	M24 - MAGNESIUM SULFATE (20%)	
	Version date: 2025-02-17	Effective date: 2025-04-30 (07:00)
ERS HIGH ALERT MEDICATION (A03)		

INDICATIONS
<ul style="list-style-type: none"> • Cardiac arrest with torsade des pointes / polymorphic ventricular tachycardia (table A) • Torsade de pointes with pulse (table B) • Preeclampsia / eclampsia (table C) • Severe acute exacerbation of asthma or COPD (table D)

WARNINGS
<p>USE WITH CAUTION:</p> <ul style="list-style-type: none"> • Myasthenia gravis

TABLE A: CARDIAC ARREST WITH TORSADES DES PIONTES / POLYMORPHIC VENTRICULAR TACHYCARDIA	
INTRAVENOUS (INTRAOSSEOUS)	ICP / ACP
<p>ADULTS:</p> <ul style="list-style-type: none"> • Administer 2 grams by rapid injection followed by saline flush • Repeat up to two more times as required (cumulative maximum = 6 grams) <p>INFANTS / CHILDREN / ADOLESCENTS:</p> <ul style="list-style-type: none"> • Administer 50 mg/kg (maximum per dose = 2 grams) by rapid injection followed by saline flush • Repeat up to two more times as required (cumulative maximum = 6 grams) 	



TABLE B: TORSADES DES PIONTES WITH PULSE	
INTRAVENOUS (INTRAOSSEOUS)	ACP
<p>ADULTS:</p> <ul style="list-style-type: none"> • Administer 1 gram by slow injection over 15 minutes • Repeat up to three more times as required (cumulative maximum = 4 grams) <p>INFANTS / CHILDREN / ADOLESCENTS:</p> <ul style="list-style-type: none"> • Administer 20 mg/kg (maximum per dose = 1 gram) by slow injection over 15 minutes • Repeat up to three more times as required (cumulative maximum = 4 grams) 	

TABLE C: PREECLAMPSIA / ECLAMPSIA	
INTRAVENOUS (INTRAOSSEOUS)	PCP / ICP / ACP
<u>ECLAMPSIA (PATIENT HAS NOT RECEIVED PROPHYLAXIS)</u>	
ADULTS / ADOLESCENTS: <ul style="list-style-type: none"> • Administer 4 to 6 grams by slow injection over 10 minutes • If seizure(s) recur, repeat 2 to 4 grams by slow injection over 5 minutes • Cumulative maximum dose = 10 grams 	
<u>ECLAMPSIA (PATIENT HAS RECEIVED PROPHYLAXIS)</u>	
ADULTS / ADOLESCENTS: <ul style="list-style-type: none"> • Administer 2 to 4 grams by slow injection over 10 minutes • If seizure(s) recur, repeat 2 to 4 grams by slow injection over 5 minutes • Cumulative maximum dose = 10 grams 	
<u>SEVERE PREECLAMPSIA (PROPHYLAXIS)</u>	
ADULTS / ADOLESCENTS: <ul style="list-style-type: none"> • Administer 4 grams by slow injection over 30 minutes 	

TABLE D: SEVERE ACUTE EXACERBATION OF ASTHMA OR COPD	
INTRAVENOUS (INTRAOSSEOUS)	ICP / ACP
ADULTS: <ul style="list-style-type: none"> • Administer 2 grams by slow injection over 20 minutes INFANTS / CHILDREN / ADOLESCENTS: <ul style="list-style-type: none"> • Administer 50 mg/kg (maximum per dose = 2 grams) by slow injection over 20 minutes 	

NOTES
1. Monitor closely for signs of magnesium toxicity. Signs include slurred speech, decreased muscle tone and level of consciousness, and hypoventilation. Calcium chloride may be given to counteract magnesium toxicity.

LINKS
<ul style="list-style-type: none"> • C02 - Advanced Cardiac Arrest • C06 - Tachycardia • D09 Preeclampsia & Eclampsia • E07 - Asthma & COPD • M26 - Calcium Chloride

APPROVED BY	
	
Provincial Medical Director	Provincial Associate Medical Director

VERSION CHANGES (refer to X08 for change tracking)
<ul style="list-style-type: none">• Addition of advanced work scope• Revised dosing for preeclampsia / eclampsia• Differentiation of dosing for cardiac arrest versus torsade with pulse