

Your Full Name: _____ Spouse's Name: _____

Address(es) of Possible TCE Exposure: _____

City: Maquoketa County: Jackson State: Iowa Zip: _____

How long have you lived at the above address? _____

Mailing Address (if different from above) _____

Dates of possible TCE exposure from _____ to _____

Email: _____ Preferred Phone #: _____

Date of Birth: _____ Age: _____

Occupation: _____

Any known work exposure to dangerous chemicals: _____

Ht: _____ Wt: _____ Use tobacco? _____ Type: _____ Qty: _____

Family history of Cancer/Leukemia? _____

Other significant family med history: _____

Have you had any of the following (Y/N): Developmental Defects: _____

Liver Cancer: _____ Pancreatic Cancer: _____ Kidney Cancer: _____ Autoimmune Disease: _____

Non-Hodgkin's Lymphoma: _____ Brain Cancer: _____ Reproductive Issues: _____

Heart Abnormalities: _____ Other Cancers: _____ Leukemia: _____

Other Significant Diseases: _____

If any of above, Age at onset, & Date of Diagnosis: _____

If any of above, what is your current status: _____

Other Current Medical Conditions & Meds (**Use separate sheet if needed**): _____

Have you or family ever been contacted by the City, State, Feds, or anyone regarding TCE or other chemicals in your groundwater or soil, explain who, what & when: _____

Has anyone ever told you any health condition of you or family may be related to TCE or other chemical exposure explain who, what & when: _____

Has any testing for TCE or other chemicals occurred at/on your affected property, explain who, what & when: _____

What else should we know about you or family members? _____

TCE's effects on the human body

This chart shows how the body may be affected by exposure to trichlorethylene, or TCE. The chart reflects studies of people who worked with high levels of TCE, studies of rats and mice exposed to high levels of TCE and a few studies of people exposed to lower levels of TCE in drinking water. The information comes from a draft risk assessment released by the Environmental Protection Agency in 2001. After controversy erupted over its findings, the National Academy of Sciences was asked to review the report.

Exposure

Once a person is exposed to TCE – by drinking, breathing or touching the chemical – it is distributed via the circulatory system throughout the body, where it can accumulate in fat and other tissues.

Liver: TCE can be toxic to the human liver, and has been linked to increased risk of liver cancer. Mice exposed to TCE developed tumors, but rats did not.

Pancreas: A possible increased chance of pancreatic cancer has been identified.

Kidney: Workers showed signs of kidney damage. TCE was associated with increased cancer risk in some human and animal studies.

Brain: TCE was once used as an anesthetic. In short, high doses, it has a similar effect to other solvents, alcohol, ethers, petroleum distillates and other halogenated solvents. It has been associated with dizziness, headaches, sleepiness, nausea, confusion, blurred vision, and weakness in several human studies.

Lymphatic system: In humans, TCE was associated with an elevated, but not statistically significant, risk of non-Hodgkin's lymphoma. Exposure was associated with lymphoma in mice.

Immune system: TCE is linked to immune system damage and increased incidence of autoimmune diseases.

Development: There is evidence of heart abnormalities in human and animal offspring exposed in the womb. Rat pups showed heart and eye malformations and behavioral changes.

Reproductive system: Some male workers showed possible reproductive effects, like reduced sperm counts. Links have been drawn to cervical and prostate cancer.

Female reproductive organs

Male reproductive organs

Susceptibility

Besides the size and duration of the dose of TCE, several factors may influence whether people are affected by TCE after exposure. For cancer risk assessments, the EPA assumes a 150-pound adult is exposed to TCE for 24 hours a day for 30 years.

■ Some people's genetic makeup will make them more or less likely to be affected.

■ Women were more susceptible to some effects than men. Women and female rats and mice showed signs of certain immune-system related problems.

■ Children could be more affected than adults because they breathe, drink and eat more than adults, relative to their body weights.

Developing fetuses and babies can also be exposed in utero and via breast milk. One study linked higher leukemia rates to prenatal exposure to TCE.

■ Exposure to different chemicals, like other chlorinated solvents and alcohol, may increase the effects of TCE.

■ Diabetics and those with certain other illnesses may be more susceptible.

Sources: Environmental Protection Agency; Journal research

Sten Miller/Poughkeepsie Journal