



# Optimum Dosing

## OAT Treatment



# Faculty/Presenter Disclosure

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Relationships with commercial interests:

Grants/Research Support: None  
Speakers Bureau/Honoraria: None  
Consulting Fees: None  
Other: None

# Disclosure of Commercial Support

Disclosure of Conflict of Interest:

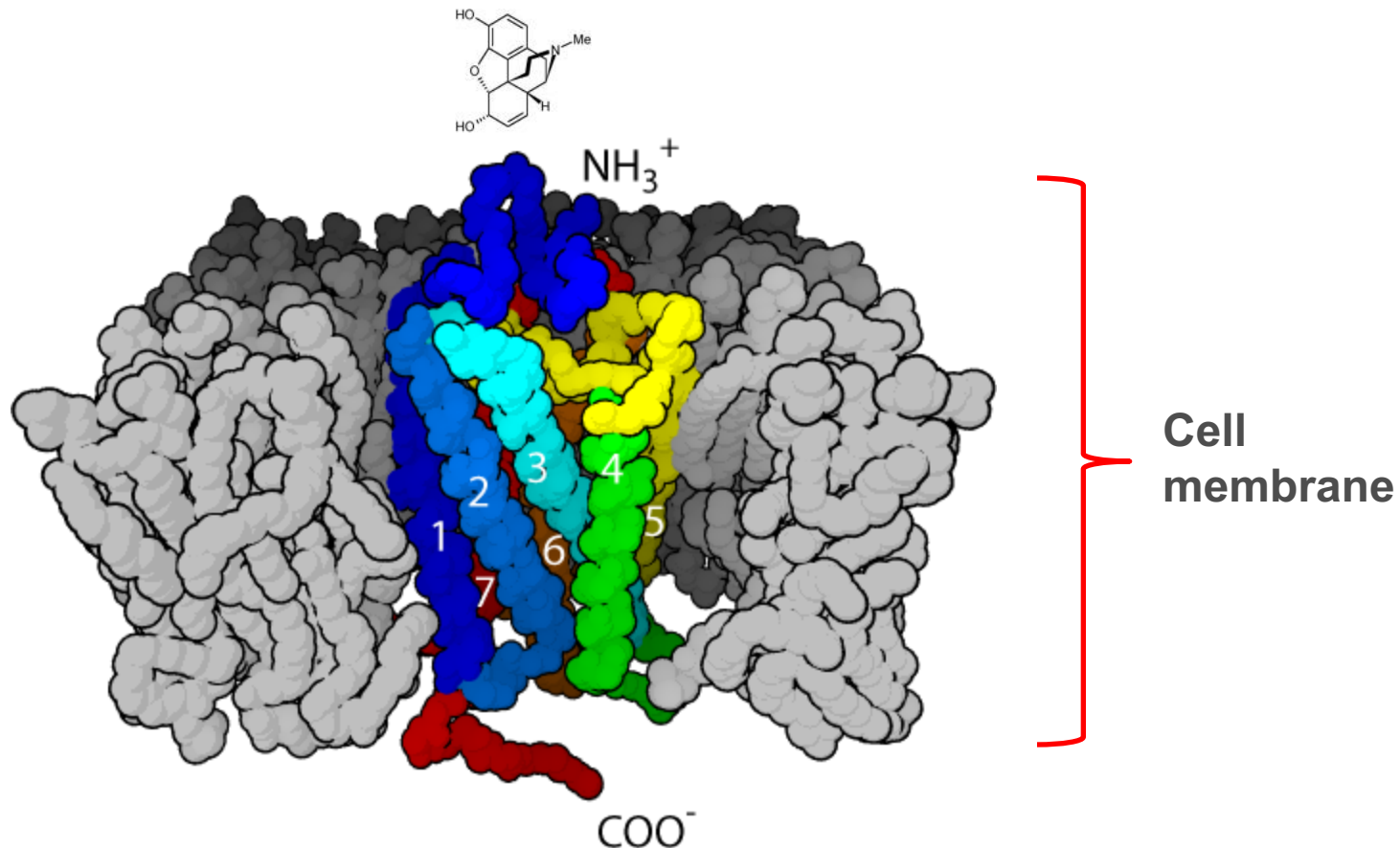
None



# Learning Objectives

1. Brief on optimal dosing : OAT First line agents
2. Team 1 : START – Bup-Nlx (Suboxone)
3. Team 2 : South Team - Methadone

