

Hazardous Medication List

Reducing occupational exposure to hazardous medications
for **ALL STAFF**

Copyright ©2026 Alberta Health Services (Pharmacy Services, Health Professions Strategy and Practice and Workplace Health and Safety) and Covenant Health (Pharmacy Services)



This work is licensed under the Creative Commons Attribution-Noncommercial-ShareAlike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/4.0/>. The license does not apply to AHS or Covenant Health logos and trademarks or third-party works licensed by AHS or Covenant Health.

Disclaimer

This material is intended for general information only and is provided on an “as is,” “where is” basis. Although reasonable efforts were made to confirm the accuracy of the information, neither Alberta Health Services nor Covenant Health make any representation or warranty, express, implied, or statutory, as to the accuracy, reliability, completeness, applicability, or fitness for a particular purpose of such information. This material is not a substitute for the advice of a qualified health professional. Each of Alberta Health Services and Covenant Health expressly disclaims all liability for the use of these materials, and for any claims, actions, demands or suits arising from such use.

Contents

Alberta Health Services / Covenant Health Hazardous Medication Classification	iii
Hazardous Medication List – Key Points.....	4
Summary of changes in this version.....	5
COMPLETE List	6
KNOWN Hazard Medications.....	9
POTENTIAL Hazard Medications	10
REPRODUCTIVE Hazard Medications	11
Special Handling Considerations for Specified Hazard Medications	13
◆ Bacillus Calmette-Guérin vaccine (BCG)	13
Monoclonal Antibodies (mAbs)	13
◆ Pentamidine	13
■ Gene therapy	13
Extended Precautionary Period for Hazard Medications	14
A. KNOWN Hazard Medications Requiring PPE for Longer than 48 Hours.....	14
B. POTENTIAL and REPRODUCTIVE Hazard medications.	14
Appendix A: Reproductive Population Subset	15
Appendix B: AHS Classification of Hazardous Medications.....	16
Appendix C: NIOSH Classification of Hazardous Medications	17
Appendix D: Handling Hazardous Medications-Risk Assessment Algorithm	19

Alberta Health Services / Covenant Health Hazardous Medication Classification

KNOWN Hazard Medication	These medications meet the criteria of the National Institute for Occupational Safety and Health (NIOSH) definition of a hazardous drug (see appendix C) and: • Have Manufacturer Special Handling Instructions (MSHI) in the package insert and/or: ○ Are classified by the National Toxicology Program (NTP) as “known to be a human carcinogen” ○ Are classified by the International Agency for Research on Cancer (IARC) as Group 1 “carcinogenic to humans” or Group 2A “probably carcinogenic to humans”. Not all KNOWN hazard medications are cytotoxic or anti-neoplastic. These medications present a serious risk to the health or welfare of healthcare staff during occupational exposure.
POTENTIAL Hazard Medication	These medications meet the NIOSH criteria of a hazardous drug for carcinogenicity, cytotoxicity, genotoxicity, or organ toxicity at low doses but are not classified as carcinogenic by NTP or IARC; nor do they have an MSHI.
REPRODUCTIVE Hazard Medication	These medications meet the NIOSH criteria of a hazardous drug for developmental, reproductive, or teratogenic risks. These medications may present an occupational exposure risk <u>for only certain individuals</u>; staff of childbearing years regardless of gender with a potential to conceive or fertilize, women who are pregnant, or women who are breast feeding. Staff members with specific questions should discuss them with their supervisor(s) in consultation with their personal physician(s) and Workplace Health and Safety (WHS) to assess the risk of occupational exposure to these medications and the option of temporarily refraining from handling hazardous medications. Certain REPRODUCTIVE Hazard Medications may only be applicable to a subset of the Reproductive population; see Key Points on the next pages.

Hazardous Medication List – Key Points

	Indicates the medication is a CYTOTOXIC agent. Cytotoxic refers to a substance or process which results in cell damage or cell death.
	Indicates REPRODUCTIVE Hazard Medications applicable to a subset of the reproductive population. - Some REPRODUCTIVE hazard medications have been identified to have specific parameters and may only be applicable to a subset of the reproductive population. - Refer to Appendix A for more detailed medication-specific information.
	Operational challenges have been identified for: conjugated estrogen (IV only) and chloral hydrate. Please reach out to hazardousmedication@ahs.ca for more information.
The following products are NOT listed on the Hazardous Medication List, but may require special handling precautions: - Salts, PEGylated and liposomal medication - only the <i>parent compound</i> is listed (e.g., doxorubicin). These medications would have the same precautionary period as the listed parent medication. - Combination products containing a hazardous medication (e.g., spironolactone-hydrochlorothiazide). - Investigational / Clinical Trial medication as toxicological data is often incomplete or unavailable, except where current data indicates a hazardous risk. Follow the study protocol for safe handling precautions. - Chemicals and / or raw powders; follow the Safety Data Sheet (SDS) for safe handling precautions. - Radiopharmaceuticals: Nuclear Medicine has policies and procedures for the handling of these products.	
Use this Hazardous Medication List, the Handling Hazardous Medication Risk Assessment Algorithm (located in Appendix D and on the Handling Hazardous Medication Insite Page), as well as the Hazardous Medication PPE Guide to determine the classification of the medication and the required or suggested PPE, dependent on the likelihood of exposure due to the task being performed.	
If you need to prepare and/or administer more than one hazardous medication or a combination product containing more than one hazardous medication, wear the PPE for the higher level of protection.	
The Hazardous Medication List will be reviewed and updated quarterly. Refer to Insite for the most current version.	

