

Neuraxial Opioids and/or Local Anesthetics

Scope: Unless otherwise stated, these items pertain to single drug and combinations of all opioids and/or local anesthetics administered to adults, neonates, and pediatric patients by the neuraxial route of administration. This includes continuous infusions of epidural analgesia/anesthesia with opioids and/or local anesthetics (including epidural PCA); single injections of epidural or intrathecal opioids and/or local anesthetics; and combination intrathecal injection and epidural continuous infusion. Examples of neuraxial opioids include: morphine, **HYDRO**morphine, fenta**NYL**, and **SUF**entanil. Examples of neuraxial local anesthetics include: bupivacaine, ropivacaine, lidocaine, and chloroprocaine.

Self-Assessment Items

A	There has been no activity to implement this item.
B	This item has been formally discussed and considered, but it has not been implemented.
C	This item has been partially implemented for some or all patients, orders, drugs, or staff.
D	This item is fully implemented for some patients, orders, drugs, or staff.
E	This item is fully implemented for all patients, orders, drugs, or staff.

		A	B	C	D	E
Protocols, Guidelines, and/or Order sets						
1	Standard protocols, guidelines, and/or order sets exist and are followed for the management of patients who receive neuraxial opioids and/or local anesthetics, which include: (score each item individually)					
a	Detection and management of inadequate analgesia					
b	The type and frequency of monitoring required during administration					
c	Identification and treatment of complications (e.g., accidental catheter disconnection, opioid/local anesthetic toxicity)					
d	Instructions for changing solution bags or syringes and removing catheters					
e	When to discontinue and restart anticoagulants and antiplatelet medications when inserting or removing neuraxial catheters (to prevent spinal hematoma)					
f	A warning that the patient should not receive other pain medications, central nervous system (CNS) depressants, or epidural drugs without the consent of an anesthesia practitioner					
2	When used outside of the operating room and post-anesthesia care unit, neuraxial opioids and/or local anesthetics are prescribed via a standard order set(s).					
Anesthesia Oversight						
3	The anesthesia department is involved in developing and approving all protocols, guidelines, and/or order sets associated with neuraxial opioids and/or local anesthetics.					
4	Only anesthesia- or pain management-trained practitioners with demonstrated competency are permitted to prescribe, start, adjust, or administer infusions, injections, or bolus doses of neuraxial opioids and/or local anesthetics.					

ISMP Medication Safety Self Assessment® for High-Alert Medications

A	There has been no activity to implement this item.
B	This item has been formally discussed and considered, but it has not been implemented.
C	This item has been partially implemented for some or all patients, orders, drugs, or staff.
D	This item is fully implemented for some patients, orders, drugs, or staff.
E	This item is fully implemented for all patients, orders, drugs, or staff.

