

**APPENDIX A:
LIST OF COMMON HAZARDOUS DRUGS (HDS)**

This Appendix is taken verbatim from the NIOSH List of and Other Hazardous Drugs in Healthcare Settings, 2016, DHHS (NIOSH) Publication No. 2016-161 (Supersedes 2014-138). This list is not all-inclusive and represents an assessment of some, but not all, marketed drugs at a fixed point in time. No attempt to include investigational drugs was made, but they should be prudently handled as hazardous drugs until adequate information becomes available to exclude them. Any determination of the hazard status of a drug should be periodically reviewed and updated as new information becomes available. Importantly, new drugs should routinely undergo a hazard assessment. Periodic updates to the NIOSH list can be found at: <http://www.cdc.gov/niosh/topics/hazdrug>.

NIOSH GROUP 1: HAZARDOUS ANTINEOPLASTIC DRUGS				
Drug	AHFS Classification	MSHG	Reason for Listing	Links
abiraterone*	10:00 antineoplastic agents		Women who are pregnant or women who may be pregnant should not handle without protection (e.g., gloves); FDA Pregnancy Category X	DailyMed; DrugBank
adotrastuzumab emtansine	10:00 antineoplastic agents	yes	Conjugated monoclonal antibody; FDA Pregnancy Category D	DailyMed; DrugBank
afatinib	10:00 antineoplastic agents		Special warnings on contraception for females while taking and 2 weeks post-treatment; FDA Pregnancy Category D	DailyMed; DrugBank
altretamine	10:00 antineoplastic agents	yes	FDA Pregnancy category D	DailyMed; DrugBank
amsacrine	NA antineoplastic agents	yes	IARC Group 2B	DrugBank
anastrozole	10:00 antineoplastic agents		FDA Pregnancy category X	DailyMed; DrugBank
arsenic trioxide	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen**; FDA Pregnancy Category D	DailyMed; DrugBank
axitinib	10:00 antineoplastic agents		Teratogenic, embryotoxic and fetotoxic in mice at exposures lower than human exposures; FDA Pregnancy category D	DailyMed; DrugBank
azacitidine	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
Bacillus Calmette Guerin (BCG)***	80:12 vaccines	yes	See special handling requirements**; FDA Pregnancy Category C	DailyMed
Belinostat	10:00 antineoplastic agents	yes	May cause teratogenicity and/or embryo-fetal lethality because it is a genotoxic drug and targets actively dividing	DailyMed; DrugBank

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			cells; FDA Pregnancy Category D	
bendamustine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed
bexarotene	10:00 antineoplastic agents		FDA Pregnancy Category X	DailyMed; DrugBank
bacalutimide	10:00 antineoplastic agents		FDA Pregnancy Category X	DailyMed; DrugBank
bleomycin	10:00 antineoplastic agents	yes	IARC Group 2B; FDA Pregnancy Category D	DailyMed; DrugBank
bortezomib	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
bosutinib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
brentuximab vedotin	10:00 antineoplastic agents	yes	Conjugated monoclonal antibody; FDA Pregnancy Category D	DailyMed; DrugBank
busulfan	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
cabazitaxel	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
cabozantinib	10:00 antineoplastic agents		Embryolethal in rats at exposures below the recommended human dose; FDA Pregnancy category D	DailyMed; DrugBank
capecitabine	10:00 antineoplastic agents	yes	Metabolized to 5-fluoro- uracil; FDA Pregnancy Category D	DailyMed; DrugBank
carboplatin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
carfilzomib	10:00 antineoplastic agents		Special warnings on contraception while taking and 2 weeks post- treatment; FDA Pregnancy category D	DailyMed; DrugBank
carmustine	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
chlorambucil	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
cisplatin	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank

