Introduction and Background	
Purpose:	This specialty surge annex applies to events resulting in a large number of pediatric patients that would overwhelm the existing pediatric facilities in the region, as well as incidents that would cause the existing pediatric care facilities to be out of service and/or need to evacuate. This plan is intended to support, not replace, any existing facility or agency policy or plan by providing uniform response actions in the case of an emergency that involves significant numbers of children.
Scope:	The Mid-America Regional Council Health Care Coalition (MARC HCC) Pediatric Surge Plan provides guidance to regional hospitals and Emergency Medical Services in relation to Pediatric surge trauma needs. This document will be reviewed and updated yearly or after a Pediatric Surge event identifying needed changes.
Background and Planning Assumptions:	This annex was developed through the cooperative effort of MARC Region hospital, EMS, and pediatric subject matter experts (SME). According to the American Academy of Pediatrics (AAP), the pediatric age range spans from birth to young adulthood. As directed by the Office of the Assistant Secretary of Preparedness and Response (ASPR), states nationwide are to work with health care systems in establishing pediatric surge preparedness and response plans to address pediatric surge. "All hospitals should be prepared to receive, stabilize, and manage pediatric patients. Additionally, pediatric practitioners may be able to help identify patients who are appropriate for transfer to non-pediatric facilities. EMS resources, including providers with appropriate training and equipment, should be prepared to transport pediatric patients," (AAP). The MARC HCC includes a number of hospitals including Children's Mercy Hospital. For a list of regional pediatric capacity, please see Table 1. Planning assumptions include, but are not limited to the following: 1. All hospitals providing emergency services are equipped to initially treat and stabilize pediatric patients in accordance with their available resources. All hospitals have differing capacities and capabilities of treating and stabilizing pediatric victims; however, all hospitals should at minimum provide initial triage and resuscitation for pediatric patients. 2. Each pediatric trauma center has an updated surge plan to fully maximize and leverage their organizational resources prior to activating the HCC Pediatric Surge Plan. 3. The pediatric surge response will use existing National Incident Management System / Hospital Incident Command System (NIMS/HICS) response frameworks. 4. Most critical access hospitals will not be able to treat critically injured pediatric patients' long term and will need to transport them to a higher trauma level hospital.

	5. Providers specializing in pediatrics are able to provide definitive care for pediatric patients. 6. Planning and response under the Pediatric Surge Plan will be coordinated with other response plans because most disasters involving pediatric patients also include other victims. Determination of whether a child meets pediatric age should follow both organizational definitions and assessment of physical maturity and anatomical characteristics of victim.
Regional Risks	In addition to the regional risks outlined in the MARC HCC Hazard Vulnerability Assessment and THIRA, potential causes of a surge of pediatric patients could include a pandemic that significantly impacts children, a pediatric mass casualty event (e.g., school shooting/attack, transportation accident, local pediatric hospital impacted and unable to care for children or has to evacuate, etc.).
Pediatric Capabilities in the Region	In addition to Pediatric specific hospitals and designated pediatric beds, the following subject matter experts may be accessed through Children's Mercy Hospital. • Children's Mercy Telehealth • Children's Mercy Affiliated Practices (CMAPs) • Children's Health Network • Pediatric Care Network ***All the above resources may be accessed through 1-800-GOMERCY***
Access and Functional Needs	The MARC HCC Region; including Kansas counties Johnson, Leavenworth, Miami, and Wyandotte, and Missouri counties Cass, Clay, Jackson, Platte, and Ray; includes 20,137 individuals under the age of 18 with a disability. This accounts for approximately 4% of the total population under age 18. *Source: U.S. Census Bureau, American Community Survey 2018, 5-year dataset.*
Concept of Operations	
Activation	Activation of an incident resulting in a pediatric surge will follow the existing protocols outlined in the MARC HCC Response Plan.
Notification	Notification of a pediatric surge incident will follow the existing protocols outlined in the MARC HCC Response Plan, with the following additions/modifications: • The MARC HCC Threat Assessment Team will be convened as necessary, including Pediatric SME (Medical Director of Emergency Management, Children's Mercy Hospital) • Pediatric-specific bed poll initiated in EMResource • Activation of existing hospital Mutual Aid Agreements (MAA's) • Notification of Missouri Emergency Response Center of incident and to request assistance from the State of Missouri (800-392-0272)

