New Year, New Job: Working Safely while Pregnant or Breastfeeding

By Ginger Nichols, Licensed Certified Genetic Counselor at MotherToBaby Connecticut

The New Year often brings thoughts of finding a new job. Even those happy in their current occupations often use the New Year to jump start career advancements. If you are thinking about a pregnancy, or you are already pregnant or breastfeeding, chances are you have also started to think more about potential exposures that might be of concern.

As a prenatal genetic counselor, I have noticed a common trend among working women. Many women do not worry very much about potential work hazards when first starting their careers. However, once they start to plan a pregnancy or find out that they are pregnant, many women call to ask about job safety. With a new life is on their minds, many women start to view their environment more critically.

For those of you planning a pregnancy, now is a great time to ask your questions about workplace safety with your healthcare providers or to contact a MotherToBaby specialist. Researching possible occupational exposures prior to pregnancy can allow time to decide if extra safety measures should be considered. Don't forget to think about occupational exposures that your partner might be facing.

Occupational hazards can include:

- chemicals,
- metals,
- anesthetic gases,
- ionizing radiation,
- loud noise,
- extreme heat or extreme cold,
- strenuous physical exertion,
- repetitive movements,
- whole body vibration,
- infectious agents (viruses, diseases),
- injury,
- emotional stress and
- changing shift rotations.

In general, exposures can happen through: inhaling substances (e.g., breathing a gas, powder, dust or vapor into your lungs), absorption through skin, or ingestion (i.e., eating or drinking).

Sometimes, workers carry hazardous substances (dust, powder, chemicals, metal flakes) home on their shoes or clothing. This is one of the reasons that it is also important talk to your partner or other adults living in your home about their workplace.

While the list of potential hazards looks long, we should remember that just because we work around a potential hazard, it does not mean that we are actually exposed to the hazard. More importantly, employment has generally been considered beneficial for maternal health and birth outcomes. This is due to the financial and social benefits of working, and some call it the "healthy worker effect". Most of the health problems that have been associated with workplace exposures do not affect our ability to get pregnant or to carry a healthy pregnancy to term.

The United States Department of Labor's Occupational Safety and Health Administration (OSHA) requires employers (your bosses) to make the workplace safe for their workers. But, workplace safety measures were mainly created with

adults (men and non-pregnant women) in mind; not a developing baby. In addition, workplace hazards that might affect a pregnancy are difficult to research. Therefore, your healthcare providers might not always know how a true exposure could affect a pregnancy. However, by following proper safety procedures, workplace exposures will likely be kept below levels that would affect your health or a pregnancy.

What should I be ready to discuss if I am worried about possible exposures at my workplace?

- Employer/Job title
- How long you've been working there
- Description of job tasks, during and prior to pregnancy
- Exposures that you are worried about
- Personal protective equipment used (such as gloves, gowns, masks, or eyewear)
- Ventilation at the work site (e.g., are there Hoods? Air Handlers? Fans? Windows that can open?)
- Eating or drinking at the work site (e.g., do you store your food in an area that is designated only for that purpose?)
- Any health symptoms in you or coworkers
- Any reports available, such as blood lead levels, air quality reports, or water report.
    - Sometimes an industrial hygienist will come to a work site to visually look at the work place or to take test samples (air, water, surfaces) for contamination.
- For those who work around chemicals, they may ask about Safety Data Sheets (more on these below).
- Other jobs/hobbies during pregnancy

What are Safety Data Sheets?

The best way to find out what chemicals are in the product(s) you use at work, or products that are used around you, is to get a copy of the Safety Data Sheets (SDS) (previously called Material Safety Data Sheets, or MSDS). SDS are prepared by chemical manufacturers and outline information on the product. Your workplace is required to have the SDS readily available to workers for all hazardous chemicals used at a worksite. Most SDS / MSDS can also be downloaded from the internet.

Along with listing hazardous ingredients, the SDS will talk about how to handle and store the product. The sheet should also talk about any specific recommendations for PPE and how to clean a spill or how to apply immediate first aid in case of accidental exposure.

Sometimes, a hazardous ingredient may be listed as "trade secret" or "proprietary formulation". One can try to learn more about the chemicals in the proprietary formulation by contacting the manufacturer at the address or telephone number listed on the SDS. If a product contains no hazardous ingredients, it will be listed as such.

Along with a list of ingredients considered hazardous, the SDS may also discuss allowable levels of exposure. You may have heard of these limits by the terms: the Threshold Limit Value (TLV) or Permissible Exposure Limit (PEL). TLVs and PELs are limits for the maximum exposure allowed in the workplace. Industrial hygienists can perform workplace assessments to determine if there are exposures that are above allowable levels. These limits are designed to minimize health effects in nonpregnant workers. So it cannot be assumed that exposure levels below the TLV or PEL will be safe for a pregnant woman and/or her fetus.

