



### **Working in a CR while pregnant**

If you are pregnant, or planning a pregnancy, exposure to some chemicals existing in the clean room may harm your baby, especially during the first trimester of pregnancy. Some chemicals can cause miscarriage, slow down the growth of the baby, or cause birth defects when they reach your blood stream. Working with strong acids, strong bases, or other strongly irritating chemicals is typically not likely to harm your baby. These are strong irritants which react with the first tissue they contact - the eyes, nose, throat, or skin. Even in the case of an exposure, very little amount of these chemicals enters the bloodstream itself. In other cases, exposures are too brief or too small to create a hazard. During the last six months of pregnancy, exposures to harmful chemicals can slow down the growth of the baby or affect brain development, but are less likely to cause physical birth defects. Because you may not know that you are pregnant during the first three months, *it is important to find out about workplace hazards before you get pregnant.* You should get more information about the chemicals you use by familiarizing yourself with the MSDS. Links to various chemicals MSDS can be found on the MNCF website and as a hard copy in a binder at the entrance to both clean rooms.

**Information you need to find out and share with your doctor, or other health professional:**

**1. What chemicals you use.**

Some chemicals can harm your baby, but many cannot.

**2. How much, how often, and how long you are exposed to these chemicals.**

In general, the less you are exposed, the less chance that you or your baby will be affected.

**3. Whether the chemical gets into your body and reaches the baby.**

To harm your baby, a chemical must get into your body, be absorbed into your blood, and reach the baby. Chemicals can enter your body through the air you breathe, through contact with your skin, or through your digestive system if you accidentally swallow them. Your baby is exposed if the chemical passes from your blood, through the placenta, to it.

Some chemicals can be absorbed into the blood stream and can be harmful to the baby. Because there are so many considerations involved, it is not possible to list all the chemicals that



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can be harmful to pregnancy but typically you should pay more attention to solvents such as Ethylene Glycole. It may be a good idea to do less photolithography processing and to get the assistance of a staff member during the first three months of pregnancy. Get assistance when you need to fill chemical dispensers.

Even when you know what chemicals you work with, and how much you are exposed to **the best way to protect yourself and your unborn baby is to keep your exposure to all chemicals as low as possible.**

Exposure to hazardous chemicals can be reduced in several ways:

1. Replace hazardous chemicals with safer ones.
2. Use safe work practices:
  - 2.1. Store chemicals in sealed containers when not in use. Do not eat, drink, or smoke in the clean room. Avoid skin contact with chemicals. If chemicals are spilled on you, change out of contaminated clothing and wash yourself with soap and water using the emergency showers.
  - 2.2. Ventilation – work only in a fume hood! Do not use chemicals outside the hood.
  - 2.3 Use of personal protective equipment according to clean room safety guidelines

**For More Information on Hazards to Pregnancy from Specific Chemicals contact “The Tetrological Center, Israel”:**  
[http://www.health.gov.il/Subjects/pregnancy/health\\_centers/Pages/Tartology.aspx](http://www.health.gov.il/Subjects/pregnancy/health_centers/Pages/Tartology.aspx)

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**References:** The department of health services in CA website.