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cladribine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
clofarabine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
crizotinib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed
cyclophosphamide	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen; FDA Pregnancy Category D	DailyMed; Drugbank
cytarabine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
dabrafenib	10:00 antineoplastic agents		Special warnings on contraception for females while taking and 2 weeks post-treatment; FDA Pregnancy Category D	DailyMed; DrugBank
dacarbazine	10:00 antineoplastic agents	yes	FDA Pregnancy Category C	DailyMed; Drugbank
dactinomycin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
dasatinib	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; Drugbank
daunorubicin	10:00 antineoplastic agents	yes	IARC Group 2B, AKA daunomycin; FDA Pregnancy Category D	DailyMed; Drugbank
decitabine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; Drugbank
degarelix	10:00 antineoplastic agents	yes	FDA Pregnancy Category X	DailyMed; Drugbank
docetaxel	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
doxorubicin	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
enzalutamide	10:00 antineoplastic agents		Embryo-fetal toxicity in mice at exposures that were lower than in patients receiving the recommended dose; FDA Pregnancy Category X	DailyMed; DrugBank
epirubicin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; Drugbank

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eribulin	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
erlotinib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
estramustine	10:00 antineoplastic agents	yes	FDA Pregnancy Category X	DailyMed; Drugbank
etoposide	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
everolimus	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; Drugbank
exemestane	10:00 antineoplastic agents		FDA Pregnancy Category X	DailyMed; DrugBank
floxuridine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
fludarabine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
fluorouracil	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
flutamide	10:00 antineoplastic agents		Indicated only for men; FDA Pregnancy Category D	DailyMed; DrugBank
fulvestrant	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
gemcitabine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
gemtuzumab ozogamicin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
goserelin	10:00 antineoplastic agents		FDA Pregnancy Category X	DailyMed; DrugBank
histrelin	10:00 antineoplastic agents		Can cause fetal harm when administered to a pregnant patient, with the possibility of spontaneous abortion; FDA Pregnancy Category X	DailyMed; DrugBank
hydroxyurea	10:00 antineoplastic agents	yes	Special warning on handling bottles and capsules FDA Pregnancy Category D	DailyMed; DrugBank
idarubicin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank

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ifosfamide	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
imatinib	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
irinotecan	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
ixazomib	10:00 antineoplastic agents	yes	Male and female patients of childbearing potential must use effective contraceptive measures during and for 3 months following treatment	DailyMed; DrugBank
ixabepilone	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
letrozole	10:00 antineoplastic agents		FDA pregnancy Category X	DailyMed; DrugBank
leuprolide	10:00 antineoplastic agents	yes	FDA Pregnancy Category X	DailyMed; Drugbank
lomustine	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
mechlorethamine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
megestrol	10:00 antineoplastic agents		Nursing should be discontinued if megestrol is required. Women at risk of pregnancy should avoid exposure; FDA Pregnancy Category X	DailyMed; DrugBank
melphalan	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
mercaptopurine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
methotrexate	10:00 antineoplastic agents	yes	FDA Pregnancy Category X	DailyMed; DrugBank
mitomycin	10:00 antineoplastic agents	yes	IARC Group 2B; FDA Pregnancy Category D	DailyMed; DrugBank
mitotane	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
mitoxantrone	10:00 antineoplastic agents	yes	IARC Group 2B; FDA Pregnancy Category D	DailyMed; DrugBank

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nelarabine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
nilotinib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
omacetaxin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
oxaliplatin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
paclitaxel	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
panobinostat	10:00 antineoplastic agents	yes	Special warnings on contraception for females while taking and 1 month post-treatment;	DailyMed; DrugBank
pazopanib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
pemetrexed	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
pentostatin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
pertuzumab	10:00 antineoplastic agents		Black Box warning on embryo-fetal death and birth defects; FDA Pregnancy Category D	DailyMed; DrugBank
pipobroman	NA		FDA Pregnancy Category D	DrugBank
pomalidomide	10:00 antineoplastic agents	yes	Females of reproductive potential must use two forms of contraception or continuously abstain from heterosexual sex during and for 4 weeks after stopping treatment; FDA Pregnancy Category X	DailyMed; DrugBank
ponatinib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
pralatrexate	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
procarbazine	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank

