

Pain Management

The goal is to reduce the level of pain for patients in the pre-hospital setting. All non-cardiac pain should be assessed and scored according to the “Wong Pain Scale”. Reassessment should be timed according to medication onset of action, changes in patient condition, patient positioning and other treatments.

Pre-Medical Control

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow **General Pre-Hospital Care Protocol** or Follow **Pediatric Assessment and Treatment Protocol**.
2. For trauma patients follow the **Adult or Pediatric Trauma Protocol**.
3. Place the patient in the position of most comfort.

SPECIALIST/PARAMEDIC

1. Start an IV NS KVO. If the patient has a systolic blood pressure is less than 100 mm Hg and signs of hypoperfusion administer an IV/IO fluid bolus. Refer to **Vascular Access & IV Fluid Therapy Procedure**.

PARAMEDIC

Only one pain medication may be given pre-radio if authorized by the MCA. Medical Control must be contacted if a different pain medication is needed.

If indicated, administer pain medication as described below. Administer narcotics slowly when using IV or IO routes. Systolic BP should be maintained at:

Adult \geq 100 mm Hg

Pediatric $80 + (2 \times \text{age})$ mm Hg

1. Administer pain medication per MCA selection.
2. Administer Fentanyl in 1 mcg/kg increments IV/IM/IO. If pain persists after five minutes repeat dose up to a maximum dose of 3 mcg/kg. For pediatric patients, administer Fentanyl in 1 mcg/kg increments IV/IM/IO up to a maximum of 2 mcg/kg.
3. Administer Morphine sulfate in 2 – 5 mg (0.05 mg/kg) increments IV/IM/IO, up to a maximum of 20 mg. For pediatric patients administer Morphine sulfate 0.05 mg/kg IV/IM/IO, may repeat dose every 5 minutes to a maximum total dose of 0.2 mg/kg.
4. Administer hydromorphone 1 mg IV/IM/IO every 10 minutes for maximum of 3 mg. For pediatric patients administer hydromorphone 0.01 mg/kg IV/IM/IO every 10 minutes for maximum of 0.03 mg/kg.
5. Medications administered IM are limited to a single dose without medical control order.

Michigan
General Procedures
PAIN MANAGEMENT

Date: November 15, 2012

Page 2 of 7

ADULT NARCOTIC ANALGESIC OPTIONS

Fentanyl 1 mcg/kg IV/IM/IO may repeat every 5 minutes until maximum of 3 mcg/kg

Morphine Sulfate 2-5 mg (0.05 mg/kg) IV/IM/IO may repeat dose every 5 minutes until maximum of 20 mg.

Hydromorphone 1 mg IV/IM/IO every 10 minutes for maximum of 3 mg.

IV/IO medication should be given slowly. IM administration should be limited to a single dose.

PEDIATRIC NARCOTIC ANALGESIC OPTIONS

Fentanyl 1 mcg/kg IV/IM/IO may repeat every 5 minutes until maximum of 2 mcg/kg

Morphine Sulfate - 0.05 mg/kg IV/IM/IO, may repeat dose every 5 minutes to a maximum of 0.2 mg/kg.

Hydromorphone 0.01 mg/kg IV/IM/IO every 10 minutes for maximum of 0.03 mg/kg.

IV/IO medication should be given slowly. IM administration should be limited to a single dose.

MCA Pain Management Selections

Protocols	Medications		Pre-Medical Control		Post-Medical Control	
Adult Abdominal Pain	<input checked="" type="checkbox"/>	Fentanyl			<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/>	Morphine			<input checked="" type="checkbox"/>	
		Hydromorphone				
Adult Burns	<input checked="" type="checkbox"/>	Fentanyl	<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>	Morphine Sulfate	<input checked="" type="checkbox"/>			
		Hydromorphone				
Adult Soft Tissue & Orthopedic Injury	<input checked="" type="checkbox"/>	Fentanyl	<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>	Morphine Sulfate	<input checked="" type="checkbox"/>			
		Hydromorphone				
Adult Chest Pain/ACS		Fentanyl				
	<input checked="" type="checkbox"/>	Morphine Sulfate	<input checked="" type="checkbox"/>			
		Hydromorphone				
Pediatric Burns	<input checked="" type="checkbox"/>	Fentanyl	<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>	Morphine Sulfate	<input checked="" type="checkbox"/>			
		Hydromorphone				
Other indications not listed above	<input checked="" type="checkbox"/>	Fentanyl	<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>	Morphine Sulfate	<input checked="" type="checkbox"/>			
		Hydromorphone				