	• Notification of incident to Kansas Department of Health and Environment (KDHE) ESF 8 and to request assistance from State of Kansas (785-640-5962)
Roles and Responsibilities:	The role of the MARC HCC is to support local health and medical systems, in partnership and collaboration with public health, emergency management, emergency medical system (EMS), first responders and government and community organizations for a seamless medical response to any type of natural or man-made disaster including a large-scale pediatric incident. It is the responsibility of the MARC HCC is to communicate with, identify resources and otherwise assist healthcare organizations. The MARC HCC is intended to support and integrate with other official command and control structures as authorized by state and local emergency management. Hospitals will be expected to follow existing protocols for triage, treating and transferring patients. EMS will be responsible to respond to the scene(s), field triage, stabilize and transport following established protocols.
Logistics:	If activated, the RHCC will support logistical issues as needed and to the extent able.
Special Considerations	
Behavioral Health:	RHCC will assist facilities, as requested, to connect with pediatric behavioral health subject matter experts. MARC HCC Response Plan – Appendix H: Disaster Behavioral Health and Regional Coordination Guide (RCG) Emergency Support Function (ESF) 6 – Attachment G: Regional Mental Health Response System Plan. In addition, other regional mental health resources for pediatrics include Saint Luke's Hospital of Kansas City's Crittenton Children's Center and The University of Kansas Health System Marillac Campus.
Decontamination:	Facilities will follow established protocol for patient decontamination.
Evacuation:	The MARC HCC will assist regional hospitals with evacuation efforts through identification of available resources via EMResource. Most likely, the Regional Healthcare Coordination System will be activated to assist in the evacuation. See MARC HCC Response Plan - Appendix G: Evacuation and Tracking
Special Pathogens:	Facilities will follow established protocol for children and special pathogens. For novel pathogens, hospitals will follow guidelines issued by the CDC and/or state and local public health departments.
Security:	Facilities will follow pediatric security guidelines as established by industry standards, accrediting bodies, and CMS.
Operations – Medical Care	
Triage:	On-scene EMS will provide triage per existing protocol which will also identify those patients that are most suited for transfer to a specialty facility. RHCS (if activated) will assist in determining available resources for triaged patients through utilization of existing polls in EMResource for both Kansas and Missouri pediatric facilities.
Treatment:	Facilities will follow existing protocols for treatment and transfer of patients.

Supplies:	Per regulatory and accreditation requirements, all emergency departments are required to maintain a standard minimum baseline of pediatric supplies and capability for the stabilization of pediatric patients. Facilities will follow existing protocol and vendor agreements for pediatric supplies. In the event there is additional need beyond existing vendor agreements, RHCS (if activated) will assist in identification and sharing of regional resources. In accordance with the American Academy of Pediatrics Policy Statement, *Pediatric Readiness in the Emergency Department* (2018); "Pediatric equipment, supplies, and medications shall be easily accessible, labeled, and logically organized (e.g., kilogram weight, weight-based color coding, etc.). A. Medication chart, color-based coding, medical software, or other systems shall be readily available to ED staff to ensure proper sizing of resuscitation equipment and proper dosing of medications based on patient weight in kilograms. B. Resuscitation equipment and supplies shall be located in the ED; trays and other items may be housed in other departments (such as the newborn nursery or central supply) with a process to ensure immediate accessibility to ED staff. A mobile or portable appropriately stocked pediatric crash cart should be available in the ED at all times. C. ED staff shall be appropriately educated as to the location of all items. D. Each ED shall have a daily method to verify the proper location and function of equipment and expiration of medications and supplies. E. Tables 3 and 4 [included below]…outline medications, equipment, and supplies necessary for the care of children in the ED by qualified health care providers," (AAP, 2018). *Source: Pediatric Readiness in the Emergency Department (November, 2018). Pediatrics 142 (5).*
Operations - Other	
Transportation:	On-scene transportation will be coordinated by EMS per existing plans and protocols (MCI Plan) with critical care transportation coordinated by:

