Paint

This sheet is about exposure to paint in pregnancy and while breastfeeding. This information is based on available research studies. It 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) and 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. In the past, lead and mercury were used in paint.

How could I be exposed to the chemicals in paint and what symptoms could they cause?

Exposure to paint can happen by breathing in dust or fumes (inhalation), direct skin contact (absorption) or swallowing paint chips or dust (ingestion). Painting in an area with poor or no ventilation (movement of fresh air around a closed space) for long periods of time could cause symptoms such as nausea, headaches, or loss of appetite. Some people might have allergic skin reactions or eye irritation. Ingestion of paint can lead to stomach irritation, nausea, or vomiting. Ingesting lead-based paint is toxic. 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, ongoing exposure through a work setting would likely give higher total exposure than one-time household exposure. Smell is not a good measure of the level of exposure.

Does using paint increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Household painting with proper safety precautions is expected to result in a low level of exposure and is not likely to increase the chance of miscarriage.

Does using paint increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like paint, might increase the chance of birth defects in a pregnancy. It is not known if paint exposure can increase the chance of birth defects. Household painting with proper safety precautions is expected to result in a low level of exposure and is not likely to increase the chance of birth defects.

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

It is not known if paint can increase the chance of 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).

Misusing paint (huffing):

Inhaling fumes from household substances to experience a “high” is called huffing. Some people huff paint or thinner containing toluene (a clear liquid with a unique smell that is used in making paints, paint thinners, and other products). There are older reports of babies born with problems after prenatal exposure to toluene-containing paint. In these cases, pregnant women were pregnant were directly huffing paint. Some of these babies were 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 pregnant women were exposed to very high amounts of toluene and a much higher exposure than a hobby, painting a room in the home, or a professional painter would likely have.

How can I protect myself when painting?

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

- Selecting the correct paint, such as using paint for indoors only when painting a room in your house.
- 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 the air move. After painting, ventilate the room for another 2 to 3 days, and limit your time in this area.
- Wearing protective clothing such as long sleeves to cover your skin as well as gloves. 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.

The Environmental Protection Agency (EPA) has a booklet with healthy tips for indoor painting at: https://www.cpsc.gov/s3fs-public/painting.pdf.

Walls, windows, or other surfaces might contain lead paint, especially in older homes. Be careful of exposure even if you are not preparing the walls. The dust you inhale might contain lead. MotherToBaby has a fact sheet on lead here: https://mothertobaby.org/fact-sheets/lead-pregnancy/.

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

Studies looking at professional painters have mixed results. These studies usually combine the outcomes of pregnancies of painters, printers, chemists, factory workers, and laboratory technicians, all with different chemical exposures. No consistent pattern of birth defects or increased chance of pregnancy complications has been reported.

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 might be able to offer specific ways to reduce your chemical exposure at work. More information and 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 might still be present in older homes. Paint chips can be tested for lead. Women 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/fact-sheets/lead-pregnancy/.

Breastfeeding:

Exposure to paint during breastfeeding has not been well-studied. However, it is unlikely that low-level paint exposure in the breastfeeding woman would cause side effects in a nursing child. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man is exposed to paint, can it affect fertility or increase the chance of birth defects?

It is not known if paint could affect a man's fertility (ability to get a woman pregnant) or increase the chance of birth defects. In general, exposures that men 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.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, November 1, 2024.