

## **Occupational Causes of Infertility – The Deadly 13**

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<https://natural-fertility-prescription.com/major-causes-of-infertility/>

When we speak of causes of infertility we rarely think about our jobs. Being a stunt man or a cliff diver or an extreme sport professional can be dangerous for life. People in those occupations are aware of the dangers and do it for love.

However there are many other occupations we may do for love or out of necessity which are dangerous to your health without you being aware of this.

Stress is a big contributor to infertility and one could argue that all jobs pose a degree of stress and are as such detrimental to ones fertility. However the difference between positive and negative stress needs to be pointed out. ‘Butterflies in the stomach’ are a symptom of positive stress. Positive stress is also called eustress - a term coined by endocrinologist Hans Selye. This type of excitement is often confused with the negative stress also known as the fight or flight reaction.

As your body is preparing to fight or run away from what it perceives as danger, it needs to quickly divert energy from the systems which will not need it such as the digestive system and the immune system, to the systems that will need it such as your brain and the muscles. Food and viruses are of no importance if you come across a grizzly bear on your leisurely Sunday afternoon walk though the forest. When we can't digest food properly we can't absorb the nutrients needed for optimal fertility.

In addition to stress which accompanies many jobs and careers there are certain occupations which expose one to toxic chemicals shown to be detrimental to fertility and as such can be added to the list of possible causes of infertility.

### **Occupational Causes of Infertility - The Deadly 13**

1. Agrochemical Industry incl. non-organic farmers
2. Ammunition Manufacturing
3. Clothing Industry
4. Commercial Cleaning Solution Manufacturers
5. Cosmetic Industry
6. Health care professionals working with organic solvents incl. dental workers
7. Laboratory workers

8. Metal workers
9. Ore metal smelting workers
10. Paint and Ink Industry incl. painters and artists
11. Plastic Industry
12. Textile Industry
13. Welders

### **What do these industries have in common?**

They all use chemicals and substances shown to negatively impact fertility. They are also known as Endocrine Disruptors – ED's. ED's are substances which interfere and disrupt production, secretion, transportation, action and elimination of the body's own hormones, leading to dangerous imbalances in the body and infertility.

### **They are:**

- Phthalates
- Bisphenol A
- Organochlorines (OCs) and their metabolites
- Glycol Ether
- Organic solvents
- Heavy Metals

### **Phthalates**

Phthalates are found in toys, perfumes, food packaging, cosmetics, blood storage bags and medications.

They are used as solvents, lubricants and plasticizers, giving plastic its flexible characteristic. People who work in the plastic industry frequently come into contact with phthalates as they can be inhaled, absorbed through the skin and ingested with food and water. Phthalates don't actually bind to plastic which makes it easy for them to leach out.

### **Bisphenol A**

Bisphenol A is found in the coating of the tins, milk containers, re-usable water bottles, dental material and baby formula bottles. Bisphenol A is an estrogen mimicker but with a stronger effect on the body that

the endogenous – ‘home made’ estrogen. Exposure to bisphenol is associated with recurrent miscarriages and increase incidence of autoimmune diseases.

### **Organochloride Compounds**

Organochlorines are found in pesticides (DDT and it’s metabolites, methoxychlor and lindane). They are airborne and mostly consumed with non organic animal products, fruit and vegetables and tap water. Pesticides have been associated with infertility in men and women and miscarriages.

### **Glycol Ether**

Glycol Ether is used in surface coating, printing ink, cleaners, cosmetics, water-based paints and agrochemical industry. Exposure to glycol ether can lead to poor sperm motility – ability to swim forward.

### **Organic Solvents**

Studies show that people working with organic solvents experience increased time to pregnancy, increased risk of miscarriage and a 13-fold risk of major malformations. Workers in the labs, paint, plastic, clothing and textile industries are at the highest risk of being exposed to organic solvents.

### **Heavy Metals**

People working as painters, artists, welders and metal workers have the highest exposure to heavy metals. In men exposure to heavy metals can lead to decreased formation of new sperm (spermatogenesis), testicular damage, and altered testosterone secretion. In women exposure to heavy metals in particular lead can lead to spontaneous abortions and still births. Lead can cross the placenta and damage the foetus. Dental workers are exposed to mercury when working with amalgam. Mercury exposure has been linked to spontaneous abortions and reduced fertility.

### **What to do if you are working in one of these industries and are experiencing difficulties conceiving or carrying a baby to full term?**

- Get yourself tested for heavy metals, bisphenol A, organic solvents and organochloride compounds. If the tests are positive speak to your employer and show them the test results.
- Ask to be given a different role where you won’t be coming into contact with EDs during chelation therapy and preconception time (pregnancy and breast feeding for women).
- Your employer needs to protect the workers and it’s their OHS (occupational health and safety) duty to comply.
- Raise the issue with your HR and OHS department if your boss won’t help you. If your company won’t help you go higher up in the chain and raise the issue with worker’s unions and the press. It’s likely that you are not the only one affected by this problem and you will find support.

- Tell others; share this information with your family, friends and colleagues at work.
- If you are an artist, go on a sabbatical from painting while you are preparing for your pregnancy, during pregnancy and breastfeeding or look into painting with environmentally and fertility friendly paints.
- And if you can't make any of the above changes wear a face mask, gloves and eye protection at work or change jobs.

As you have seen, your job may well be added to the possible list of causes of infertility, and as such if you do work in one of the above industries, you should take this factor into consideration. What industry do you work in? Do you think your job may be negatively impacting your fertility? I'd love to hear your thoughts on this!