

## Appendix A – High Alert Medication Safeguards

Medication/Medication Class	Prescribers	Pharmacists	Nurses
<b>Anticoagulants</b> (includes heparin, low molecular weight heparin, thrombolytics, argatroban, eptifibatide, warfarin, factor Xa inhibitors)	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations and order sets</li> <li>❖ Order and monitor laboratory levels according to guidelines</li> <li>❖ Avoid using ‘banned abbreviations’ – write units instead of “u”</li> <li>❖ Note: multiple anticoagulants and/or antiplatelet agents increase the risk of bleeding, use cautiously</li> </ul>	<ul style="list-style-type: none"> <li>❖ Procure commercially available premixed IV solutions when available</li> <li>❖ Utilize P&amp;TC approved standard concentrations</li> <li>❖ Monitor laboratory levels according to guidelines</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Store in clearly labeled ‘High Alert’ bins</li> </ul>	<ul style="list-style-type: none"> <li>❖ Continuous infusions require IDC upon initiation and any rate change</li> <li>❖ Continuous infusions should be administered via a dedicated IV line</li> <li>❖ Administer IV infusions via IV Smart Pump</li> <li>❖ Obtain and communicate laboratory levels according to guidelines</li> </ul>
<b>Concentrated Potassium</b> (≥ 2mEq/mL)	<ul style="list-style-type: none"> <li>❖ Shall never be ordered IV Push</li> </ul>	<ul style="list-style-type: none"> <li>❖ Shall never be stored in patient care areas</li> <li>❖ Store in pharmacy only in clearly labeled High Alert bins</li> </ul>	<ul style="list-style-type: none"> <li>❖ Shall never be administered IV push</li> </ul>
<b>Sodium Chloride Solution &gt;0.9%</b>	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations</li> <li>❖ Order and monitor laboratory levels according to guidelines</li> </ul>	<ul style="list-style-type: none"> <li>❖ Procure commercially available premixed IV solutions when available</li> <li>❖ Shall never be stored in patient care areas</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Dispense 3% Hypertonic Saline with ‘Caution: Hypertonic Sodium Chloride 3% - 500mLs’ auxiliary sticker</li> </ul>	<ul style="list-style-type: none"> <li>❖ Continuous infusions require IDC upon initiation and any rate change</li> <li>❖ Administer via IV Smart Pump</li> <li>❖ Monitor patient and laboratory levels according to guidelines</li> <li>❖ If not used, medication must be returned to pharmacy</li> </ul>
<b>Insulins</b>	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations and order sets</li> <li>❖ Avoid using ‘banned abbreviations’ – write “units” instead of “u”</li> <li>❖ Order and monitor laboratory levels according to guidelines</li> <li>❖ Ensure reversal agent ordered</li> </ul>	<ul style="list-style-type: none"> <li>❖ Store in clearly labeled ‘High Alert Insulin’ bins with lids or in individual Pyxis pockets</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> </ul>	<ul style="list-style-type: none"> <li>❖ IDC required at Pyxis upon removal of subcutaneous or IV push doses</li> <li>❖ Continuous infusions require IDC upon initiation and any rate change</li> <li>❖ Administer continuous infusions via IV Smart Pump</li> <li>❖ Obtain and communicate laboratory levels according to guidelines</li> </ul>
<b>Narcotic/Opioid Analgesics:</b> Patient Controlled Analgesia, continuous infusions, fentanyl transdermal patches, methadone	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations and order sets</li> <li>❖ Fentanyl patches must be ordered on fentanyl patch order form in addition to Orchid order set; Prescriber must be on facility’s authorized prescriber list</li> <li>❖ Ensure reversal agent ordered</li> </ul>	<ul style="list-style-type: none"> <li>❖ Standardize and limit drug concentrations/formulations</li> <li>❖ Ensure completion of fentanyl patch order form &amp; prescriber is on facility authorized prescriber list</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Store in clearly labeled ‘High Alert’ bins</li> </ul>	<ul style="list-style-type: none"> <li>❖ PCA/Morphine &amp; Hydromorphone continuous infusions: IDC required upon initiation and any rate change</li> <li>❖ Fentanyl Continuous infusion: IDC required upon initiation only</li> <li>❖ Fentanyl Patch: IDC required upon administration and removal of patch</li> <li>❖ Methadone: IDC required</li> <li>❖ Administer PCA and continuous infusions via IV Smart Pump</li> <li>❖ Monitor patient according to protocol</li> </ul>
<b>Benzodiazepine Continuous Infusions</b>	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations and order sets</li> </ul>	<ul style="list-style-type: none"> <li>❖ Standardize and limit drug concentrations/formulations</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Store in clearly labeled ‘High Alert’ bins</li> </ul>	<ul style="list-style-type: none"> <li>❖ IDC required upon initiation only</li> <li>❖ Monitor patient according to protocol</li> </ul>