	• Children's Mercy Transport Team (p: 1-800-GOMERCY) • HCC Region A EMS Coordinator (via Lee's Summit Fire Dispatch 816-969-7407) • RHCC will assist in coordinating transport services as needed Transportation between hospitals will be coordinated through existing protocols and with support from RHCC as needed.
Tracking:	Patient tracking will follow existing protocols including MARCER MCI Plan, Ambulance Diversion Plan, Patient Movement Plan, MARCER and Missouri Kansas City EMS Region TCD Plan. See MARC HCC Response Plan – Appendix E: Pre-Hospital Care Plans and Patient Tracking (and Movement) to access these standalone plans.
Reunification:	The MARC RHCC will support reunification efforts using the MARC HCC HICS 256 process. *A regional reunification plan is currently in development.*
Deactivation and Recovery:	See MARC HCC Response plan for information on Incident Deactivation, Demobilization, and Recovery/Return to Pre-Disaster State.

Tables

Regional Capacity	Table 1
Facility Capability	Table 2
Resuscitation Medications	Table 3
Pediatric Medications	Table 4

Incident Action Guide– Pediatric Surge

Situation/Status Information

- Type of Incident (mass casualty involving children, Children's Mercy Hospital out of service/evacuating, pandemic, outbreak of disease in the region)
- Affected Area and Population(s)
- Age distribution of affected individuals
- Hospital Status in the Region (HAvBED polling)
- Number and Location of Alternate Care Sites Established
- Functional and Access Needs Populations
- Equipment (Medical and Non-Medical) Needed for Treatment of Children
- Personnel and Staffing Shortfalls
- Mutual Aid Requests
- Availability of Transportation Resources

Initial Actions to Support the Region

Actions/Decisions	Regional plans
• Activate RHCS/RHCC, as needed	• MARC HCC Response Plan
• Medical Surge Operations • Mass Casualty Operations – Patient Triage, Tracking and Recordkeeping	• MARCER MCI Plan • MARC HCC Response Plan • Kansas City Regional Patient Movement Plan

• Hospital coordination, as needed • Patient transfers/transportation as needed • Bed availability	
• Coordinate/Maintain safety and security	• MARC Regional ESF 13 – Public Safety and Security
• Public Information/Risk Communication and Information Sharing	• MARC Regional ESF 15 – Emergency Public Information
Actions After Initial Response and Into Hours 8 to 48	
• Mass Fatality (morgue) operations • Functional and Access Needs Populations • Alternate Care Sites • Address Mental/Behavioral Healthcare needs • Address/Coordinate environmental health concerns	• Regional Mass Fatality Plan and KCRMORG SOP • MARC Regional ESF 6 - Regional Mental Health Response Plan
Additional Resources	
• American Academy of Pediatrics: Children and Disasters • American Academy of Pediatrics, Policy Statement; November 2018. • Centers for Disease Control and Prevention (CDC): Caring for Children in a Disaster • U.S. Department of Health and Human Services, Assistant Secretary for Preparedness and Response (ASPR) TRACIE Topic Collection: Pediatric/Children • Missouri Hospital Association: Pediatric Evacuation and Surge Program, May 2018	

Table 1: Region Capacity

Patient Type	Beds	Surge Capacity	Total
Pediatric Acute Care	279	36	315
Pediatric ICU	81	19	100
Neonatal ICU	267	52	319
Inpatient Maternity	330	77	407
Pediatric LTC/Rehab	no responses **(NR)**	0	0
Pediatric Behavioral Health	68	16	84

Table 2: Pediatric Capability by Facility
(From EMResource, June 2021)