Summary of changes in this version

- **Added four (4) new medications to the list, indicated by bold BLUE type**
 - inavolisib classified as REPRODUCTIVE hazard
 - omaveloxolone classified as POTENTIAL hazard
 - trofinetide classified as REPRODUCTIVE hazard
 - zilucoplan classified as REPRODUCTIVE hazard
- **Added seven (7) new medications to the list – all of which were included previously as a grouping under ‘progestin’ medication, indicated by bold BLUE type**
 - desogestrel classified as POTENTIAL hazard
 - dienogest classified as POTENTIAL hazard
 - etonogestrel classified as POTENTIAL hazard
 - hydroxyprogesterone classified as POTENTIAL hazard
 - norethindrone classified as POTENTIAL hazard
 - norethisterone classified as POTENTIAL hazard
 - norgestrel classified as POTENTIAL hazard
- **Added two (2) medications to the list – both of which were included previously as a combination product, indicated by bold BLUE type**
 - drospirenone classified as POTENTIAL hazard
 - estetrol classified as KNOWN hazard
- **Added one (1) medication to the list – which previously was only listed by its synonym mycophenolic acid, indicated by bold BLUE type**
 - mycophenolate sodium classified as POTENTIAL hazard

HAZARDOUS MEDICATIONS

COMPLETE List

K = KNOWN, P = POTENTIAL, R = REPRODUCTIVE

A		
abacavir	P	
abemaciclib	R	
abiraterone	R	
acitretin	R	
AFAtinib	P	
alefacept	P	
alitretinoin	R	
alpelisib	R	
altretamine	△ K	
ambrisentan	R	
amifampridine	P	
amifostine	R	
amsacrine	△ K	
anastrozole	R	
apalutamide	P	
apomorphine	P	
arsenic trioxide	△ K	
asciminib	R	
avacopan	R	
avapritinib	R	
aXitinib	P	
azaCITIDine	△ K	
azaTHIOprine	△ K	
B		
bacillus calmette-guérin (BCG)	◆ K	
baricitinib	P	
belantamab mafodotin	△ K	
belinostat	△ K	
belumosudil	R	
belzutifan	R	
bendamustine	△ K	
benznidazole	R	
bexarotene	R	
C		
bicalutamide	P	
bleomycin	△ K	
blinatumomab	P	
bortezomib	△ K	
bosentan	R	
bosutinib	R	
brentuximab vedotin	△ K	
brigatinib	R	
buserelin	R	
busulfan	△ K	
D		
cabazitaxel	△ K	
cabergoline	R	
cabozantinib	R	
capecitabine	△ K	
capivasertib	P	
capmatinib	R	
carBAMazepine	P	
carbetocin	★ R	
CARBOplatin	△ K	
carboprost	R	
carfilzomib	R	
carmustine	△ K	
cenobamate	R	
ceritinib	R	
cetorelix acetate	R	
chloral hydrate	● K	
chlorambucil	△ K	
chloramphenicol	K	
chlormethine	△ K	
choriogonadotropin alpha	R	
cidofovir	K	
CISplatin	△ K	
cladribine	△ K	
E		
clevidipine	R	
cloBAZam	R	
clofarabine	△ K	
clofazimine	R	
clomiPHENE	R	
clonazepam	R	
cobimetinib	R	
colchicine	R	
crizotinib	P	
cyclophosphamide	△ K	
cycloSPORINE	K	
cyproterone	P	
cytarabine	△ K	
F		
daBRAFeinib	P	
dacarbazine	△ K	
dacomitinib	R	
DACTINomycin	△ K	
danazol	R	
darolutamide	P	
daSATinib	K	
datopotamab deruxtecan	K	
DAUNOrubicin	△ K	
decitabine	△ K	
deferiprone	P	
degarelix	R	
desogestrel	P	
dexMEDEtomidine	R	
dexrazoxane	△ K	
dienogest	P	
diethylstilbestrol	K	
dihydroergotamine	R	
dinoprostone	R	
divalproex sodium	R	
DOCEtaxel	△ K	
G		
DOXOrubicin	△ K	
dronedarone	R	
drospirenone	P	
dutasteride	R	
H		
edaravone	R	
eflornithine	R	
enasidenib	P	
enfortumab vedotin	△ K	
entecavir	P	
entrectinib	P	
enzalutamide	R	
epiRUBicin	△ K	
erdafitinib	P	
ergonovine (ergometrine) / methylergonovine	R	
eriBULin	△ K	
erlotinib	R	
eslicarbazepine	R	
estetrol	K	
estradiol	P	
estramustine	△ K	
estrogen - conjugated	● K	
estrogen - esterified	K	
estrogen / progesterone combinations	K	
estropipate	P	
I		
etonogestrel	P	
etoposide	△ K	
everolimus	△ K	
evinacumab	R	
exemestane	R	
exenatide	P	
J		
fedratinib	R	
finasteride	R	

Bold BLUE type indicates a medication newly listed as of March 2026.

