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. This sheet talks about some of the general exposures present in nail salon work settings and outlines some resources available to help create a safe work environment. This information should not take the place of medical care and advice from your health care provider.

What types of hazards might be at my workplace?

In general, possible hazards that nail care workers might face include chemicals, dust, bacteria, fungus, and sitting for a long time. Just because you work around a possible hazard, it does not mean that you actually have levels of exposure that would cause a problem for you or a pregnancy. There are things that you can do to reduce possible exposures that can help you have a healthy pregnancy and continue to work.

What kinds of chemicals could I possibly be exposed to when I do my job?

Nail polish and nail polish remover can contain phthalates and solvents (solvents break down pigments and glues). Acetone and toluene are commonly used solvents. Artificial nails can expose workers in the area to acrylic resin, methacrylate products, gel acrylic, and plasticizers (such as dibutyl phthalates). Artificial nail removers might contain acetonitrile. Formaldehyde gas can be released into the air when using some nail salon products. Disinfecting chemicals are also used to clean tools and soaking tubs.

All salons are different, the amount of contact you have with chemicals can be different among workers depending on the type of artificial nails and other beauty services your salon offers, hours you work and the type of ventilation or air system in your workplace.

How can I learn about the chemicals in the products that I work with in my salon?

To learn more about the specific chemicals that you work with ask your employer for the Material Safety Data Sheets (MSDS) for each product that you use. Some MSDS are also available online.

The salon where I work has a strong smell. Does that mean I have high levels of exposure?

No. Nail salons often have a chemical smell. Most chemicals can be smelled long before they would cause a problem for the worker. For this reason, chemical odor cannot be used to determine if you have had an exposure that may be of concern.

Some small air quality studies in nail salons have found that most chemical concentrations found in the air were below the recommended occupational exposure limits. Occupational exposure limits are established to keep working adults healthy and this is reassuring. However, many of these air monitoring studies have noticed formaldehyde levels higher than recommended for a workers respiratory health. Methyl methacrylate has also been measured in the air of nail salons.

If you feel ill (headaches, nausea, dizzy or “drunk”) while working in your salon, you should move to an area with fresh air and work with your employer to find ways to reduce levels of chemicals in the air where you work. If you are feeling sick while at work but not when you are in other places, this could be a warning sign that solvent levels in the air at your nail salon might be high.

Do I only need to worry about fumes from the products I work with?

No. There are a few ways that you can be exposed to chemicals. You can breathe in fumes or vapors of chemicals when you or your co-workers use products. When artificial nails are filed you can breathe in the dust which
contains chemicals. You can also be exposed through your skin when you are applying products. If you eat or drink while using these materials you could also accidentally get them into your mouth.

**Will working in a nail salon increase my risk for miscarriage?**
Possibly, if you are exposed to high levels of chemicals. Some studies on organic solvents and formaldehyde have suggested a risk for miscarriage for workers with high levels of exposure. However, studies looking particularly at nail salon workers have not noticed a high risk for miscarriage. Using proper protection and working in a ventilated space will help to keep exposures low.

**Will working in a nail salon increase my risk for birth defects?**
This is unlikely if you are following proper safety procedures and exposures are low. Some studies on solvents and chemical have suggested a greater chance for birth defects with high levels of exposure. Studies among women who abuse toluene (sniffing the fumes to get “high”) found effects similar to someone who abused alcohol in their pregnancy. Studies on formaldehyde have not noticed an increased risk for birth defects. Studies looking specifically at workers in nail salons have not found an increased risk of birth defects in their children.

**Can working in a nail salon cause other complications for me or my baby?**
Possibly. Some products that you work with might cause allergy symptoms, asthma, or skin reactions. Some studies have also reported that workers in salons may be more likely to experience premature rupture of membranes (when the fluid around the baby in the womb leaks out). Some studies have also found a higher chance to develop high blood pressure. One study among Vietnamese women working in nails salons showed a greater chance to have babies that were smaller than expected. Your health care provider can help to monitor your pregnancy for potential problems.