Hospital	ED Designation[1]	OB Level of Care[2]	Neonatal Level of Care[3]	Neonatal Specialty Level of Care[4]	Pediatric Level of Care[5]	Pediatric Specialty Care/PICU[6]	Comments
AdventHealth College Boulevard (KS)	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Emergency Care Only	No	
AdventHealth Lenexa (KS)	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Emergency Care Only	No	
AdventHealth Shawnee Mission (KS)	Emergency Care Capable	Level 4 Perinatal Care	Level 1 Well Nursery	Level 3 NICU	Pediatric Capable	No	
AdventHealth South Overland Park (KS)	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Emergency Care Only	No	
Belton Regional Medical Center - TC	Trauma Center	Level 1 Basic Care	Level 1 Well Nursery	Level 2	Pediatric Capable	No	Level 3 Trauma Center
Cass Regional Medical Center - TC	Trauma Center	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	Level 3 Trauma Center
Centerpoint Medical Center - TC	Trauma Center	Level 1 Basic Care	Level 1 Well Nursery	Level 2	Pediatric Capable	No	Level 2 Trauma Center
Children's Mercy Hospital - TC	Pediatric Trauma Center	Level 4 Perinatal Care	Emergency Care Only	Level 4 NICU	Designated Peds Beds	Yes	Level 1 Pediatric Trauma Center/Pediatric Stroke/ ACS Certified Pediatric Surgery Center | Fetal Surgery Center | Level 4 NICU/ CMH does not do normal deliveries only delivery of high-risk infants | ECMO | ECMO/ACS Certified in Pediatric Surgery/Transplant and Dialysis
Children's Mercy Kansas	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Designated Peds Beds	No	Pediatric Emergency Dept

Excelsior Springs Medical Center	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Pediatric Capable**	**No**	
Kansas City VA Medical Center	No Status	No Status	No Status	No Status	No Status	No Status	
Lawrence Memorial Hospital - TC	**Trauma Center**	No Status	No Status	No Status	No Status	No Status	Level 4 Trauma Center
Lee's Summit Medical Center	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Emergency Care Only**	**No**	
Liberty Hospital - TC	**Trauma Center**	**Level 2 Specialty Care**	**Level 1 Well Nursery**	**Level 2**	**Pediatric Capable**	**No**	Level 2 Trauma Center
Menorah Medical Center	**Emergency Care Capable**	**Level 2 Specialty Care**	**Level 1 Well Nursery**	**Level 2**	**Pediatric Capable**	**No**	
North Kansas City Hospital - TC	**Trauma Center**	**Level 2 Specialty Care**	**Level 1 Well Nursery**	**Level 2**	**Designated Peds Beds**	**No**	Level 2 Trauma Center
Olathe Medical Center	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Emergency Care Only**	**No**	
OPR - ER of Olathe	No Status	No Status	No Status	No Status	No Status	No Status	
OPR - Pediatric ER of Overland Park	No Status	No Status	No Status	No Status	No Status	No Status	
Overland Park Regional Med Ctr - TC	**Trauma Center**	**Level 4 Perinatal Care**	**Level 1 Well Nursery**	**Level 3 NICU**	**Designated Peds Beds**	**Yes**	Level 2 Trauma Center
Providence Medical Center -TC	**Trauma Center**	**Level 2 Specialty Care**	**Level 1 Well Nursery**	**Level 2**	**Emergency Care Only**	No Status	Level 4 Trauma Center
Research Medical Center - TC	**Trauma Center**	**Level 3 Subspecialty Care**	**Level 1 Well Nursery**	**Level 3 NICU**	**Pediatric Capable**	**Yes**	
RMC-Brookside Campus	No Status	No Status	No Status	No Status	No Status	No Status	
Saint John Hospital (KS)	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Emergency Care Only**	No Status	
Saint Joseph Medical Center	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Pediatric Capable**	**No**	