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regorafenib	10:00 antineoplastic agents		Black Box warning on severe and sometimes fatal hepatotoxicity; total loss of pregnancy at doses lower than recommended human dose; FDA Pregnancy Category D	DailyMed; DrugBank
romidepsin	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed
sorafenib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
streptozocin	10:00 antineoplastic agents	yes	IARC Group 2B; FDA Pregnancy Category D	DailyMed; DrugBank
sunitinib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
tamoxifen	10:00 antineoplastic agents		IARC Group 1 carcinogen; FDA Pregnancy Category D	tamoxifen
temozolomide	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
temsirolimus	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
teniposide	10:00 antineoplastic agents	yes	IARC Group 2A carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
thioguanine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
thiotepa	10:00 antineoplastic agents	yes	IARC Group 1 carcinogen; FDA Pregnancy Category D	DailyMed; DrugBank
topotecan	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
toremifene	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
trametinib	10:00 antineoplastic agents		Embryotoxic and abortifacient at doses less than recommended human dose; FDA Pregnancy Category D	DailyMed; DrugBank
trifluridine/tipiracil (combination only)	10:00 antineoplastic agents	yes	Embryo-fetal lethality and embryo-fetal toxicity at doses lower than or similar to exposures at the recommended human dose	DailyMed; DrugBank; DrugBank

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triptorelin	10:00 antineoplastic agents		FDA Pregnancy Category X	DailyMed
valrubicin	10:00 antineoplastic agents	yes	FDA Pregnancy Category C	DailyMed; DrugBank
vandetanib	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
vemurafenib	10:00 antineoplastic agents		FDA Pregnancy Category D	DailyMed; DrugBank
vinblastine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
vincristine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; Drugbank
vinorelbine	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; DrugBank
vismodegib	10:00 antineoplastic agents		Black Box warning on embryo-fetal death or severe birth defects; recommend effective contraception for females during therapy and for 7 months after treatment; present in semen; no sperm donation during and 3 months post-treatment; FDA Pregnancy Category D	DailyMed; DrugBank
vorinostat	10:00 antineoplastic agents	yes	FDA Pregnancy Category D	DailyMed; Drugbank
ziv-aflibercept	10:00 antineoplastic agents		Embryotoxic and teratogenic in rabbits at exposure levels lower than human exposures at the recommended dose, with increased incidences of external, visceral, and skeletal fetal malformations; FDA Pregnancy Category C	DailyMed; Drugbank

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NIOSH GROUP 2: LIST OF HAZARDOUS NON-ANTINEOPLASTIC DRUGS				
Drug	AHFS Classification	MSHG	Reason for Listing	Links
abacavir *	8:18.08.20 nucleoside and reverse transcriptase inhibitors		FDA Pregnancy Category C; malignant tumors observed in male and female mice and rats; genotoxic in <i>in vivo</i> micronucleus test.	DailyMed; DrugBank
alefacept	84:92 skin and mucous membrane agents, miscellaneous		Increased frequency of malignancies observed in treated patients; FDA Pregnancy Category B	DailyMed; DrugBank
apomorphine	28:36.20.08 Nonergot-derivative dopamine receptor agonists		FDA Pregnancy Category C; genotoxic in several <i>in vitro</i> assays.	DailyMed; DrugBank
azathioprine	92:44 immunosuppressant agents	yes	IARC Group 1 carcinogen**; FDA Pregnancy Category D***	DailyMed; DrugBank
carbamazepine	28:12:92 anticonvulsants, miscellaneous		Black Box warning for aplastic anemia; congenital malformations in offspring of mothers who took drug; rapid transplacental passage; FDA Pregnancy Category D	DailyMed; Drugbank
chloramphenicol	8:12:08 chloramphenicols		IARC Group 2A carcinogen; FDA Pregnancy Category C	DailyMed; DrugBank
cidofovir	8:18:32 nucleoside and nucleotides	yes	FDA Pregnancy Category C	DailyMed; Drugbank
cyclosporine	92:44 immunosuppressive agents		IARC Group 1 carcinogen; FDA pregnancy Category C	DailyMed; Drugbank
deferiprone	64:00 Heavy metal antagonists		Genotoxic <i>in vitro</i> and <i>in vivo</i> ; FDA Pregnancy Category D	DailyMed; DrugBank
dexrazoxane	92:56 protective agents	yes	FDA Pregnancy Category C; secondary malignancies observed in patients treated long term with Razoxane (a racemic mixture containing dexrazane); genotoxic <i>in vitro</i> and <i>in vivo</i> ; in laboratory studies, testicular atrophy	DailyMed; DrugBank

