New York State (NYS) - Issued Formulation
Morphine Milligram Equivalent (MME) Conversion Table Guidance

The MME conversion factors found in the MME Conversion Table are to be used ONLY to calculate total and assessable MMEs for reporting as required by the Opioid Stewardship Act (OSA). The values presented in this table may differ from those provided in other MME conversion factor tables and calculation tools. Therefore, this table is the exclusive source for calculating the total and assessable MMEs to be reported to the NYS Department of Health (DOH) pursuant to the OSA.

The MME Conversion Table includes the Strength per Unit and MME Conversion Factor for the product sold or distributed which are necessary to calculate the total MMEs. It is located at: https://apps.health.ny.gov/pub/ctrldocs/bne/nysdohosandcmme2017.xlsx.

Definitions of MME Conversion Table Column Headings:

NDC Drug Number: The 9-digit NDC Drug Number represents the labeler code and product code only. The package code is intentionally omitted from the MME Conversion Table for simplification purposes. When calculating MMEs for products having different NDC package codes but with the same labeler and product codes, the strength per unit and the conversion factor will be the same regardless of the package code for those NDC Drug Numbers.

(Note, use the 9-digit NDC Drug Number on the MME Conversion Table to calculate the MMEs; but the entire 11-digit NDC drug code for the products sold and distributed must be reported to NYS using the NYS Health Commerce System via the Controlled Substance Distribution and Sales Reporting (CDSR) application.)

MME Strength per Unit: ‘Unit’ in this table has been adjusted to ‘each’, including but not limited to:

- 1 ml
- 1 mg
- 1 capsule
- 1 tablet
- 1 suppository
- 1 patch
- 1 troche
- 1 lozenge
- 1 film

MME Conversion Factor: A standard factor to be utilized in the calculation of total MMEs. It is derived from the federal Centers for Disease Control and Prevention (CDC)’s conversion factors.
**Calculation for MME:**

Under the OSA, the reporting entity must calculate and submit the total and assessable number of MMEs sold or distributed to or within NYS for the transaction year by the full 11-digit NDC drug code. Refer to the following formula, examples, and the MME Conversion Table to calculate MMEs.

**Math conversions**
1 gram = 1000 mg
1 microgram (mcg) = 0.001 mg

**Formula:**

\[
\text{Total MME per NDC} = (\text{Strength per Unit}) \times (\text{MME conversion factor}) \times (\text{Quantity})
\]

The determination of ‘Quantity’ shipped/sold/transferred/distributed will vary depending on the manufacturer’s product packaging and can be ascertained by using the examples below.

**Example 1:**
To calculate the MME for tablets, capsules, and other solid dosage forms:

For 5 mg hydrocodone tablets, the Conversion Factor listed on the MME Conversion Table is 1 MME.

For the distribution of one bottle of 500 tablets, the quantity = 500 tablets

\[ (5 \text{ mg}) \times (1 \text{ MME}) \times (500 \text{ tablets}) = 2,500 \text{ Total MMEs} \]

For the distribution of 20 bottles of 500 tablets, the quantity = 10,000 tablets

\[ (5 \text{ mg}) \times (1 \text{ MME}) \times (10,000 \text{ tablets}) = 50,000 \text{ Total MMEs} \]

**Example 2:**
To calculate the MME for bulk powders, you will need to identify how many milligrams were distributed.

For a 50-gram jar of hydrocodone powder, the Conversion Factor listed on the MME Conversion Table is 1 MME.

For the distribution of one 50-gram jar, convert 50 grams to 50,000 mg, the quantity = 50,000 mg.

\[ (1 \text{ mg}) \times (1 \text{ MME}) \times (50,000 \text{ mg}) = 50,000 \text{ Total MMEs} \]

For the distribution of twenty 50-gram jars, convert 50 grams to 50,000 mg, the quantity = 1,000,000 mg.

\[ (1 \text{ mg}) \times (1 \text{ MME}) \times (1,000,000 \text{ mg}) = 1,000,000 \text{ Total MMEs} \]
Example 3:
To calculate the MME for liquids/solutions, you will need to determine the number of milliliters distributed.

For 10 mg/5 ml codeine liquid, the Conversion Factor listed on the MME Conversion Table is 0.15 MME.

\[
10 \text{ mg} / 5 \text{ ml} = 2 \text{ mg} / 1 \text{ ml}
\]

For the distribution of one bottle of 473 ml, the quantity = 473

\[
(2 \text{ mg}) \times (0.15 \text{ MME}) \times (473 \text{ ml}) = 141.9 \text{ Total MMEs}
\]

For the distribution of 20 bottles of 473 ml, the quantity = 9,460 ml

\[
(2 \text{ mg}) \times (0.15 \text{ MME}) \times (9,460 \text{ ml}) = 2,838 \text{ Total MMEs}
\]

Some NDC Drug Numbers will have an MME Conversion Factor = ‘0’ and a Strength per Unit = ‘0’. For these, please enter ‘0’ total MMEs and ‘0’ assessable MMEs when reporting to NYS. Examples are remifentanil, alfentanil, sufentanil, fentanyl in solution and fentanyl base/powder.

Note: If a fentanyl base/powder or fentanyl in solution is being reported, and it is listed on the MME Conversion Table with a conversion factor other than zero, please send an email to osa@health.ny.gov for instruction. Include ‘Fentanyl Reporting Question’ in the subject line of the email.

Some NDC Drug Numbers have an MME Conversion Factor, but are not subject to the assessment. The total MMEs for these NDC Drug Numbers need to be reported, however the assessable MMEs will be ‘0’. Examples are buprenorphine, methadone and morphine.

If an NDC Drug Number is not found on the MME Conversion Table, please send an email to osa@health.ny.gov. Include ‘Drug Not Found’ in the subject line of the email.

MMEs for each NDC Drug Number sold or distributed must be reported on the NYS Health Commerce System’s ‘Controlled Substance Distribution and Sales Reporting (CDSR)’ application. For additional reporting specifications, see the document, ‘New York State Opioid Annual Assessment Reporting Guidance’ at: https://apps.health.ny.gov/pub/ctrldocs/bne/nyosareportingguidance.pdf

The MME conversion factor is intended for NYS Opioid Stewardship Act reporting purposes only. These values are not to be used for any clinical evaluation or clinical decision-making purposes. This table and guidance document are to be used ONLY for calculating MMEs for purposes of reporting data in compliance with the Opioid Stewardship Act.