Saint Luke's Community Hospital Leawood	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's Community Hospital Legends	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's Community Hospital N OP	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's Community Hospital Roeland	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's Community Hospital S OP	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's Community Hospital S.Olathe	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's Community Hospital Shawnee	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Saint Luke's East Hospital	Emergency Care Capable	Level 2 Specialty Care	Level 1 Well Nursery	Level 2	Pediatric Capable	No	
Saint Luke's Hospital - TC	Trauma Center	Level 4 Perinatal Care	Level 1 Well Nursery	Level 4 NICU	Pediatric Capable	No	
Saint Luke's Northland Hosp. Barry Rd.	Emergency Care Capable	Level 2 Specialty Care	Level 1 Well Nursery	Level 2	Pediatric Capable	No	
Saint Luke's South Hospital (Ks)	Emergency Care Capable	Level 2 Specialty Care	Level 1 Well Nursery	Level 2	Pediatric Capable	No	
St. Mary's Medical Center	Emergency Care Capable	Emergency Care Only	Emergency Care Only	N/A	Pediatric Capable	No	
Truman Medical Center - Hospital Hill-TC	Trauma Center	Level 3 Subspecialty Care	Level 1 Well Nursery	Level 3 NICU	Emergency Care Only	No	
Truman Medical Center - Lakewood	Emergency Care Capable	Level 2 Specialty Care	Level 1 Well Nursery	Level 2	Designated Peds Beds	No	
University of Kansas Health System - TC	Trauma Center	Level 4 Perinatal Care	Level 1 Well Nursery	Level 3 NICU	Designated Peds Beds	Yes	Level 1 Trauma Center

VA Med Center - Leavenworth	No Status	No Status	No Status	No Status	No Status	No Status	
Northern District							
Carroll County Memorial Hospital	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Pediatric Capable**	**No**	
Fitzgibbon Hospital	**Emergency Care Capable**	**Level 1 Basic Care**	**Level 1 Well Nursery**	**N/A**	**Pediatric Capable**	**No**	
Lafayette Regional Medical Center	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Pediatric Capable**	**No**	
Ray County Memorial Hospital	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Pediatric Capable**	**No**	
Southern District							
Bates County Memorial	**Emergency Care Capable**	**Emergency Care Only**	**Emergency Care Only**	**N/A**	**Pediatric Capable**	**No**	
Bothwell Regional Health Center	**Emergency Care Capable**	**Level 1 Basic Care**	**Level 1 Well Nursery**	**N/A**	**Designated Peds Beds**	**No**	
Golden Valley Memorial Healthcare	**Emergency Care Capable**	**Level 1 Basic Care**	**Level 1 Well Nursery**	**N/A**	**Pediatric Capable**	**No**	
Western Missouri Medical Center	**Trauma Center**	**Level 2 Specialty Care**	**Level 1 Well Nursery**	**Level 2**	**Pediatric Capable**	**No**	Level 3 Trauma Center

Note: Consult EMResource for Most Current Status

Definitions:

[1]ED Designation	
Emergency Care Capable	Able to stabilize and care for obstetric and pediatric patients in the emergency department.
Trauma Center	ED has received trauma designation from Missouri Department of Health and Senior Services
Pediatric Trauma Center	ED has received pediatric trauma designation from Missouri Department of Health and Senior Services
N/A	Facility does not have an emergency department

[2]OB Level of Care	
Emergency Care Only	Facility is able to stabilize and care for OB patients in the emergency department.
Level 1 Basic Care	Care of low to moderate risk pregnancies with ability to detect, stabilize, and initiate management of unanticipated maternal-fetal or neonatal problems that occur during the antepartum, intrapartum, or postpartum period until the patient can be transferred to a facility at which specialty maternal care is available.
Level 2 Specialty Care	Level I facility plus care of appropriate moderate-risk to high-risk antepartum, intrapartum, or postpartum conditions.
Level 3 Subspecialty Care	Level 2 facility plus care of more complex maternal medical conditions, obstetric complications, and fetal conditions.
Level 4 Perinatal Care	pregnant women and fetuses throughout antepartum, intrapartum, and postpartum care
N/A - No ED	No emergency department

[3]Neonatal Level of Care	
Emergency Care Only	The facility is able to stabilize and care for neonatal patients in the emergency department.
Level 1 Well Nursery	Ability to care for healthy newborns (born no more than 5 weeks early), temporarily assist a baby struggling to breathe, and stabilize premature or sick babies until they can be transferred to a higher level of care
N/A	No Emergency Department

