# **Opioid Basics** MMEs (Morphine Milligram Equivalents) & Dose reductions

# MMEs > 100 Have No Proven Benefit for **Chronic Pain and Significant Proven Harms**

The 'number needed to kill' for opioid doses over 200 MME is 32. Kaplovitch, PLoS One 2015;10(8):e0134550.

MME=morphine milligram equivalent or the 'INR' of opioid dosing

| Medication                          | tablets per day | MMEs |
|-------------------------------------|-----------------|------|
| Acetaminophen-codeine 300-30mg (#3) | 4               | 20   |
| Morphine IR 15 mg                   | 6               | 90   |
| Oxycodone 15 mg                     | 4               | 90   |
| Hydromorphone 4 mg                  | 6               | 96   |
| Acetaminophen-hydrocodone 325-10    | 10              | 100  |
| Fentanyl patch 50 mcg               | (1)             | 120  |

# **Common Opioid Doses**

"We know of no other medication routinely used for a nonfatal condition that kills patients so frequently."

### Freiden, NEJM 2016: 374;16:1503.

### **Overdose risk:** Doses of 50 MME 2x Doses of 100 MME Qχ

\* compared with doses less than 20 MME, CDC Guidelines 2016

## **Recommended prescriber monitoring frequency:**

| Opioid dose > 50   | Face-to-face visit every 90 days |
|--------------------|----------------------------------|
| Opioid doses > 120 | Face-to-face visit every 30 days |

Source: CDC Guidelines, WA State Medical Directors Agency guidelines

Prescribers should "carefully justify" opioid doses in excess of 90 MME. Source: CDC

# 2016 CDC Recommendations

Discuss risks and benefits

Use the lowest effective dose

Evaluate benefits and harms frequently



# Improving Opioid Prescribing and Patient Safety: Educational Outreach







### Disclaimer

These are general recommendations only; specific clinical decisions should be made by the treating healthcare provider based on an individual patient's clinical condition. This document presents only general information regarding prescribing laws in the state of Maine. Prescribers in Maine are instructed to independently study Chapter 488 and comply with current state law and rules.

### **Learning Objectives**

- Calculate morphine milligram equivalents & evidence behind limits
- Discuss reduction (tapering) strategies

### **Additional Resources**

- ▶ 2016 CDC Opioid Prescribing Guidelines: www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
- Agency Medical Directors' Group, Washington State, 2015 Opioid Prescribing Guideline summary and MME calculator: www.agencymeddirectors.wa.gov
- Caring for ME: a joint project of Maine Quality Counts and the Maine Medical Association: qclearninglab.org/welcome-caring-for-me/
- Quality Counts Controlled Medication Playbook: mainequalitycounts.org/what-we-do/population-health/chronicpain-and-controlled-medication-playbook/
- Opioid and Chronic Pain Toolkit available at MICISMaine.org

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#### **Education Statement**

This monograph was created in support of accompanying live educational activities. This monograph is not approved for medical education credit.

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