★ Reproductive Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

● Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

HAZARDOUS MEDICATIONS

fingolimod	P
floxuridine	 K
fluCONazole	R
fluCYTosine	R
fludarabine	 K
fluorouracil (5FU)	 K
fluoxymesterone	P
flutamide	P
fosphenytoin	P
fostamatinib	R
fruquintinib	R
fulvestrant	R
G / H	
ganaxolone	R
ganciclovir	 K
ganirelix acetate	R
gefitinib	P
gemcitabine	 K
gemtuzumab ozogamicin	 K
gilteritinib	P
glasdegib	P
gonadotropin, chorionic	R
goserelin	R
guadecitabine	 K
histrelin	R
hydroxyprogesterone	P
hydroxyUREA	 K
I	
icatibant	R
icosapent ethyl	R
IDArubicin	 K
ifosfamide	 K
iMAtinib	K
inavolisib	R
inebilizumab	R
infigratinib	P
inotuzumab ozogamicin	 K

irinotecan	 K
ISOtretinoin	R
ivabradine	R
ivosidenib	R
ixabepilone	 K
ixazomib	 K
J / K / L	
larotrectinib	R
lazertinib	P
leflunomide	P
lenalidomide	K
lenvatinib	R
letrozole	R
leuprolide	R
levonorgestrel	P
lixisenatide	R
lomitapide	R
lomustine	 K
lonafarnib	R
loncastuximab tesirine	 K
lorlatinib	R
lurbinectedin	 K
M	
macitentan	R
maribavir	R
mavacamten	P
mecasermin	P
mechlorethamine	K
medroxyPROGESTERone	R
megestrol	P
melphalan	 K
melphalan flufenamide	 K
menotropins	R
mercaptopurine	 K
methIMazole	P
methotrexate	 K
methylTESTOSTERone	R
midostaurin	P

miFEPRISone	R
miltefosine	R
mipomersen	P
mirvetuximab soravtansine	 K
miSOPROStol	R
mitoMYcin	 K
mitotane	 K
mitoXANTRONE	 K
momelotinib	R
mycophenolate mofetil	K
mycophenolate sodium (mycophenolic acid)	P
N	
nab-sirolimus	P
nafarelin	R
nelarabine	 K
neratinib	P
nevirapine	P
niLOtinib	R
niraparib	P
nirogacestat	R
norethindrone	P
norethisterone	P
norgestrel	P
O	
olaparib	P
olipudase alfa	R
omacetaxine	 K
omaveloxolone	P
onasemnogene abeparvovec	■ K
ospemifene	P
oxaliplatin	 K
oxandrolone	R
OXcarbazepine	P
oxytocin	★ R
P	
PACLitaxel	 K
pacritinib	R
palifermin	P

palovarotene	R
pamidronate	R
panobinostat	 K
PARoxetine	R
pasireotide	R
PAZOPanib	R
pegcetacoplan	P
peginesatide	R
pegvaliase	P
PEMEtrexed	 K
pemigatinib	P
pentamidine	◆ R
pentetate calcium	R
pentostatin	 K
phenoxybenzamine	P
phenyTOIN	P
pipobroman	P
plerixafor	R
polatuzumab vedotin	 K
pomalidomide	K
PONATinib	P
ponesimod	P
porfimer	 K
posaconazole	R
PRALAtrexate	 K
pralsetinib	P
procarbazine	 K
progesterone	P
progestins	P
propylthiouracil	P
Q / R	
quizartinib	P
raloxifene	P
raltitrexed	 K
rasagiline	P
ravulizumab	R
regorafenib	R
relugolix	R

Bold BLUE type indicates a medication newly listed as of March 2026.

★ Reproductive Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

● Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

HAZARDOUS MEDICATIONS

remdesivir	P
repotrectinib	P
revumenib	R
ribavirin	R
ribociclib	R
riociguat	R
ripretinib	R
risdiplam	K
ritlecitinib	P
romiDEPsin	 K
S	
sacituzumab govitecan	 K
selinexor	P
selpercatinib	R
selumetinib	R
semaglutide	P
setmelanotide	R
siponimod	R
sirolimus	P
sodium phenylbutyrate - ursodoxicoltaurine	R
sonidegib	R
SORafenib	R

sotatercept	R
sotorasib	P
spironolactone	P
streptozocin	 K
SUNItinib	P
T	
tacrolimus	P
talazoparib	P
tamoxifen	K
telisotuzumab vedotin	K
temazepam	R
temozolomide	 K
temsirolimus	K
teniposide	 K
tepotinib	R
teriflunomide	P
testosterone	R
thalidomide	K
thioguanine	 K
thiotepa	 K
tirzepatide	P
tisotumab vedotin	 K

tofacitinib	P
topiramate	R
topotecan	 K
toremifene	R
trabectedin	 K
trametinib	P
trastuzumab deruxtecan	 K
trastuzumab emtansine	 K
treosulfan	 K
tretinoin	R
trifluridine / tipiracil (combination only)	 K
triptorelin	R
trofinetide	R
tucatinib	R
U / V	
ulipristal	R
upadacitinib	P
uracil mustard	 K
urofollitropin	R
valGANCiclovir	K
valproate / valproic acid	R

valrubicin	 K
vanDETanib	K
vemURAFenib	R
venetoclax	R
vigabatrin	R
vinBLASine	 K
vinCRISine	 K
vinorelbine	 K
vismodegib	R
voretigene neparvovec	■ K
voriconazole	R
vorinostat	 K
W / X / Y / Z	
warfarin	R
zidovudine	P
zilucoplan	R
ziprasidone	R
ziv-aflibercept	R
zoledronic acid	R
zonisamide	R

Bold BLUE type indicates a medication newly listed as of March 2026.