<b>Medication/Medication Class</b>	<b>Prescribers</b>	<b>Pharmacists</b>	<b>Nurses</b>
<b>Neuromuscular Blocking Agents</b> (includes Cisatracurium, Pancuronium, Rocuronium, Succinylcholine, Vecuronium)	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations and order sets</li> <li>❖ Administer only after proper sedation/analgesia has been instituted</li> <li>❖ Administer only if patient is properly ventilated or immediately prior to ventilation with provider present at bedside</li> </ul>	<ul style="list-style-type: none"> <li>❖ Standardize and limit drug concentrations/formulations</li> <li>❖ Dispense with ‘High Alert’ and ‘Warning: Paralyzing Agent – causes respiratory arrest’ auxiliary stickers</li> <li>❖ Store in clearly labeled ‘High Alert Paralytic’ bins with lids</li> </ul>	<ul style="list-style-type: none"> <li>❖ IDC required upon initiation and any rate change</li> <li>❖ Verify patient is properly ventilated or will be immediately placed on ventilator</li> <li>❖ Administer continuous infusions via IV Smart Pump</li> <li>❖ Monitor patient according to protocol</li> </ul>
<b>Anti-Neoplastic Agents</b>	<ul style="list-style-type: none"> <li>❖ Must be ordered by credentialed prescriber</li> <li>❖ Telephone/Verbal orders will not be accepted</li> <li>❖ Do not use “u” for units when ordering dose</li> <li>❖ Order and monitor laboratory levels according to guidelines</li> </ul>	<ul style="list-style-type: none"> <li>❖ Two pharmacists to verify new regimens for dosage calculations and schedule</li> <li>❖ Ensure prescriber is credentialed to order medication or has obtained specialist approval</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Store in clearly labeled ‘High Alert’ bins</li> </ul>	<ul style="list-style-type: none"> <li>❖ IV Infusions: IDC required by chemotherapy certified nurse</li> <li>❖ Oral: IDC required</li> <li>❖ Ensure prescriber is credentialed to order medication or has obtained specialist approval</li> <li>❖ Obtain and communicate laboratory levels according to guidelines</li> <li>❖ Administer IV infusions via IV Smart Pump</li> </ul>
<b>Magnesium Sulfate (in all OB areas only – does not include electrolyte repletion)</b>	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations and order sets</li> </ul>	<ul style="list-style-type: none"> <li>❖ Procure commercially available premixed IV solutions when available</li> <li>❖ Utilize P&amp;TC approved standard concentrations</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Store in clearly labeled High Alert bins</li> </ul>	<ul style="list-style-type: none"> <li>❖ IDC required upon initiation and any rate change</li> <li>❖ Administer via IV Smart Pump</li> </ul>
<b>Medications administered via intrathecal route</b>	<ul style="list-style-type: none"> <li>❖ Prescriber administration only</li> <li>❖ Ensure formulations are sterile and preservative free</li> </ul>	<ul style="list-style-type: none"> <li>❖ Compound product using preservative free, sterile formulations</li> <li>❖ Filter needle shall be used unless contraindicated</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Dispense with ‘Intrathecal Use Only’ auxiliary stickers</li> </ul>	<ul style="list-style-type: none"> <li>❖ Monitor patient according to protocol</li> </ul>
<b>Medications administered via epidural route</b>	<ul style="list-style-type: none"> <li>❖ Prescriber administration only</li> <li>❖ Ensure reversal agent ordered, if applicable</li> </ul>	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved standard concentrations</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> <li>❖ Dispense with ‘Epidural Use Only’ auxiliary stickers</li> </ul>	<ul style="list-style-type: none"> <li>❖ Administer continuous infusions via Epidural Smart Pump</li> <li>❖ Monitor patient according to protocol</li> </ul>
<b>Parenteral Nutrition</b>	<ul style="list-style-type: none"> <li>❖ Utilize P&amp;TC approved parenteral nutrition order form for all orders</li> <li>❖ Nutrition and GI consultation recommended prior to initiation PN</li> <li>❖ Order and monitor laboratory levels according to guidelines</li> </ul>	<ul style="list-style-type: none"> <li>❖ Ensure utilization of standard order form</li> <li>❖ Monitor laboratory levels daily</li> <li>❖ Dispense with ‘High Alert’ auxiliary sticker</li> </ul>	<ul style="list-style-type: none"> <li>❖ IDC required upon initiation</li> <li>❖ Administer via IV Smart Pump</li> <li>❖ Obtain and communicate laboratory levels according to guidelines</li> </ul>