



HYDRomorphone:

Evidence-based change for safer medication use

RESPONSE TO A REGIONAL MEDICATION-SAFETY RISK

WHY THIS CHANGE?

Serious regional incidents have involved HYDRomorphone being selected when another medication was intended and errors calculating or preparing the required volume. The 10 mg/mL concentration magnifies the consequence of these errors because common doses require very small volumes.

WHAT REGIONAL USE TELLS US

399

patient encounters
reviewed

1 mg

median total dose

85.2%

received 4 mg or less

58.3% received 2 mg or less • 87.9% received two doses or fewer • Maximum single dose: 2 mg

The 10 mg/mL formulation is more concentrated than needed for routine care and increases the potential harm from medication errors.

REGION-WIDE ADOPTION OF HYDRomorphone 2 mg/mL

10 mg/mL

0.5 mg dose = 0.05 mL

1 mg dose = 0.1 mL

Highly concentrated.
Common doses require very small volumes.

2 mg/mL

0.5 mg dose = 0.25 mL

1 mg dose = 0.5 mL

Same dose.
Larger, easier-to-measure volume.

WHY 2 mg/mL?

The 10 mg/mL concentration contains much more medication than is required for routine care while adding substantial risk. The lower concentration does not eliminate medication error. It better matches regional use, provides more measurable volumes for common doses, and reduces the amount of HYDRomorphone that could be delivered if an error occurs.

A safer concentration does not replace safe practice.
Read the vial. Calculate carefully. Cross-check every time.