Michigan
General Procedures
PAIN MANAGEMENT

Date: November 15, 2012

Page 3 of 7

Post-Medical Control

1. For patients with evidence of hypotension or hypoperfusion, contact medical control.

NOTE: Calculating medications when given a dosage range and a per kg dose:

1. Calculate weight in kilos and multiply by the prescribed dosage (e.g. - mg/kg)
2. The resultant dose should fall within the listed dosing range. For ease of administration, doses may be rounded to the nearest whole number within the range for those calculated doses at or above 1 dosage unit, or to the nearest tenth for those below 1 dosage unit (examples: 1.2mg rounded to 1mg, and 0.26mg rounded to 0.3mg). That calculated and rounded dose may be given and repeated in timed intervals, as indicated for that medication, to the control of symptoms or maximum stated cumulative dose if symptom control is not previously achieved.
3. Patients who are very small or very large may fall below or exceed the dosing range, respectively. Those that fall below should be given the lowest dose in the range. Those that exceed the range should be given the maximum dose within the range.









Pediatric patients will never be given a single or total dose that exceeds the maximum single or total adult dose.

Michigan
General Procedures
PAIN MANAGEMENT

Date: November 15, 2012

Page 4 of 7

Wong Pain Scale: Pain Assessment Scale
Choose a number from 1 to 10 that best describes your pain

No pain		Distressing pain						Unbearable pain		
0	1	2	3	4	5	6	7	8	9	10
										
0	2	4	6	8	10					
NO HURT	HURTS LITTLE BIT	HURTS LITTLE MORE	HURTS EVEN MORE	HURTS WHOLE LOT	HURTS WORST					

Indications for pain management include the following:
Short term pain relief for significantly painful conditions, including:

- Burns, isolated extremity trauma
- Back pain
- Flank pain
- Significant abdominal pain
- Severe headaches with migraine history
- Severe headache without altered mental status
- Significant pain in alert multiple trauma patient

Precautions such as reduced dose or administration rate may be indicated for:

- Elderly
- Respiratory depressed
- Pregnancy – not a contraindication to pain treatment unless at term or in labor
- Altered mental status
- Severe respiratory disorders
- Nursing mothers – relative, still treat pain
- Impaired hepatic or renal function – decreased metabolism
- Ingestion of benzodiazepines (i.e. Valium) – increased respiratory depression

For conditions in which longer acting pain management is desired and appropriate, i.e. burns, isolated extremity trauma, Morphine may be used preferentially to Fentanyl.

Michigan
General Procedures
PAIN MANAGEMENT

Date: November 15, 2012

Page 5 of 7

The goal is to reduce the level of pain for patients in the pre-hospital setting. All non-cardiac pain should be assessed and scored according to the Wong Pain Scale. Reassessment should be timed according to medication on set of action changes in patient condition, patient positioning and other treatments



Place the patient in the position of most comfort

Start IV NS KVO.

If patient has a systolic blood pressure less than 100 mm Hg and signs of hypoperfusion administer an IV/IO fluid bolus. Refer to **Vascular Access & IV Fluid Therapy Procedure.**

Only one pain medication may be given pre-radio if authorized by the MCA. Medical Control must be contacted if a different pain medication is needed.