* Reproductive Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

● Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

KNOWN HAZARDOUS MEDICATIONS

KNOWN Hazard Medications

A		datopotamab deruxtecan		ixabepilone		Q / R	
altretamine	⚠		⚠		⚠	raltitrexed	⚠
amsacrine	⚠	DAUNOrubicin	⚠	ixazomib	⚠	risdiplam	
arsenic trioxide	⚠	decitabine	⚠	J / K / L		romiDEPsin	⚠
azaCITIDine	⚠	dexrazoxane	⚠	lenalidomide		S	
azaTHIOprine	⚠	diethylstilbestrol		lomustine	⚠	sacituzumab	⚠
B		DOCEtaxel	⚠	loncastuximab	⚠	govitecan	
bacillus calmette- guérin (BCG)	◆	DOXOrubicin	⚠	tesirine	⚠	streptozocin	⚠
belantamab		E		M		T	
mafodotin	⚠	enfortumab	⚠	mechlorethamine		tamoxifen	
belinostat	⚠	vedotin	⚠	melphalan	⚠	telisotuzumab vedotin	
bendamustine	⚠	epiRUBicin	⚠	melphalan	⚠	temozolomide	⚠
bleomycin	⚠	eriBULin	⚠	flufenamide	⚠	temsirolimus	
bortezomib	⚠	estetrol		mercaptopurine	⚠	teniposide	⚠
brentuximab	⚠	estramustine	⚠	methotrexate	⚠	thalidomide	
vedotin	⚠	estrogen - conjugated	●	mirvetuximab	⚠	thioguanine	⚠
busulfan	⚠	estrogen - esterified		soravtansine	⚠	thiotepa	⚠
C		estrogen / progesterone combinations		mitoMYcin	⚠	tisotumab vedotin	⚠
cabazitaxel	⚠	etoposide	⚠	mitotane	⚠	topotecan	⚠
capecitabine	⚠	everolimus	⚠	mitoXANTRONE	⚠	trabectedin	⚠
CARBOplatin	⚠	F		mycophenolate mofetil		N	
carmustine	⚠	floxuridine	⚠	O		nelarabine	⚠
chloral hydrate	●	fludarabine	⚠	omacetaxine	⚠	P	
chlorambucil	⚠	fluorouracil (5FU)	⚠	onasemnogene	■	PACLitaxel	⚠
chloramphenicol		G / H		abeparvovec	■	panobinostat	⚠
chlormethine	⚠	ganciclovir	⚠	oxaliplatin	⚠	PEMEtrexed	⚠
cidofovir		gemcitabine	⚠	P		pentostatin	⚠
CISplatin	⚠	gemtuzumab	⚠	polatuzumab	⚠	vedotin	⚠
cladribine	⚠	ozogamicin	⚠	pomalidomide		porfimer	⚠
clofarabine	⚠	guadecitabine	⚠	PRALAtrexate	⚠	procabazine	⚠
cyclophosphamide	⚠	hydroxyUREA	⚠	U / V / W / X / Y / Z		vorinostat	⚠
cycloSPORINE		I		uracil mustard	⚠	valGANciclovir	
cytarabine	⚠	IDArubicin	⚠	valrubicin	⚠	vanDETanib	
D		ifosfamide	⚠	vinBLASline	⚠	vinCRISline	⚠
dacarbazine	⚠	iMATinib		vinorelbine	⚠	voretigene	■
DACTINomycin	⚠	inotuzumab	⚠	vorinostat	⚠		
daSATinib		ozogamicin	⚠				
		irinotecan	⚠				

Bold BLUE type indicates a medication newly listed as of March 2026.

* Reproductive Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

● Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

POTENTIAL HAZARD MEDICATIONS

POTENTIAL Hazard Medications

A	entrectinib	midostaurin	progesterone
abacavir	erdafitinib	mipomersen	progestins
AFAatinib	estradiol	mycophenolate sodium (mycophenolic acid)	Q / R
alefacept	estropipate	N	quizartinib
amifampridine	etonogestrel	nab-sirolimus	raloxifene
apalutamide	exenatide	neratinib	rasagiline
apomorphine	F	nevirapine	remdesivir
aXitinib	fingolimod	niraparib	repotrectinib
B	fluoxymesterone	norethindrone	ritlecitinib
baricitinib	flutamide	norethisterone	S
bicalutamide	fosphenytoin	norgestrel	selinexor
blinatumomab	G / H	O	semaglutide
C	gefitinib	olaparib	sirolimus
capivasertib	gilteritinib	omaveloxolone	sotorasib
carBAMazepine	glasdegib	ospemifene	spironolactone
crizotinib	hydroxyprogesterone	OXcarbazepine	SUNItinib
cypoterone	I	P	T
D	infigratinib	palifermin	tacrolimus
daBRAFeinib	J / K / L	pegcetacoplan	talazoparib
darolutamide	lazertinib	pegvaliase	teriflunomide
deferiprone	leflunomide	pemigatinib	tirzepatide
desogestrel	levonorgestrel	phenoxybenzamine	tofacitinib
dienogest	M	phenytoIN	trametinib
drospirenone	mavacamten	pipobroman	U / V
E	mecasertin	PONATinib	upadacitinib
enasidenib	megestrol	ponesimod	W / X / Y / Z
entecavir	methIMazole	pralsetinib	zidovudine

Bold BLUE type indicates a medication newly listed as of March 2026.