		A	B	C	D	E
Products Used						
5	The facility has established standard mixtures, concentrations, and safe MAXIMUM DOSES for neuraxial opioids and/or local anesthetics, which are used for 90% of <u>adult</u> patients. Scoring guideline: Choose <i>Not Applicable</i> <u>only</u> if your facility does not provide care to adults.					
		NOT APPLICABLE				
6	The facility has established standard mixtures, concentrations, and safe MAXIMUM DOSES for neuraxial opioids and/or local anesthetics, which are used for 90% of <u>neonatal</u> and <u>pediatric</u> patients. Scoring guideline: Choose <i>Not Applicable</i> <u>only</u> if your facility does not provide care to neonates or pediatric patients.					
		NOT APPLICABLE				
7	The anesthesia department, with support from the pharmacy and/or PHARMACY AND THERAPEUTICS COMMITTEE , has conducted a literature search and evaluated the potential for using a neuraxial local anesthetic that is less cardiotoxic than bupivacaine (e.g., ropivacaine) for certain patient populations.					
8	Due to the long duration of action, neuraxial morphine or HYDRO morphine is not administered to outpatient surgical patients who plan to be discharged within 24 hours post-procedure.					
Patient Assessment						
9	The practitioner planning the administration of neuraxial opioids and/or local anesthetics conducts and documents a pre-procedure assessment of the patient that includes, at a minimum: (score each item individually)					
a	Vital signs					
b	Medication history (e.g., pre-procedure opioids [including opioid patches], anticoagulants), drug allergies, and previous adverse opioid and/or local anesthetic reactions					
c	Airway assessment (e.g., anatomical variants, potential difficulties with intubation or ventilation, airway classification)					
d	General health assessment to uncover problems that could impact ventilation (e.g., sleep-disordered breathing) and co-existing conditions that may increase the risk of complications (e.g., obesity, impaired coagulation, infection, cardiac instability, compromised immunity)					
e	Examination of the patient's back or other site of injection					
Dispensing						
10	Pharmacy (not anesthesia services) purchases and dispenses all opioids and/or local anesthetics for neuraxial administration.					
11	Neuraxial infusions and injections of opioids and/or local anesthetics not commercially available are prepared in the pharmacy and dispensed in the most ready-to-administer form (e.g., labeled syringe, small volume bag).					

A	There has been no activity to implement this item.
B	This item has been formally discussed and considered, but it has not been implemented.
C	This item has been partially implemented for some or all patients, orders, drugs, or staff.
D	This item is fully implemented for some patients, orders, drugs, or staff.
E	This item is fully implemented for all patients, orders, drugs, or staff.

		A	B	C	D	E
12	Neuraxial opioids (with or without local anesthetics) are <u>not</u> dispensed to clinical areas (outside of anesthesia carts) in batches that also contain medications for other routes of administration, are not left in medication rooms or storage areas for clinical staff to put away, <u>and</u> are not delivered via pneumatic tube systems.					
TIME-OUT Process						
13	Prior to administration, a standardized TIME-OUT is performed by the immediate team (e.g., anesthesia provider, physician, and nurse) to verify the patient's name and date of birth; the procedure; the neuraxial medication (including review or BARCODE SCANNING of the product label to confirm the drug[s], concentration[s], and preservative-free status); and the monitoring and RESCUE plan.					
Administration						
14	Neuraxial opioids and/or local anesthetics are obtained by the person who will be administering the drug <u>and</u> only brought to the patient's bedside immediately before they are needed to avoid potential confusion with other medications or solutions prescribed for the patient.					
Preventing Misconnections and Wrong Route Errors						
15	Equipment used for neuraxial opioid and/or local anesthetic insertion and infusion is standardized throughout the facility so that it is familiar to all practitioners administering or supervising neuraxial analgesia.					
FAQ 16	Infusion pumps (including syringe pumps) used for epidural medications are standardized throughout the facility, specifically configured for epidural medications, visually distinguishable from those used for IV administration, and labeled or visually identified as delivering epidural medication.					
17	Dual-channel infusion pumps are not used for simultaneous administration of IV and epidural infusions.					
18	Infusion pumps used to administer medications and solutions via different routes of administration (e.g., IV and epidural) are not stacked on the same pole.					
19	Epidural infusion lines and central venous access lines are secured on opposite sides of the patient's back or chest.					
20	Administration sets with yellow-striped tubing and without injection ports are used for all epidural infusions, and not for any other purpose; <u>and</u> the end of the tubing closest to the patient is clearly labeled "Epidural."					
21	All bags and syringes of neuraxial opioids and/or local anesthetics, and their overwraps if applicable, are labeled with a prominent auxiliary warning (e.g., For Epidural Use Only; For Intrathecal Use Only) in a large font size (e.g., greater than 20 point) on both sides of the bag or syringe.					

A	There has been no activity to implement this item.
B	This item has been formally discussed and considered, but it has not been implemented.
C	This item has been partially implemented for some or all patients, orders, drugs, or staff.
D	This item is fully implemented for some patients, orders, drugs, or staff.
E	This item is fully implemented for all patients, orders, drugs, or staff.