If indicated, administer pain medication as described below. Administer narcotics slowly when using IV routes. Systolic blood pressure should be maintained at:

- Adult greater than or equal to 100 mm Hg
- Pediatric 80 + (2 x age) mm Hg

- Administer pain medication per MCA selection.
- Administer Fentanyl in 1 mcg/kg increments IV/IM/IO. If pain persists after 5 minutes repeat dose to a maximum of 3 mcg/kg.
- For **pediatric** patients, administer Fentanyl in 1 mcg/kg increments IV/IM/IO up to a max of 2 mcg/kg.
- Administer Morphine Sulfate in 2 – 5 mg (0.05 mg/kg) increments IV/IM/IO, up to a maximum of 20 mg.
- For **pediatric** patients administer Morphine Sulfate 0.05 mg/kg IV/IM/IO, may repeat dose every 5 minutes to a maximum total dose of 0.2 mg/kg.
- Administer hydromorphone 1 mg IV/IM/IO every 10 minutes for a maximum of 3 mg.
- For **pediatric** patients administer hydromorphone 0.01 mg/kg IV/IM/IO every 10 minutes for max of 0.03 mg/kg.
- Medications administered IM are limited to a single dose without medical control order.

ADULT NARCOTIC ANALGESIC OPTIONS

Fentanyl 1 mcg/kg IV/IM/IO, may repeat every 5 min until max of 3 mcg/kg,

Morphine sulfate 2-5 mg (0.05 mg/kg) IV/IM/IO may repeat dose every 5 min until max of 20 mg.

Hydromorphone 1 mg IV/IM/IO every 10 min for maximum of 3 mg.

IV/IO medication should be given slowly. IM medication should be limited to a single dose.

PEDIATRIC NARCOTIC ANALGESIC OPTIONS

Fentanyl 1 mcg/kg IV/IM/IO, may repeat every 5 min until max of 2 mcg/kg.

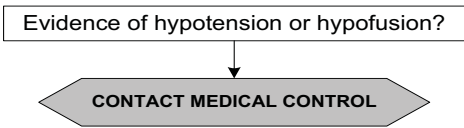
Morphine sulfate (0.05 mg/kg) IV/IM/IO, may repeat dose every 5 min until max of 0.2 mg/kg.

Hydromorphone 0.01 mg/kg IV/IM/IO every 10 min for maximum of 0.03 mg/kg.

IV/IO medication should be given slowly. IM medication should be limited to a single dose.

MCA Pain Management Selections

Protocols	Medications	Pre-Medical Control	Post-Medical Control
Adult Abdominal Pain	<input checked="" type="checkbox"/> Fentanyl	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Morphine Sulfate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/> Hydromorphone	<input type="checkbox"/>	<input type="checkbox"/>
Adult Burns	<input checked="" type="checkbox"/> Fentanyl	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/> Hydromorphone	<input type="checkbox"/>	<input type="checkbox"/>
Adult Soft Tissue & Orthopedic Injury	<input checked="" type="checkbox"/> Fentanyl	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Morphine Sulfate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Hydromorphone	<input type="checkbox"/>	<input type="checkbox"/>
Adult Chest Pain/ACS	<input type="checkbox"/> Fentanyl	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Morphine Sulfate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Hydromorphone	<input type="checkbox"/>	<input type="checkbox"/>
Pediatric Burns	<input checked="" type="checkbox"/> Fentanyl	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Morphine Sulfate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Hydromorphone	<input type="checkbox"/>	<input type="checkbox"/>
Other indications not listed above	<input checked="" type="checkbox"/> Fentanyl	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Morphine Sulfate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Fentanyl	<input type="checkbox"/>	<input type="checkbox"/>



Michigan
General Procedures
PAIN MANAGEMENT

Date: November 15, 2012

Page 6 of 7

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Pediatric patients will never be given a single or total dose that exceeds the maximum single or total adult dose.

MCA Name Detroit East Medical Control Authority
MCA Board Approval Date 03/19/2013
MDCH Approval Date 9/26/2013
MCA Implementation Date 10/01/2013



Section 5-20









Michigan
General Procedures
PAIN MANAGEMENT

Date: November 15, 2012

Page 7 of 7

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