were breathing in the paint on purpose to get a high feeling. Toluene is a type of solvent used to thin paint. These babies were sometimes born preterm and had low birth weight, a small head size (microcephaly), and facial features similar to children exposed to alcohol during pregnancy. These children also had developmental delays. In these cases, the people who were pregnant were exposed to very high amounts of toluene (higher exposure than a hobby or professional painter would likely have).

What precautions should I take if I paint a room in my house?

Consider having someone else do the painting for you. If you do plan to paint, reduce your exposure by:

- Reading the product label and following all handling instructions for painting, cleaning, and storing.
- Working in a well-ventilated (fresh air) area with open windows and doors. Use fans in windows to help move air. After painting, ventilate the room for another 2 to 3 days, and limit your time in this area.
- Wear protective clothing such as gloves and long sleeves to cover your skin. If painting is part of your job, talk to your safety officer about wearing a respirator mask that filters vapors from paints and thinners.
- Not eating or drinking while painting.
- Washing your hands well after painting.

Walls, windows, or other surfaces may contain lead paint, especially in older homes. Be careful of exposure even if you are not preparing the walls. The dust you inhale may contain lead. The Environmental Protection Agency (EPA) has a booklet with healthy tips for indoor painting at: <https://www.cpsc.gov/s3fs-public/painting.pdf>.

I work as a painter. Can my work increase the chance of birth defects or other pregnancy-related problems?

Organic solvents are ingredients in paint that have been the most studied during pregnancy. However, the term “organic solvents” is used to describe many different chemicals, so it’s hard to know which exact chemical(s) may increase the chance of problems in a pregnancy. These studies usually combine the outcomes of pregnancies of painters, printers, chemists, factory workers, and laboratory technicians, all with different chemical exposures. Some of these studies suggest a possible small increased chance of miscarriage and/or birth defects, while other studies show no higher chance for these problems.

Even among professional painters, exposure levels will vary greatly based on paints and cleaners used, ventilation, wall preparation, protective gear used, handling and storage, and amount of time working. While there is no clear concern for painters, lowering chemical and fume exposure makes sense for both adult and pregnancy health. Each product has specific safety precautions on the label. An occupational health specialist or industrial hygienist may be able to offer specific ways to reduce your chemical exposure at work. More information and some safety tips for working around chemicals can be found at: <https://mothertobaby.org/fact-sheets/reproductive-hazards-workplace/>.

I live in an old home, and I am concerned about lead paint.

The U.S. Federal Government banned lead-based paint from housing in 1978. However, lead-based paint may still be present in older homes. Paint chips can be tested for lead. People who are pregnant should not remove old paint. Do not scrape, sand, or burn old paint because this puts higher concentrations of heavy metals (like lead), solvents, and other chemicals into the air.

If you need to remove lead paint from your home, have it done by someone who is certified in lead removal. Stay away from the area until the project is done, and the area is properly cleaned. For more information on lead, please see the MotherToBaby fact sheet at <https://mothertobaby.org/pregnancy-breastfeeding-exposures/lead/>.

Breastfeeding and painting:

Little is known about exposure to paint during breastfeeding. However, it is unlikely that low-level paint exposure would be a problem for a nursing child. Be sure to talk to your healthcare provider about your breastfeeding questions.

If a male is exposed to paint, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

It is not known if paint could affect male fertility or increase the chance of birth defects above the background risk. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

Please click [here](#) for references.

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://www.MotherToBaby.org).

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