* Reproductive Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

○ Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

REPRODUCTIVE HAZARD MEDICATIONS

REPRODUCTIVE Hazard Medications

(applicable to staff members of any gender with reproductive potential)

A	clomiPHENE	goserelin	oxandrolone
abemaciclib	clonazePAM	histrelin	oxytocin ★
abiraterone	cobimetinib	I	P
acitretin	colchicine	icatibant	pacritinib
alitretinoin	D	icosapent ethyl	palovarotene
alpelisib	dacomitinib	inavolisib	pamidronate
ambrisentan	danazol	inebilizumab	PARoxetine
amifostine	degarelix	ISOtretinoin	pasireotide
anastrozole	dexMEDEtomidine	ivabradine	PAZOPanib
asciminib	dihydroergotamine	ivosidenib	peginesatide
avacopan	dinoprostone	J / K / L	pentamidine ◇
avapritinib	divalproex sodium	larotrectinib	pentetate calcium
B	dronedarone	lenvatinib	plerixafor
belumosudil	dutasteride	letrozole	posaconazole
belzutifan	E	leuprolide	Q / R
benznidazole	edaravone	lixisenatide	ravulizumab
bexarotene	eflornithine	lomitapide	regorafenib
bosentan	enzalutamide	lonafarnib	relugolix
bosutinib	ergonovine (ergometrine) / methylegonovine	lorlatinib	revumenib
brigatinib	erlotinib	M	ribavirin
buserelin	eslicarbazepine	macitentan	ribociclib
C	evinacumab	maribavir	riociguat
cabergoline	exemestane	medroxyPROGESTERone	ripretinib
cabozantinib	F	menotropins	S
capmatinib	fedratinib	methyITESTOSTERone	selpercatinib
carbetocin ★	finasteride	miFEPRISone	selumetinib
carboprost	fluCONazole	miltefosine	setmelanotide
carfilzomib	fluCYTOsine	miSOPROStol	siponimod
cenobamate	fostamatinib	momelotinib	sodium phenylbutyrate - ursodoxicoltaurine
ceritinib	fruquintinib	N	sonidegib
cetrorelix acetate	fulvestrant	nafarelin	SORAFenib
choriogonadotropin alpha	G / H	niLOtinib	sotatercept
clevidipine	ganaxolone	O	T
cloBAZam	ganirelix acetate	olipudase alfa	temazepam
clofazimine	gonadotropin, chorionic		tepotinib

Bold BLUE type indicates a medication newly listed as of March 2026.

★ Reproductive Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

● Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

REPRODUCTIVE HAZARD MEDICATIONS

testosterone
topiramate
toremifene
tretinoin
triptorelin
trofinetide

tucatinib
U / V
ulipristal
urofollitropin
valproate / valproic acid
vemURAFenib

venetoclax
vigabatrin
vismodegib
voriconazole
W / X / Y / Z
warfarin

zilucoplan
ziprasidone
ziv-aflibercept
zoledronic acid
zonisamide

Bold BLUE type indicates a medication newly listed as of March 2026.

* **Reproductive** Hazard Medication applicable to a subset of the reproductive population. See Appendix A.

○ Indicates a special circumstance. See information on page 4.

◆, ■, and ◇ See special handling precautions on page 13.

Special Handling Considerations for Specified Hazard Medications

◆ Bacillus Calmette-Guérin vaccine (BCG)

BCG, although classified as a vaccine, is used in the treatment of certain cancers. BCG should be prepared with aseptic techniques. To avoid cross-contamination, parenteral drugs should not be prepared in areas where BCG has been prepared. A separate area for the preparation of BCG suspension is recommended. All equipment, supplies, and receptacles in contact with BCG should be handled and disposed of as biohazardous. If preparation cannot be performed in a containment device, then respiratory protection, gloves, and a gown should be worn to avoid inhalation or contact with BCG organisms. Follow special handling guidelines.

BCG requires specialized clean up if spilled. AHS/COV staff: see the Hazardous Medication Insite page to access Lippincott Procedures: *Hazardous medication spill response* for information on handling hazardous medication spills including BCG.

Monoclonal Antibodies (mAbs)

While many monoclonal antibodies are classified by American Hospital Formulary Service (AHFS) as 10:00 antineoplastic medication, they are not typically classified as hazardous medication by NIOSH.

Monoclonal antibodies included on the Hazardous Medication List require handling precautions as per the PPE Guide.

◆ Pentamidine

For inhalation (administered by respiratory therapist). AHS/COV staff: follow special handling guidelines on the Respiratory Therapy Insite Page linked under Resources on the Hazardous Medication Insite page.

■ Gene therapy

These products require specialized clean up if spilled. AHS/COV staff: see the Hazardous Medication Insite page to access Lippincott Procedures: Hazardous medication spill response for information on handling hazardous medication spills including gene therapies. Others, please contact the Hazardous Medication team at hazardousmedication@albertahealthservices.ca for details.