**I work long hours. Can being in an awkward position for long periods of time cause any problems to my pregnancy?**
This is unlikely. As your body changes in your pregnancy, you may start to feel more uncomfortable staying in certain positions. Take some time to gently stretch or move around while you are at work.

**What if the father of the baby works in a nail salon?**
In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at: https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

**Is there anything I can do to reduce my exposures as a nail technician?**
Yes. There are ways to keep your workplace as safe as possible. These measures will help all workers, even if they are not pregnant or planning a pregnancy.

- Wash hands before and after each client.
- Always throw disposable gloves away as soon as you take them off.
- Wear gloves and dust masks that are designed to work with the chemicals that you use. Not all gloves or dust masks work for all exposures. In addition, gloves never offer a perfect barrier, so wash hands every time you take off your gloves. Discuss what is appropriate for you with your employer, your health care provider, or an industrial hygienist (a person who is trained in protective gear and equipment to make work sites as safe as possible).
- Do not eat or drink in your work area.
- If a person is bleeding, do not touch their blood. Ask that person to use a cotton ball or tissue to stop the bleeding and then have them throw it into the trash, and have them put a bandage over the cut.
- Use trash cans that have lids.
- Keep all bottles and containers tightly closed with their proper lids and caps when not in use.
- Clean and disinfect tools and foot basins after each client as required by your state’s cosmetology board.
- Get fresh air into your salon (ventilation). This can be done by: having doors and windows open; using any ceiling vents or exhaust systems (always have them on); or if there is no exhaust system then keep the fan heating, ventilation, and air conditioning (HVAC) system on during work hours (not on “auto”).
- Your work can install manicure tables that have a built in ventilation system to draw fumes away from you. Make sure they are always turned on. Change the charcoal filters at least once a month. Clean out the catch basin at least once a week. Or follow the specific maintenance schedule that comes with your particular ventilation tables.
- When possible use products with the least amount of chemicals. Replace products that can release formaldehyde into the air.
Read product labels and their MSDSs. Follow the manufacturers’ instructions on how to use, store and dispose of the products.

Discuss your immunizations (shots that can help to protect you from getting some diseases) with your health care provider. There are some that may be helpful, such as hepatitis B immunization.

MotherToBaby has a general fact sheet on occupational exposures and ways to reduce potential exposures at https://mothertobaby.org/fact-sheets/reproductive-hazards-workplace/pdf/. Your worksite should provide MSDS on all chemicals and proper personal protection for all parts of your job. Be certain to use them, even when not pregnant.

The Occupational Safety and Health Administration (OSHA) has a booklet on how to stay safe while working in a nail salon that is available to read in English, Spanish, Vietnamese, Korean, and Nepali on OSHA’s website at this link: https://www.osha.gov/SLTC/nailsalons/. If you do not have access to a computer, your health care provider or a public library may be able to help you get a copy.

Who can I contact for more information?

If you have specific concerns regarding your work site discuss them with your health care provider or call MotherToBaby with your specific questions. In addition you or your employer can contact a local industrial hygienist at https://www.aiha.org/about-ih/Pages/Find-an-Industrial-Hygienist.aspx to have your work site evaluated for ways to make your work site as safe as possible. Small businesses can also contact OSHA’s on-site consultation services to help determine whether there are hazards at their worksite: 1-800-321-OSHA (6742) and press number 4.

Some web resources:

- National Institute for Occupational Safety and Health (NIOSH): http://www.cdc.gov/niosh/
- NIOSH – The Effects of Workplace Hazards on Female Reproductive Health: http://www.cdc.gov/niosh/docs/99-104/
- OSHA Nail Salon Safety and Health: https://www.osha.gov/SLTC/nailsalons/
- Office of Women’s Health at the US Food and Drug Administration (FDA): http://www.fda.gov/womens/default.html
- The Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/