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			observed at or below the human dose	
diethylstilbestrol	NA		IARC Group 1 carcinogen; FDA Pregnancy Category X	DrugBank
divalproex	28:12:92 anticonvulsants, miscellaneous		Black Box warning for teratogenicity; FDA Pregnancy Category D; tumors seen in laboratory studies at doses below MRHD	DailyMed
entecavir	8:18:32 nucleosides and nucleotides	yes	FDA Pregnancy Category C	DailyMed; DrugBank
estradiol	68:16:04 estrogens		Black Box warning for malignant neoplasms; increased risk of endometrial cancer, breast cancer, and ovarian cancer; in laboratory studies, increased frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver; present in breast milk; FDA Pregnancy Category X	DailyMed; DrugBank
estrogen/progesterone combinations	68:12 contraceptives		IARC Group 1 carcinogen; FDA Pregnancy Category X	DailyMed
estrogens, conjugated	68:16:04 estrogens		Black Box warning for endometrial cancer and cardiovascular risks; long-term use in women and laboratory studies increases frequency of several cancers; FDA Pregnancy Category X	DailyMed
estrogens, esterified	68:16:04 estrogens		Black Box warning for endometrial cancer and cardiovascular risks: FDA Pregnancy Category X	DailyMed
estropipate	68:16:04 estrogens		Black Box warning for endometrial carcinoma in postmenopausal women and use during pregnancy; FDA Pregnancy Category X	DailyMed; DrugBank
fingolimod	92:20 biologic response modifiers		FDA Pregnancy Category C; in laboratory studies, increased	DailyMed; DrugBank

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			malformations and embryo-fetal deaths at less than the RHD; malignant lymphomas observed in male and female mice.	
fluoymesterone	68:08 androgens		Tumors in mice and rats and possibly humans; FDA Pregnancy Category X	DailyMed; DrugBank
fospheytoin	28:12.12 hydantoins		Metabolized to phenytoin; FDA Pregnancy Category D	DailyMed; DrugBank
ganciclovir	8:18:32 nucleosides and nucleotides	yes	FDA Pregnancy Category C	DailyMed; DrugBank
leflunomide	92:36 disease-modifying antirheumatic agents		Teratogenic in laboratory studies at 1/10 HD; marked postnatal survival at 1/100 HD; FDA Pregnancy Category X; severe liver injury reported in patients; carcinogenicity observed at doses below HD	DailyMed; DrugBank
lenalidomide	92:20 biologic response modulators	yes	Analog of thalidomide; FDA Black box warnings for limb abnormalities; pregnancy Category X; in laboratory studies, caused thalidomide-type limb defects in monkey offspring	DailyMed; DrugBank
liraglutide recombinant	68:20.06 incretin mimetics		FDA Pregnancy Category C; Black Box warning for thyroid C-cell tumors, with supporting evidence in laboratory studies; also in laboratory studies, teratogenic at or below the MRHD.	DailyMed; DrugBank
medroxyprogesterone acetate	68:32 progestins	yes	IARC Group 2B; FDA Pregnancy Category X	DailyMed; DrugBank
methimazole†	68:36:08 antithyroid agents		Appears in human breast milk; FDA Pregnancy Category D	DailyMed; DrugBank
mipomersen	24:06:92 antilipemic agents, miscellaneous		Black Box warning on hepatotoxicity; FDA Pregnancy Category B	DailyMed; DrugBank

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mycophenolate mofetil	92:44 immunosuppressive agents		Black Box warning for embryo fetal toxicity, malignancies and serious infections; Increased risk of first- trimester pregnancy loss and increased risk of congenital malformations; FDA Pregnancy Category D; Special warning: tablets should not be crushed and capsules should not be opened or crushed. Avoid inhalation or direct contact with skin or mucous membranes of the powder contained in capsules and oral suspension (before or after constitution). If such contact occurs, wash thoroughly with soap and water; rinse eyes with plain water.	DailyMed; DrugBank
mycophenolic acid	92:44 immunosuppressive agents		Black Box warning for first trimester pregnancy loss and an increased risk of congenital malformations; FDA Pregnancy Category D; Black Box warning for lymphomas and other malignancies; genotoxic <i>in vitro</i> and <i>in vivo</i>	DailyMed; DrugBank
nevirapine	8:18.08.16 nonnucleoside reverse transcriptase inhibitors		FDA Pregnancy Category B; in laboratory studies, hepatocellular adenomas and carcinomas at doses lower than human dose.	DailyMed; DrugBank
ospemifene	68:16:12 estrogen agonists-antagonists		Black Box warning on increased risk of endometrial cancer in certain populations; risk of adverse outcomes during pregnancy and labor; FDA Pregnancy Category X	DailyMed; DrugBank