		A	B	C	D	E
22	The pharmacy dispenses epidural infusions with an epidural administration set/tubing or connects the epidural tubing to the bag prior to dispensing the infusion.					
Reversal Agents and Treatment of Toxicity						
23	A protocol and/or order set exists and is used to identify and treat local anesthetic toxicity.					
24	Resuscitation equipment, supplemental oxygen, and naloxone are readily accessible wherever neuraxial opioids and/or local anesthetics are administered; and the naloxone is accompanied by clear indications for when it should be used, directions for preparation and administration near the point of use, and a protocol or coupled order set that permits emergency administration.					
25	Lipid emulsion is readily accessible wherever neuraxial opioids and/or local anesthetics are administered; and the lipid emulsion is accompanied by clear indications for when it should be used, directions for administration near the point of use, and a protocol or coupled order set that permits emergency administration.					
Patient Monitoring						
26	Patients receiving a neuraxial opioid or a local anesthetic/opioid combination are monitored at facility-defined frequencies for the following: level of sedation; pain score; degree of motor or sensory block (if applicable); adequacy of ventilation (e.g., respiratory rate, depth and quality of respirations, capnography); pulse rate; and blood pressure.					
27	Patients receiving neuraxial local anesthetics (without an opioid) are monitored at facility-defined frequencies for the following: pain score; degree of motor or sensory block; adequacy of ventilation (e.g., respiratory rate, depth and quality of respirations); pulse rate; and blood pressure.					
28	Protocols direct practitioners regarding the type, frequency, and duration of patient monitoring based on: (score each item individually)					
a	The age and medical conditions (including sleep-disordered breathing) of the patient					
b	Changes in infusion rates					
c	The pharmacokinetic effects of the various opioids and/or local anesthetics					
d	If the patient experiences excessive sedation, prolonged or progressive motor block, or cardiovascular/respiratory instability					
e	If the patient is receiving neuraxial opioids concomitantly with PARENTERAL opioids, sedatives, or hypnotics					
Patient Education (Includes Caregiver Education When Appropriate)						
29	Patients receive verbal <u>and</u> up-to-date written information at an appropriate reading level and in their preferred language about the signs and symptoms of an epidural abscess or post-dural puncture headache and what to do if it occurs since patients may be discharged before the onset of symptoms.					

ISMP Medication Safety Self Assessment®
for High-Alert Medications

A	There has been no activity to implement this item.
B	This item has been formally discussed and considered, but it has not been implemented.
C	This item has been partially implemented for some or all patients, orders, drugs, or staff.
D	This item is fully implemented for some patients, orders, drugs, or staff.
E	This item is fully implemented for all patients, orders, drugs, or staff.

		A	B	C	D	E
Neuraxial Analgesia in Children						
30	Dosing regimens for neonates and pediatric patients are adapted for age and weight with MAXIMUM DOSES clearly defined in protocols to minimize the risk of cumulative opioid and local anesthetic toxicity. Scoring guideline: Choose <i>Not Applicable</i> <u>only</u> if your facility does not provide care to neonates or pediatric patients.					
		NOT APPLICABLE				
Neuraxial Analgesia during Labor and Delivery						
31	Fetal heart rate patterns are monitored at facility-defined frequencies by a qualified practitioner immediately before, during, and after administration of neuraxial analgesia during labor and delivery. Scoring guideline: Choose <i>Not Applicable</i> <u>only</u> if your facility does not provide labor and delivery services.					
		NOT APPLICABLE				
32	The plan of care for neuraxial analgesia during labor and delivery is documented in the patient's health record <u>and</u> verbally communicated to the patient's nurse by the obstetrician and/or anesthesia provider. Scoring guideline: Choose <i>Not Applicable</i> <u>only</u> if your facility does not provide labor and delivery services.					
		NOT APPLICABLE				