Ellen from Modesto is the caretaker for Sassy a four-year-old tabby cat that Ellen loves dearly. Ellen is also pregnant and has concerns about being pregnant and living with a cat. Sassy is entirely indoors and spends a lot of time in close proximity to Ellen. She has heard without much detail about problems that can occur to babies because of the mother's exposure to cats during their pregnancy and would like to understand these potential problems and the risks there may be for her baby.

There is a disease process called feline toxoplasmosis that has been implicated in disease in people. I will outline this process in some detail to hopefully help clarify it and to help you understand the risks, if any, involved.

Feline toxoplasmosis is caused by a protozoal agent called <u>Toxoplasma gondii</u>. This organism lives in members of the cat family including domestic cats, where it reproduces in the small intestine and sheds its offspring, called oocysts, in the feces. There is also a part of the life cycle where the organism disseminates throughout the body becoming encysted within various body tissues. This encysted form can occur in other types of animals including fish, amphibians, reptiles, birds, and other mammals including humans. These other hosts are called intermediate hosts because the organism does not have its reproduction in these hosts. The reproductive host is the cat and they are considered the definitive host. I realize this may be more than you want to know but it truly is important in order to understand this disease and how it can relate to sharing your life with a fabulous feline or two.

Cats become infected by contact and ingestion of the oocysts shed from the feces of an infected cat or by eating an intermediate host with the cysts within its tissue. About 50% of the cats that are exposed will actually shed out the oocytes in their feces. Infected cats can have symptoms including coughing, difficulty breathing, changes in the eyes including redness and evidence of eye pain, seizures, muscle and joint pain and the list goes on. These symptoms relate to where the cysts show up in the cat's body. The disease is treatable in cats and these cats generally do well.

Human exposure to this disease from cats is very unlikely. First of all cats, that are infected with this organism will shed the oocysts in their feces only during one time period, a few days to a few weeks, once in their life. These oocysts must undergo a process called sporulation before they can become infectious to people and this process does not occur in fresh feces. Cats are very fastidious and do not allow feces to remain on their skin long enough for the oocysts to become infective. Due to the short shedding period and the very low chance of exposure to infective oocysts, it is likely unnecessary to remove companion cats from the household of pregnant women. There has also been concern expressed with cats shedding this disease in households with immune compromised people. For the reasons listed above, this too is unlikely to be necessary.

The reason that pregnant women are considered at risk for toxoplamosis is because of the encysted form of the organism invading the developing baby. This can cause damage to tissues and problems for the baby as a result. This subject is not in my realm of expertise and is best left to discussion with your physician.

Exposure to <u>Toxoplasma</u> in people is more likely to occur from working with contaminated soil or drinking contaminated water. These oocysts can live in the environment for long periods of time.

To avoid any exposure to this organism, high risk people should avoid feeding their cats anything but cat food. Do not allow cats to hunt. Clean the litterbox daily; remember that fresh feces are not infective. Pregnant women best avoid cleaning the litter box. That is what their partners are for! Using a litterbox liner can be very helpful. Wear gloves when working in the soil. Keep children's sandboxes covered to avoid their use by stray cats for defecation. Do not drink water from potentially tainted sources. Following these simple recommendations should eliminate any chance of contact with this organism and thus avoid any disease it might cause.