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National Toxicology Program

**Draft NTP Monograph
on
Developmental Effects and Pregnancy
Outcomes Associated with Cancer
Chemotherapy Use during Pregnancy**

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Pregnancy Outcomes of Medical Personnel Exposed to Cancer Chemotherapy

Cancer Chemotherapy Use during Pregnancy



Medical Personnel Exposed to Cancer Chemotherapy

- Exposure of health care workers, including women of reproductive age, to chemotherapy agents has been documented
 - Mutagenicity of urine
 - Elevated levels of genetic biomarkers (chromosome aberrations, SCE, DNA damage)
 - Direct detection of chemotherapeutic agents in urine
- Surface contamination with chemotherapeutic agents has been documented
 - Improved handling procedures and engineering controls have reduced contamination
 - Contamination persists in some hospital-based cancer centers
- Epidemiology studies report associations between health care workers potentially exposed to chemotherapeutic agents and higher occurrences of:
 - Fetal loss, congenital malformations, and low birth weight

Charge Questions for Medical Personnel Exposed to Cancer Chemotherapy

This section of the draft NTP Monograph was developed as background material using primary and secondary sources.

1. Please comment on whether the scientific information in the text is technically correct, clearly stated, and objectively presented. Please identify any needed improvements.