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oxcarbazepine	28:12:92 anticonvulsants, miscellaneous		Tumors observed in laboratory studies at 1/10 MRHD; FDA Pregnancy Category C	DailyMed; Drugbank
palifermin	84:16 cell stimulants and proliferants		FDA Pregnancy Category C; potential for stimulation of tumor growth	DailyMed; Drugbank
paliperidone	28:16:08:04 atypical antipsychotics		Metabolite of risperidone; excreted in human breast milk; FDA Pregnancy Category C	DailyMed; Drugbank
phenoxybenzamine	12:16:04:04 non-selective alpha-andrenergic blocking agents		IARC Group 2B; FDA Pregnancy Category C	DailyMed; DrugBank
phenytoin	28:12.12 hydantoins		IARC 2B; FDA Pregnancy Category D	DailyMed; DrugBank
progesterone	68:32 progestins		IARC Group 2B	DailyMed; Drugbank
progestins	68:12 contraceptives		FDA Pregnancy Category X	
propylthiouracil	68:36.08 antithyroid agents		IARC 2B; FDA Pregnancy Category D	DailyMed; DrugBank
raloxifene	68:16:12 estrogen agonists-antagonists		Abortion and developmental abnormalities seen at low doses in laboratory studies; evidence of tumors at low doses in laboratory studies; FDA Pregnancy Category X	DailyMed; Drugbank
rasagiline	28:36 antiparkinsonian agents		FDA Pregnancy Category C	DailyMed; Drugbank
risperidone	28:16:08:04 atypical antipsychotics		Evidence of tumors at low doses in laboratory studies; may be prolactin-mediated; FDA Pregnancy Category C	DailyMed; DrugBank
sirolimus	92:44 immunosuppressive agents		AKA rapamycin; increased risk of lymphomas and other malignancies; embryotoxic and fetotoxic at 0.2 HD; FDA Pregnancy Category C	DailyMed; DrugBank
spironolactone	24:32.20 mineralocorticoid receptor antagonists		FDA Pregnancy Category C; black box warning for tumorigenicity in laboratory studies.	DailyMed; DrugBank

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tacrolimus	92:44 immunosuppressive agents		Increased risk of lymphomas and other malignancies; reproductive effects seen in laboratory studies below the MRHD; excreted in breast milk; FDA Pregnancy Category C	DailyMed; DrugBank
teriflunomide	92:20 immunomodulatory agents		Black Box warning on severe hepatotoxicity and teratogenicity, including major birth defects; FDA Pregnancy Category X	DailyMed; DrugBank
thalidomide	92:20 biologic response modulators	yes	FDA Pregnancy Category X	DailyMed; DrugBank
tofacitinib	92:36 disease modifying antirheumatic drugs		Black Box warning for lymphoma and other malignancies; FDA Pregnancy Category C	DailyMed; DrugBank
uracil mustard	NA	yes	FDA Pregnancy Category D	DrugBank
valganciclovir	8:18:32 nucleosides and nucleotides	yes	FDA Pregnancy Category C	DailyMed; DrugBank
zidovudine	8:18:08 antiretroviral agents		IARC Group 2B; FDA Pregnancy Category C	DailyMed; DrugBank

NIOSH GROUP 3: LIST OF HAZARDOUS NON-ANTINEOPLASTIC DRUGS THAT PRIMARILY HAVE ADVERSE REPRODUCTIVE EFFECTS			
Drug	AHFS Classification	Reason for Listing	Links
acitretin	88:04 vitamin A	Black Box warning on adverse reproductive effects; FDA Pregnancy Category X	DailyMed; DrugBank
alitretinoin	84:92 skin and mucous membrane agents, miscellaneous	FDA Pregnancy Category D	DailyMed; DrugBank
ambrisentan	24:12:92 vasodilating agents, miscellaneous	Black Box warning on adverse reproductive effects; reduced sperm counts in patients; FDA Pregnancy Category X	DailyMed;

