



State of New Jersey
Department of Human Services
Division of Medical Assistance & Health Services
New Jersey Drug Utilization Review Board

NEWSLETTER

Volume 28 No. 12

July 2018

TO: Physicians, Nurse Practitioners, Clinics, Federally Qualified Health Centers- **For Action**
Providers of Pharmaceutical Services, Health Maintenance Organizations – **For Information Only**

SUBJECT: **Morphine Milligram Equivalents (MMEs)**

PURPOSE: To provide practitioners useful clinical information regarding the prescribing of opioid medications.

BACKGROUND: The DURB serves as an advisory board to the New Jersey Department of Human Services and the New Jersey Department of Health. The Board's responsibilities include recommending clinical standards based, in part, on the evaluation of prescription drug use by participants in the State's prescription drug programs. The Board is also responsible for disseminating information that the Board has determined would encourage appropriate drug utilization.

ACTION: Attached is an Educational Newsletter intended to encourage prescribers of opioid medications to closely consider their addiction potential and to use **Morphine Milligram Equivalents (MMEs)** as a useful guide when initially prescribing or re-assessing the clinical needs of State beneficiaries receiving pharmacy benefits.

This Newsletter may be viewed online at:

<https://www.state.nj.us/humanservices/dmahs/boards/durb/newsletters/>. The Board welcomes your comments regarding the information shared in this Newsletter. These comments may be sent to the DURB Secretary Sam.Emenike@molinahealthcare.com.

RETAIN THIS NEWSLETTER FOR FUTURE REFERENCE



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**Educational Newsletter
July 2018
Morphine Milligram Equivalents (MMEs)**

This Newsletter is intended to encourage prescribers of opioid medications to closely consider their addiction potential and to use Morphine Milligram Equivalents (MMEs) as a useful guide when initially prescribing or re-assessing the clinical needs of State beneficiaries receiving pharmacy benefits. A MME is assigned to opioid medications to represent their relative potency compared to 30mg morphine.

According to the National Institute on Drug Abuse, more than 64,000 individuals died from drug overdoses nationwide in 2016. NJ Advance Media estimates that 2,000 of these deaths occurred in New Jersey. Risk factors associated with overdoses include high doses of prescribed narcotics, in particular when combined with other CNS depressants, multiple controlled substances prescribed by multiple practitioners, individuals with low income and individuals with a behavioral health or substance use disorder diagnosis.

Every effort nationwide is being undertaken to reduce the number of opioid overdoses, including limiting initial prescription quantities and encouraging the use of (1) guidelines for prescribing these drugs for chronic pain, (2) state-sponsored Prescription Monitoring Programs (PMPs) and (3) MMEs. This Newsletter focuses on the value of MMEs in a professional practice to evaluate opioid drug utilization by patients. Patients with intractable, incurable painful conditions are excluded from the recommendations found in this Newsletter.

To determine a patient's total MMEs, a provider would first determine the total daily dose of each opioid drug in use, if necessary accessing the State's PMP as a source of this information. The MMEs for a patient can be calculated by multiplying the dose of each opioid medication by the conversion factor found in the table below, and adding them together.

CAUTION: Do not use the calculated dose in MMEs to determine dosage for converting one opioid to another - the new opioid should be lower to avoid unintentional overdose caused by incomplete cross-tolerance and individual differences in opioid pharmacokinetics. Consult the medication label.

USE EXTRA CAUTION:

- **Methadone:** conversion factors (4 to 12) can change depending on the dose (1mg/day to >60mg/day).
- **Fentanyl:** dosed in mcg/hr instead of mg/day, and absorption is affected by heat and other factors

The Centers for Medicare and Medicaid Services (CMS) recommends no more than a 90-120 mg cumulative MME daily dose with a consideration by State Medicaid Agencies (SMAs) to deny opioid drug coverage when the MME exceeds 200mg daily. Similarly, the Centers for Disease Control and Prevention (CDC) recommend no more than a 90 mg cumulative MME dose daily. The use of the Table of Opioid Morphine Equivalent Conversion Factors and MMEs

in general are intended as a guide to assist in clinical decision making, and are not a substitute for a provider's individual judgement based upon a thorough assessment of a patient's unique opioid drug needs.

Morphine Milligram Equivalents (MMEs)

Medication	MME Factor
Tramadol	0.1
Meperidine	0.1
Codeine	0.15
Dihydrocodeine	0.25
Pentazocine	0.37
Tapentadol	0.4
MORPHINE	1
Hydrocodone	1
Opium	1
Oxycodone	1.5
Oxymorphone	3
Heroin (SC Diacetylmorphine)	3
Hydromorphone	4
Methadone 1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
>/=61 mg/day	12
Levorphanol	11
Fentanyl Transdermal (TD) Patch	7.2 (Divide By Days)
Buprenorphine TD Patch	12.6 (Divide By Days)
Buprenorphine SL & Buccal	0.03 (for mcg)

Using the MME Factor

Multiply the mg or mcg respectively of the chosen opioid by the MME Factor to calculate the MME of the chosen opioid.

www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Opioid-Morphine-EQ-Conversion-Factors-March-2015.pdf CDC. (2016). CDC Guideline for Prescribing Opioids for Chronic Pain - United States, 2016. Morbidity and Mortality Weekly Report.

*Buprenorphine & Heroin References included within the full SEMP guidelines document