



## Example Hazardous Waste Pharmaceuticals

On February 22, 2019, the Environmental Protection Agency (EPA) promulgated the Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine Rule. Idaho plans to adopt the rule in spring 2021.

This fact sheet provides a list of example hazardous waste pharmaceuticals. This list is provided as a guide to help the healthcare and retail pharmaceutical sectors identify hazardous wastes. However, this list is not all inclusive; other pharmaceuticals may also be regulated as hazardous wastes. Variations in formulations, brands, and dosages may alter a pharmaceutical’s hazardous waste status. Generators must make their own hazardous waste determinations for their facilities. A waste is considered a hazardous waste if it meets a listing definition or exhibits a hazardous characteristic described in IDAPA 58.01.05.005 [40 CFR Part 261]. Some waste pharmaceuticals may have more than one hazardous waste code.

### Example P-Listed Pharmaceuticals (Acutely Hazardous Waste)

<b>Waste Code</b>	<b>Constituent of Concern*</b>	<b>Other Known Names</b>
P001	Warfarin and salts (concentration >0.3%)	Warfarin, coumadin
P012	Arsenic trioxide	Trisenox
P042	Epinephrine	Note: does not include epinephrine salts
P046	Phentermine	Note: controlled substance
P075	Nicotine	E-liquids/e-juices, prescription nicotine, research/manufacturing waste, pesticides. Note: P075 no longer includes FDA-approved OTC nicotine replacement therapies.
P188	Physostigmine salicylate	Eserine salicylate
P204	Physostigmine	Eserine
*Note: Constituent of concern must be sole-active ingredient and be unused/discarded to be P-Listed		

### Example U-Listed Hazardous Waste Pharmaceuticals

<b>Waste Code</b>	<b>Constituent of Concern*</b>	<b>Other Known Names</b>
U010	Mitomycin C	Mitomycin; Mitomycin C; Mutamycin; Mutamycin VHA Plus

U015	Azaserine	
U034	Chloral / Chloral hydrate	Note: controlled substance
U035	Chlorambucil	Leukeran
U044	Choroform	
U058	Cyclophosphamide	CTX; Cytosan, Lycophilized/VHA Plus; Neosar; Procytox
U059	Daunomycin	Daunorubicin, Cerubidin, DaunoXome, Rubidomycin; Liposomal; Idarubicin/Idamycin; Daunomycin
U075	Dichlorodifluoromethane	
U089	Diethylstilbestrol, DES (synthetic estrogen), Stilphostrol	
U121	Trichloromonofluoromethane	
U129	Lindane	G-Well shampoo; Kwell
U132	Hexachlorophene	PhisoHex disinfectant
U150	Alkeran; L-PAM; Melphalan	
U151	Mercury	Mercurochrome; Mercury iodide; Mercury chloride; Mercury sulfate
U182	Paraldehyde	Paral; Paraldehyde (CIV). Note: controlled substance
U187	Phenacetin	Acetophenetidin; (typically veterinary use)
U188	Phenol	
U200	Reserpine	
U201	Resorcinol	
U205	Selenium sulfide	Exsel shampoo; selenium sulfide; Selsun
U206	Streptozotocin	Streptozocin; Zanosar
U237	Uracil mustard	Uramustine
U248	Warfarin and salts (concentration <0.3%)	Warfarin
*Note: Constituent of concern must be sole-active ingredient and be unused/discarded to be U-Listed		

### Example Characteristic Hazardous Waste Pharmaceuticals

<b>Waste Code</b>	<b>Characteristic of Concern*</b>	<b>Examples</b>
D001	Ignitability  Aqueous drug formulation containing 24% or more alcohol by volume.  Liquid drug formulations, with	Erythromycin gel 2%; Texacort solution 1%; Taxol Injection; Erythromycin topical gel, 2%; HurriCaine topical anesthetic spray; Vi-Jon Antiseptic; Mouthwaste; Flexible Collodion; Compound

	<p>a flashpoint of less than 140° F or 60° C, except aqueous solutions containing less than 24% alcohol.</p> <p>Oxidizers or materials that readily supply oxygen to a reaction in the absence of air as defined by the DOT.</p>	<p>W Liquid Wart Remover; Cyanide Antidote Kit (Amyl nitrate inhalant); Ethyl Chloride (Skin Refrigerant); Listerine Antiseptic; Toposar; Etoposide; Dexamethasone; PacliTaxel; Silver nitrate; Benzoin Compound Tincture</p>
D002	<p>Corrosivity</p> <p>Aqueous solutions with pH ≤ 2 or pH ≥ 12.5</p>	<p>Compounding chemicals including strong acids such as glacial acetic acid, and strong bases such as sodium hydroxide; and Tresaderm (typically veterinary use)</p>
D003	<p>Reactivity</p> <p>Waste that is normally unstable and readily undergoes violent change without detonating; OR waste that reacts violently with water; OR waste that forms potentially explosive mixtures with water; OR waste that is reactive when mixed with water; OR waste that is cyanide or sulfide bearing and can generate toxic gases, vapors or fumes.</p>	<p>Potentially the only pharmaceutical that would fall under this characteristic is nitroglycerin, but because of the low amount used in most formulations it would normally not exhibit the characteristic of reactivity.</p>
D004 - D043	<p>Toxicity</p> <p>A waste is considered a toxic hazardous waste if it contains any of 40 constituents in concentrations at or above levels specified in IDAPA 58.01.05.005 [40 CFR 261.24].</p>	<p>Arsenic trioxide (D004); some barium contrasts (D005); some mineral supplements with cadmium (D006) or chromium (D007); vaccines, ophthalmic drops, or nasal sprays with mercury preservative (thimerosal) (D009); Selsun shampoo containing selenium (D010); silver sulfadiazine cream, silver nitrate (D011); Lindane lotion (D013); chloroform (D022); some human insulin containing m-cresol (D024).</p>
<p>*Note: The description of the four hazardous characteristics is abbreviated in this document. Please see IDAPA 58.01.05.005 [40 CFR 261.21 - 261.24] for complete definitions.</p>		

*Reminder* – these are just some examples, not a comprehensive list. As thousands of over-the-counter and prescription drugs are currently approved for sale in the United States, it is difficult to provide a precise list of pharmaceuticals that are considered hazardous waste.

## Helpful Resources

EPA's [Frequent Questions about Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine Rule](#)

## For More Information

For specific questions, contact your DEQ regional office:

- Boise: (208) 373-0550
- Coeur d'Alene: (208) 769-1422
- Idaho Falls: (208) 528-2650
- Lewiston: (208) 799-4370
- Pocatello: (208) 236-6160
- Twin Falls: (208) 736-2190

For general information, visit [www.deq.idaho.gov](http://www.deq.idaho.gov) or call DEQ's Hazardous Waste Bureau at (208) 373-0502.