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bosentan	24:12:92 vasodilating agents, miscellaneous	Black Box warning on adverse reproductive effects; FDA Pregnancy Category X	DailyMed; DrugBank
cabergoline	28:36:20:04 ergot-derivative dopamine receptor agonists	Inhibition of conception and embryo fetal effects at doses below recommended human dose; FDA Pregnancy Category B	DailyMed; DrugBank
cetrorelix	92:40 gonadotropin-releasing hormone antagonists	FDA Pregnancy Category X	DailyMed; DrugBank
choriogonadotropin	68:18 gonadotropins	FDA pregnancy Category X; may cause fetal harm when administered to a pregnant woman.	DailyMed; DrugBank
clomiphene*	68:16:12 estrogen agonist-antagonists	FDA Pregnancy Category X	DailyMed; DrugBank
clonazepam	28:12:08 benzodiazepines	Increased risk of congenital abnormalities when taken in first trimester; FDA Pregnancy Category D	DailyMed; DrugBank
colchicine	92:16 antigout agents	FDA Pregnancy Category C; published animal reproduction and development studies indicate it causes embryofetal toxicity, teratogenicity, and altered postnatal development at exposures within or above the clinical therapeutic range	DailyMed; DrugBank
dinoprostone	76:00 oxytocics	Hazardous only for women in late pregnancy; FDA Pregnancy Category C	DailyMed; DrugBank
dronedarone	24:04:04 antiarrhythmics	Teratogenic in laboratory studies at ½ MRHD; FDA Pregnancy Category X	DailyMed; DrugBank
dutasteride	92:08 5-alpha reductase inhibitors	Women warned not to handle; FDA Pregnancy Category X	DailyMed; DrugBank
eslicarbazepine	28:12:92 anticonvulsants, miscellaneous	Fetal malformations, fetal growth retardation, embryolethality, and reduced body weights observed in animal	DailyMed; DrugBank

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		studies; excreted in human breast milk; FDA Pregnancy Category C	
ergonovine/methylergonovine	76:00 oxytocics	Use is contraindicated during pregnancy because of its uterotonic effects; FDA Pregnancy Category C	DailyMed; DrugBank; DrugBank
finasteride	92:08 5-alpha reductase inhibitors	Women should not handle crushed or broken finasteride tablets when they are pregnant or may potentially be pregnant due to potential risk to a male fetus; FDA Pregnancy Category X	DailyMed; Drugbank
fluconazole	8:18.08 azoles	FDA Pregnancy Category C; case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/ day) during most or all of the first trimester, similar to those seen in animal studies	DailyMed; DrugBank
ganirelix	92:40 gonadotropin-releasing hormone antagonists	FDA Pregnancy Category X	DailyMed
gonadotropin, chorionic	68:18 gonadotropins	Defects of forelimbs and central nervous system and alterations in sex ratio have been reported in laboratory studies; FDA pregnancy Category C	DailyMed; DrugBank
icatibant	92:32 complement inhibitors	FDA Pregnancy Category C; in laboratory studies, premature birth and abortion rates increased at a dose that was less than 1/40th the MRHD and delayed parturition and fetal death occurred at 0.5 and 2-fold, respectively, the MRHD	DailyMed; DrugBank
lomitapide	24:06:92 antilipemic agents, miscellaneous	FDA Pregnancy Category X	DailyMed; DrugBank

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macitentan	48:48 vasodilating agents	Black Box warning for embryo-fetal toxicity; special warnings on contraception for females while taking and 1 month post-treatment; FDA Pregnancy Category X	DailyMed; DrugBank
mentropins	68:18 gonadotropins	FDA Pregnancy Category X	Drugbank
methyltestosterone	68:08 androgens	FDA Pregnancy Category X	DailyMed; DrugBank
mifepristone	76:00 oxytocics	When given to pregnant women results in termination of pregnancy; FDA Pregnancy Category X	DailyMed; DrugBank
misoprostol	56:28.28 prostaglandins	FDA Pregnancy Category X	DailyMed; DrugBank
nafarelin	68:18 gonadotropins	Note: Given only as nasal spray; no potential for occupational exposure; FDA Pregnancy Category X	DailyMed; DrugBank
oxytocin	76:00 oxytocics	Hazardous only for women in 3rd trimester; FDA Pregnancy Category C	DailyMed; DrugBank
pamidronate	92:24 bone resorption inhibitors	Embryo-fetal toxicities at doses below the recommended human dose; FDA Pregnancy Category D	DailyMed; DrugBank
paroxetine	28:16:04:20 selective serotonin uptake inhibitors	Increased risk of congenital abnormalities when taken in first trimester; complications in pregnancy when taken in third trimester; FDA Pregnancy Category D	DailyMed; Drugbank
pasireotide	68:29:04 somostatin agonists	Increased implantation loss and decreased viable fetuses, corpora lutea, and implantation sites at doses less than the human recommended	DailyMed; Drugbank