Extended Precautionary Period for Hazard Medications

A. KNOWN Hazard Medications Requiring PPE for Longer than 48 Hoursⁱ

Some hazardous medications require a longer precautionary period based on the time of excretion from the body. The following hazardous medications require the appropriate PPE from the start of the time of administration of the KNOWN hazard medication up to the number of days listed.ⁱⁱ **Salts, PEGylated and liposomal medication - only the parent compound is listed (e.g., doxorubicin). These medications would have the same precautionary period as the listed parent medication.**

Hazard Medication	Suggested precautionary period
brentuximab vedotin	10 days
carmustine	7 days
cyclophosphamide	5 days
datopotamab deruxtecan	10 days
DOXOrubicin	7 days
enfortumab vedotin	7 days
eriBULin mesylate	5 days
etoposide	5 days
imatinib mesylate	7 days
inotuzumab ozogamicin	28 days
ixabepilone	5 days
lurbinectedin	5 days
mirvetuximab soravtansine	10 days
mitoXANTRONE	7 days
onasemnogene abeparvovec	28 days
polatuzumab vedotin	28 days
risdiplam	5 days
telisotuzumab vedotin	7 days
tisotumab vedotin	7 days
trabectedin	14 days
trastuzumab deruxtecan	28 days
voretigene neparvovec	14 days
vinCRISTine	7 days
vinorelbine	5 days

B. POTENTIAL and REPRODUCTIVE Hazard medications.

POTENTIAL and REPRODUCTIVE RISK hazard medications on the AHS Hazardous Medication List do not require a precautionary period.

This document is subject to change.

Bold BLUE type indicates a medication newly listed as of March 2026.

Appendix A: Reproductive Population Subset

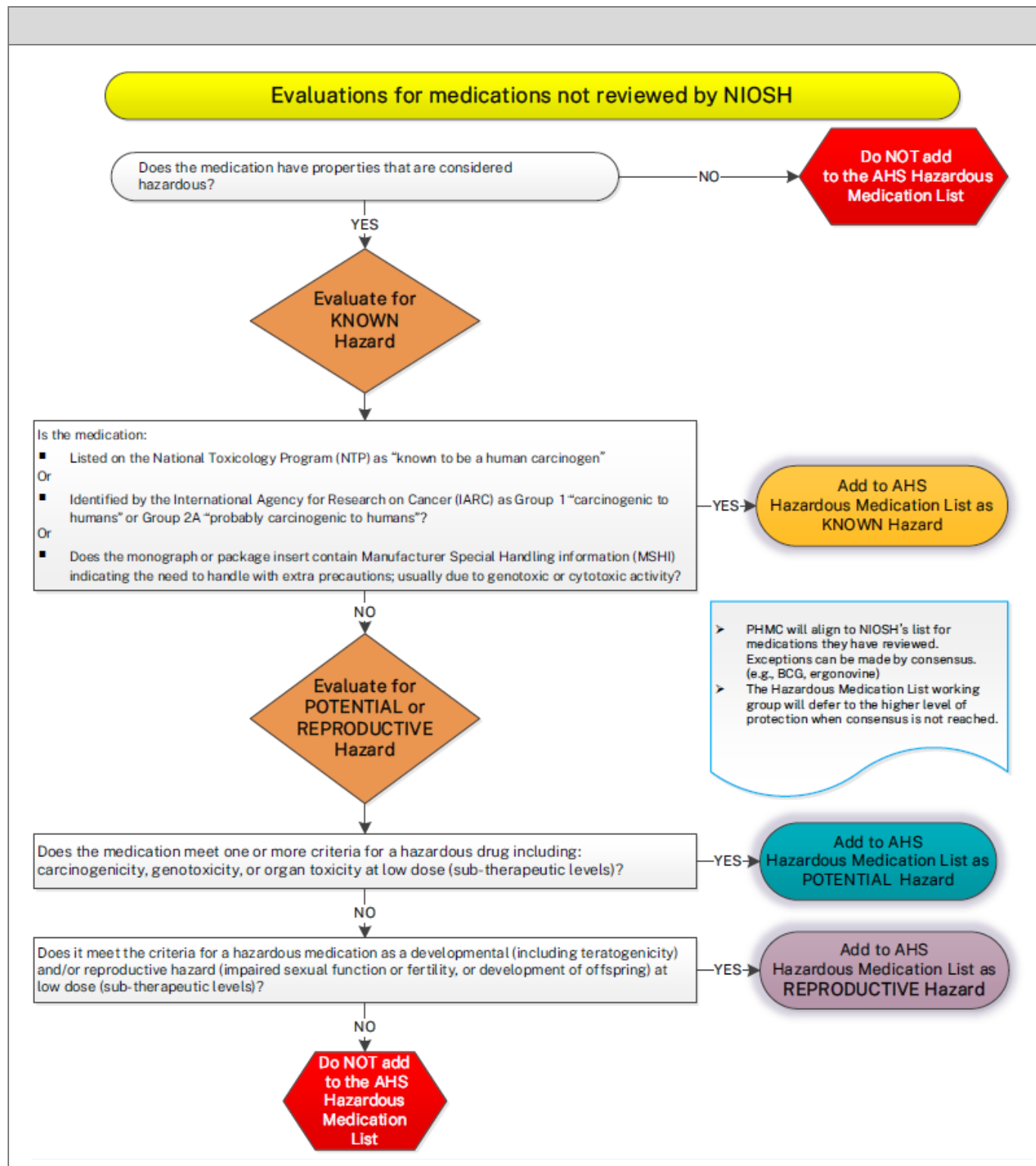
(**REPRODUCTIVE** Hazard medications with special handling parameters are indicated with an asterisk in the hazardous medication list.)