What kind of safety protection can be used?

All work places should provide the proper personal protective equipment (PPE) for handling and working around hazardous situations. Some examples of PPE include gloves, shoes, aprons, gowns, ear protection, masks, and/or ventilation such as hoods and air filters.

- Use the PPE that is recommended for your job.
- Use PPE at all times, not just when pregnant.
- Keep your training on how to properly use the PPE up to date.

- Make sure hoods, respirators, and other equipment are working properly.
- If you wear PPE (such as a respirator), be sure it fits correctly. And keep in mind: as a woman's body changes during pregnancy, PPE may need to be re-fitted.
- If you wear a respirator, remember that respirators are not a substitute for appropriate permanent exhaust ventilation (such as fume hoods, exhaust ducts and/or exhaust fans). Respirators are designed to be used only for a short period of time.
- If the right PPE is not currently at your worksite, ask your employer about getting it.

Consider talking with an occupational health specialist or industrial hygienist who may be able to provide information that is specific to your workplace.

How can I learn more about ways to reduce my exposure to potential hazards in my workplace?

MotherToBaby has a fact sheet that discusses general tips on working safely called Reproductive Hazards of the Workplace. There are some other fact sheets on specific occupational exposures, such as infectious diseases, lead, paint, and pesticides. There are also specific workplace sheets that look at working in a veterinary setting, in a nail salon, and for those who work with x-ray machines. Our entire library of fact sheets can be accessed by visiting https://mothertobaby.org/fact-sheets-parent/.

You can also contact an industrial hygienist or occupational medicine specialist. Try looking for them at a local medical university or through the American Industrial Hygiene Association: https://www.aiha.org/about-ih/Pages/Find-an-Industrial-Hygienist.aspx. Industrial hygienists should be able to provide an independent assessment on ways to improve the safety of your job, if needed, and may be able to give advice on how to work with employers in implementing these changes. The National Institute for Occupational Safety and Health (NIOSH) has a free service called Health Hazard Evaluation (HHE), which can provide you or your employer advice about health hazards that might be in your workplace and can offer tips on how to make your workplace safer. To learn more, visit the NIOSH website at: https://www.cdc.gov/niosh/hhe/.

Happy New Year, New Job, and New Baby.

Ginger Nichols is a licensed certified genetic counselor based in Farmington, Connecticut. She currently works for MotherToBaby CT, which is housed at UCONN Health in the Division of Human Genetics, Department of Genetics and Genome Sciences. She obtained her Bachelor of Science degree in Biology and Sociology from Juniata College and her Master's Degree in Medical Genetics from the University of Cincinnati. She has a special interest in occupational and environmental exposures.

About MotherToBaby

MotherToBaby is a service of the Organization of Teratology Information Specialists (OTIS), suggested resources by many agencies including the Centers for Disease Control and Prevention (CDC). If you have questions about exposures during pregnancy and breastfeeding, please call MotherToBaby toll-FREE at 866-626-6847 or try out MotherToBaby's new text information service by texting questions to (855) 999-3525. You can also visit MotherToBaby.org to browse a library of fact sheets about dozens of viruses, medications, vaccines, alcohol, diseases, or other exposures during pregnancy and breastfeeding or

connect with all of our resources by downloading the new MotherToBaby free app, available on Android and iOS markets.

Selected References:

Feinberg JS & Kelley CR (1998) Pregnant Workers: A Physician's Guide to Assessing Safe Employment; West J Med; 168(2): 86-92.

Frazier L & Hage M (1998) Reproductive Hazards of the Workplace. New York: Van Nostrand Reinhold.

Frazier L, Jones T (2000) Managing Patients with Concerns About Workplace Reproductive Hazards. JAMWA 55(2): 80-84.

The American College of Obstetrics and Gynecology (ACOG). 2017. Committee Opinion Number 313. The Importance of Preconception Care in the Continuum of Women's Health Care. Available at: https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/The-Importance-of-Preconception-Care-in-the-Continuum-of-Womens-Health-Care

The Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH). REPRODUCTIVE HEALTH AND THE WORKPLACE. https://www.cdc.gov/niosh/topics/repro/healthcare.html

The United States Department of Labor's Occupational Safety and Health Administration (OSHA). Employer Responsibilities. Available at: https://www.osha.gov/as/opa/worker/employer-responsibility.html

The United States Department of Labor's Occupational Safety and Health Administration (OSHA). Hazard Communication Safety Data Sheets: https://www.osha.gov/Publications/HazComm_QuickCard_SafetyData.html

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, February 6, 2018.