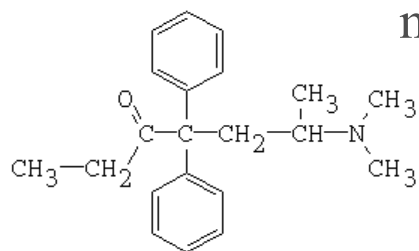
# Opioid Receptor



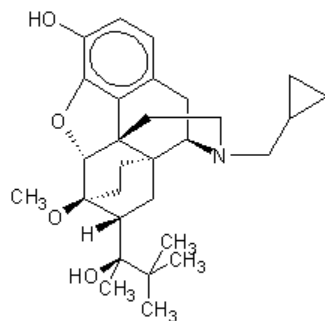
**G protein coupled receptors (GPCRs),**  
also known as **seven-transmembrane**  
**domain receptor**

# Opioid Molecular Structure

## Synthetic opioid

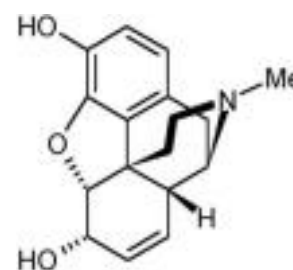


methadone

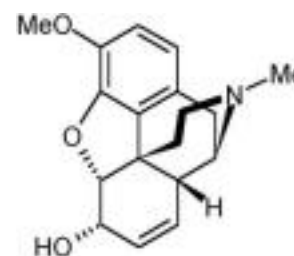