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		dose; FDA Pregnancy Category C	
pentetate calcium trisodium	NA	Severe teratogenic effects in laboratory studies in dogs: supplied in ampule which can lead to occupational exposure; FDA Pregnancy Category C	DailyMed
peginesatide	20:16 hematopoietic agents	Adverse embryo-fetal effects, including reduced fetal weight, increased resorption, embryo-fetal lethality, and cleft palate, observed in doses below the recommended human dose; FDA Pregnancy Category C	DailyMed; DrugBank
plerixafor	20:16 hematopoietic agents	Teratogenic in laboratory studies; FDA Pregnancy Category D	DailyMed; DrugBank
ribavirin	8:18:32 nucleosides and nucleotides	Teratogenic and embryotoxic effects in several laboratory studies; contraindicated in women who are pregnant and in the male partners of women who are pregnant; FDA Pregnancy Category X	DailyMed; DrugBank
riociguat	48:48 vasodilating agents	Exclude pregnancy before the start of treatment, monthly during treatment, and 1 month after stopping treatment; FDA Pregnancy Category X	DailyMed; DrugBank
telavancin	8:12:28 glycopeptides	Black Box warning for potential risk to fetus and adverse reproductive outcomes; reduced fetal weights and increased rates of digit and limb malformations in three species at clinical doses; FDA Pregnancy Category C	DailyMed; Drugbank
temazepam	28:24:08 benzodiazepines	Increased risk of congenital malformations associated with treatment during the first	DailyMed; Drugbank

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		trimester of pregnancy; FDA Pregnancy Category X	
testosterone	68:08 androgens	Children should avoid contact with unwashed or unclothed application sites on skin; FDA Pregnancy Category X	DailyMed; DrugBank
topiramate	28:12.92 anticonvulsants, miscellaneous	FDA Pregnancy Category D	DailyMed; DrugBank
tretinoin	84:16 cell stimulants and proliferants	Black Box warning for severe birth defects; Special FDA distribution system; FDA Pregnancy Category X	DailyMed; DrugBank
ulipristal	68:12 contraceptives	FDA Pregnancy Category X	DailyMed
valproate/valproic acid	28:12:92 anticonvulsants, miscellaneous	Black Box warning for teratogenicity; congenital malformations including neural tube defects and others; teratogenic in multiple species; FDA Pregnancy Category D	DailyMed; DailyMed; DrugBank
vigabatrin	28:12:92 anticonvulsants, miscellaneous	Malformations seen in laboratory studies below the MRHD; FDA Pregnancy Category C	DailyMed; Drugbank
voriconazole	8:14.08 azoles	FDA Pregnancy Category D	DailyMed; DrugBank
warfarin	20:12.04.08 coumarin derivatives	FDA Pregnancy Category D	DailyMed; DrugBank
ziprasidone	28:16:08:04 atypical antipsychotics	Developmental toxicity, including possible teratogenic effects at doses similar to human therapeutic doses; an increase in the number of pups born dead and a decrease in postnatal survival at less than MRHD; FDA Pregnancy Category C	DailyMed; Drugbank
zoledronic acid	92:24 bone resorption inhibitors	Number of stillbirths increased and survival of neonates decreased in laboratory studies	DailyMed; DrugBank

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		at low doses; FDA Pregnancy Category D	
zonisamide	28:12:92 anticonvulsants, miscellaneous	Teratogenic in multiple animal species; FDA Pregnancy Category C	DailyMed; DrugBank