Hazardous Medication	Background	Mechanism of Action	PPE Recommendations
oxytocin	Oxytocin has been identified as a hazard medication by NIOSH. It is considered a Table 2, primarily having adverse reproductive effects. PPE requirements are only applicable to a subset of the reproductive population.	Oxytocin stimulates uterine contraction by activating G-protein-coupled receptors that trigger increases in intracellular calcium levels in uterine myofibrils. Oxytocin also increases local prostaglandin production, further stimulating uterine contraction. Oxytocin has specific receptors in the muscle lining of the uterus and the receptor concentration increases greatly during pregnancy, reaching a maximum in early labor at term.	Oxytocin is considered a REPRODUCTIVE Risk Medication. Per the references, the reproductive risk is identified to be in pregnant women in the 2 or 3rd trimester. It is recommended that the Hazardous Medication PPE described in the Guide be worn by this select group. Other individuals in the reproductive population (as described in the guide) may also choose to wear the PPE when handling oxytocin if they prefer
carbetocin	Carbetocin has not been identified as a hazard medication by NIOSH as it is not available in the USA, however PHMC has determined it should be handled in a similar manner as oxytocin. PPE requirements are only applicable to a subset of the reproductive population.	Carbetocin is a synthetic analogue of oxytocin. Carbetocin binds oxytocin receptors located in uterine smooth muscle producing rhythmic uterine contractions characteristic to deliver, as well as increasing both the frequency of existing contractions and uterine tone. Enhances uterine involution early in postpartum.	Carbetocin is considered a REPRODUCTIVE Risk Medication. Per the references, the reproductive risk is identified to be in pregnant women in the 2 or 3rd trimester. It is recommended that the Hazardous Medication PPE described in the Guide be worn by this select group. Other individuals in the reproductive population (as described in the guide) may also choose to wear the PPE when handling carbetocin if they prefer.

If you require more detailed information, please contact hazardousmedication@ahs.ca.

This document is subject to change.

Appendix B: AHS Classification of Hazardous Medications



Appendix C: NIOSH Classification of Hazardous Medications

NIOSH List of Hazardous Drugs in Healthcare Settings, 2024

National Institute for Occupational Safety and Health (NIOSH) has formalized the methodology used to guide the addition of drugs to, the removal of drugs from, or the tabular placement of drugs within the List in a document entitled Procedures for Developing the NIOSH List of Hazardous Drugs in Healthcare Settings (Procedures).

As stated in the Procedures, NIOSH defines a hazardous drug as a drug that is:

- 1) Approved for use in humans by U.S. Food and Drug Administration Center for Drug Evaluation and Research (FDA CDER),
- 2) Not otherwise regulated by the U.S. Nuclear Regulatory Commission, and
- 3) Either
 - a. Is accompanied by prescribing information in the “package insert” that includes manufacturer’s special handling information (MSHI) to protect workers handling the drug, or
 - b. Is identified as a carcinogenic hazard, developmental hazard, reproductive hazard, genotoxic hazard, or other health hazard by exhibiting one or more of the following toxicity criteria in humans, animal models, or in vitro systems:
 - i. Carcinogenicity,
 - ii. Developmental toxicity (including teratogenicity),
 - iii. Reproductive toxicity,
 - iv. Genotoxicity,
 - v. Organ toxicity at low doses, or a
 - vi. Structure and toxicity profile that mimics existing drugs determined hazardous by exhibiting any one of the previous five toxicity types.

However, if a drug also exhibits a molecular property that may limit the potential for adverse health effects from exposure to the drug in healthcare workers, it may be determined it is not a hazard.

Table 1:

Drugs that have Manufacturer Special Handling Instructions (MSHI) in the package insert and/or meet the NIOSH definition of a hazardous drug and one or more of the following criteria: are classified by the National Toxicology Program (NTP) as “known to be a human carcinogen”, or are classified by the International Agency for Research on Cancer (IARC) as Group 1, “carcinogenic to humans” or Group 2A, “probably carcinogenic to humans.”

Many of these drugs are cytotoxic, and many are hazardous to those workers who are actively trying to conceive, who are pregnant or may become pregnant, and who are breastfeeding because the drugs may be excreted in breast milk.

Not all drugs in Table 1 are antineoplastic drugs.

Drugs reviewed for this update were new drug approvals or received new safety-related warnings from the Food and Drug Administration (FDA) in the period from January 2014 through December 2015.