[4]Neonatal Specialty Level of Care	
Level 2	Facility is capable of caring for babies after they come out of Intensive Care; caring for babies no more than 8 weeks early and in relatively good health; providing mechanical ventilation for up to 24 hours for babies who cannot breathe on their own; stabilize babies more than 8 weeks premature until they can be transferred to a higher level of care.
Level 3 NICU	Facility is capable of providing long term life support to very sick or very premature babies; caring for babies born any time or birth weight, including critically ill; providing a full range of advanced imaging; providing access to a full range of pediatric sub-specialists, surgical specialists, anesthesiologists, and ophthalmologists.
Level 4 NICU	NICU/facility has the following capabilities: located in a hospital capable of providing surgical repair of complex conditions; has a full range of pediatric sub-specialists, surgical specialists, anesthesiologists, and ophthalmologists on staff; facilitates transports and provides outreach education.
N/A	

[5]Pediatric Level of Care	
Emergency Care Only	Facility is able to stabilize and care for pediatric patients in the emergency department.
Pediatric Capable	Facility has self-reported ability to provide low to moderate acuity inpatient care for pediatric patients.
Designated Peds Beds	Facility is licensed for pediatric beds - not including neonatal or PICU beds.
N/A	No emergency department or pediatric capabilities

[6]Pediatric Specialty Care/PICU	
Yes	Facility has pediatric specialty care / PICU capabilities.
No	Facility does not have pediatric specialty care / PICU capabilities.

Table 3: Resuscitation Medications for Use in Pediatric Patients in EDs (AAP, 2018)

Adenosine
Amiodarone
Atropine
Calcium chloride and/or calcium gluconate
Epinephrine (1 mg/mL [IM] and 0.1 mg/mL [IV] solutions)[a]
Lidocaine
Procainamide
Sodium bicarbonate (4.2%)[b]
Vasopressor agents (e.g., dopamine, epinephrine, and norepinephrine)

- For a more complete list of medications used in a pediatric ED, see Winkelman et al.[75] IM, intramuscular; IV, intravenous.
- a The formerly epinephrine 1:1000 solution is now 1 mg/mL for IM use or inhalation; the 1:10 000 solution is now 0.1 mg/mL for IV use.
- b If only sodium bicarbonate 8.4% is available, may dilute 1:1 with normal saline before administration in children <2 y of age.

Table 4: Medications to Be Used in the ED for the Care of Children (AAP, 2018)

Analgesics (oral, intranasal, and parenteral)
Anesthetics and/or topical (e.g., eutectic mixture of local anesthetics; lidocaine 2.5% and prilocaine 2.5%; lidocaine, epinephrine, and tetracaine; and LMX 4 [4% lidocaine])

Anticonvulsants (e.g., levetiracetam, valproate, carbamazepine, fosphenytoin, and phenobarbital)
Antidotes (common antidotes should be accessible to the ED)[a]
Antiemetics (e.g., ondansetron and prochlorperazine)
Antihypertensives (e.g., labetalol, nicardipine, and sodium nitroprusside)
Antimicrobials (parenteral and oral)
Antipsychotics (e.g., olanzapine and haloperidol)
Antipyretics (e.g., acetaminophen and ibuprofen)
Benzodiazepines (e.g., midazolam and lorazepam)
Bronchodilators
Corticosteroids (e.g., dexamethasone, methylprednisolone, and hydrocortisone)
Dextrose ($D_{10}W$)
Diphenhydramine
Furosemide
Glucagon
Insulin
Lidocaine
Magnesium sulfate
Mannitol
Naloxone hydrochloride

Neuromuscular blockers (e.g., rocuronium and succinylcholine)
Oral glucose
Sucrose solutions for pain control in infants
Sedation medications (e.g., etomidate and ketamine)
Vaccines
3% hypertonic saline

- $D_{10}W$, dextrose 10% in water.
- a For less frequently used antidotes, a procedure for obtaining them should be in place.