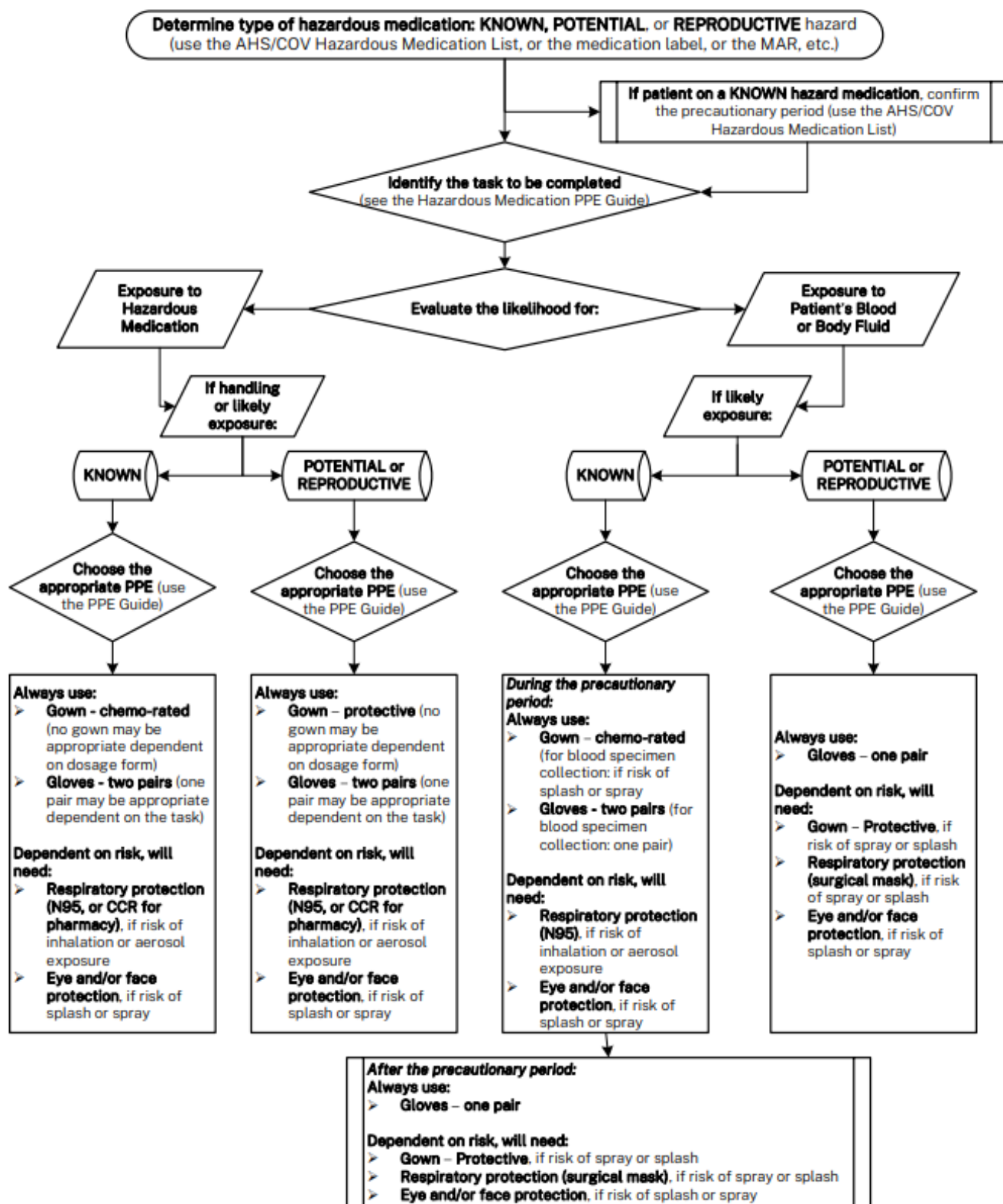
Table 2:

Drugs that meet the NIOSH definition of a hazardous drug and do not have MSHI, are not classified by NTP as “known to be a human carcinogen,” and are not classified by IARC as Group 1, “carcinogenic to humans,” or Group 2A, “probably carcinogenic to humans.” (Some may also have adverse developmental and/or reproductive effects.)

Some of these drugs may also present an occupational hazard to those workers who are actively trying to conceive, who are pregnant or may become pregnant, and who are breastfeeding because the drugs may be excreted in breast milk.

Appendix D: Handling Hazardous Medications-Risk Assessment Algorithm

(See Hazardous Medication Spill Response in Lippincott Procedures for the PPE to wear when cleaning up a hazardous medication spill)



Developed by: AHS – Provincial Hazardous Medication Committee (PHMC); Hazardous Medication Evaluation Panel; PHMC Hazardous Medication List Working Group; Pharmacy Services Medication Quality and Safety Team (MQST); Health Professions, Strategy and Practice (HPSP); Pharmacy Services Technical Practice Leads, Human Factors, Workplace Health and Safety (WHS), and COV Medication Management & Safety Team.

Acknowledgements to: Cancer Care Alberta (CCA), Eastern Health - Newfoundland, British Columbia Cancer Agency (BCCA), and Winnipeg Regional Health Authority (WRHA) for their work on hazardous medications.

Please direct questions related to safe handling of hazardous medications to the WHS Services Team in your Zone or send your questions to hazardousmedication@albertahealthservices.ca

ⁱ Product information and monographs at Drug Product Database, Lexicomp, DrugBank, and U.S. National Library of Medicine (DailyMed)

ⁱⁱ Government of South Australia, Cytotoxic Drugs and Related Waste [Internet]Department for Health and Ageing, Government of South Australia; June 2015 [cited 2021 October 22]. Available from <https://www.sahealth.sa.gov.au/wps/wcm/connect/f8aa68004b3f6cf6a340afe79043faf0/Safe+Handling+Cytotoxic+Guidelines.pdf?MOD=AJPERES&%3bCACHEID=ROOTWORKSPACE-f8aa68004b3f6cf6a340afe79043faf0-nwLgTKw>