buprenorphine

## Natural opiate

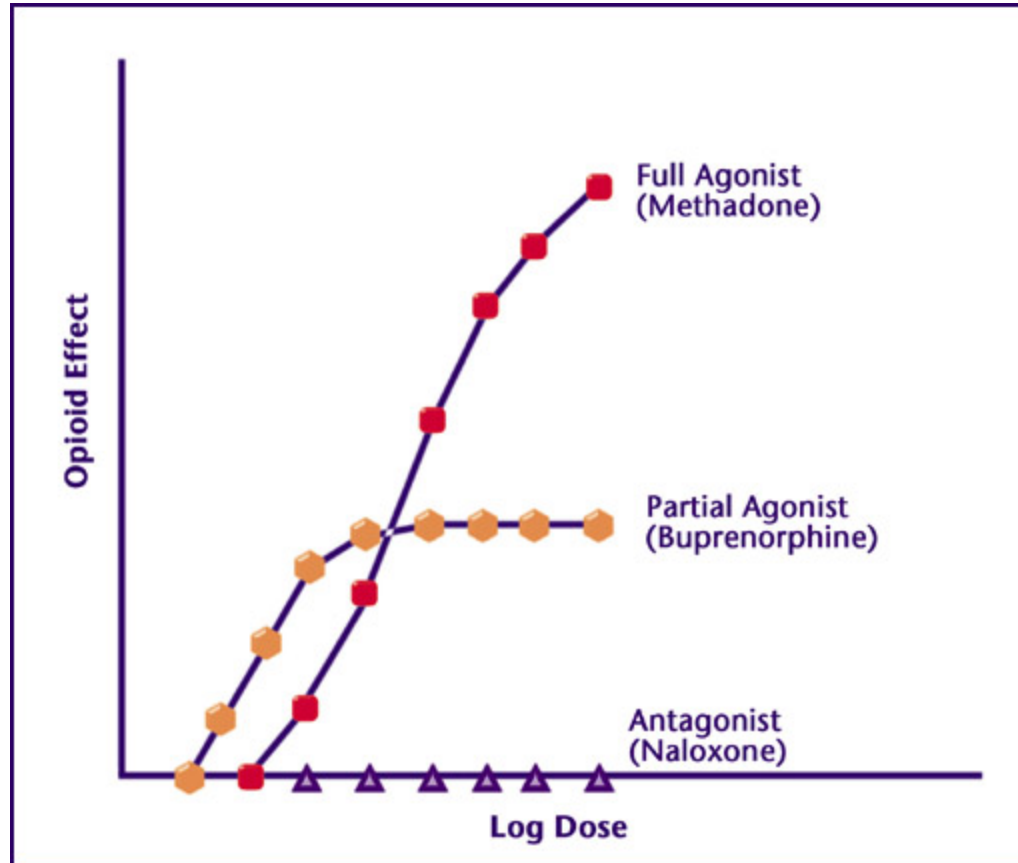


morphine



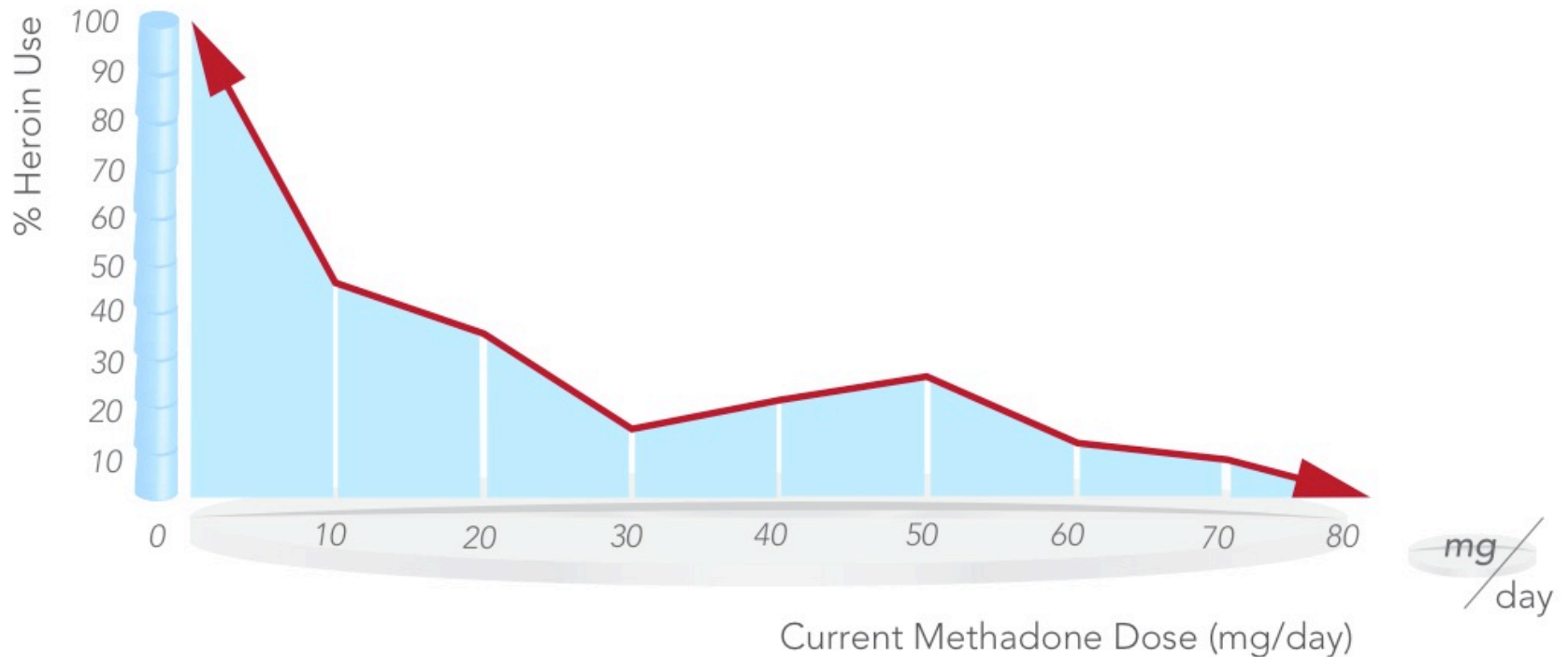
codeine

# Opioid Effect



*Conceptual Representation of Opioid Effect Versus Log Dose for Opioid Full Agonists, Partial Agonists, and Antagonists\**

# Heroin Use by Methadone Dose



Payte & Ball (1988)

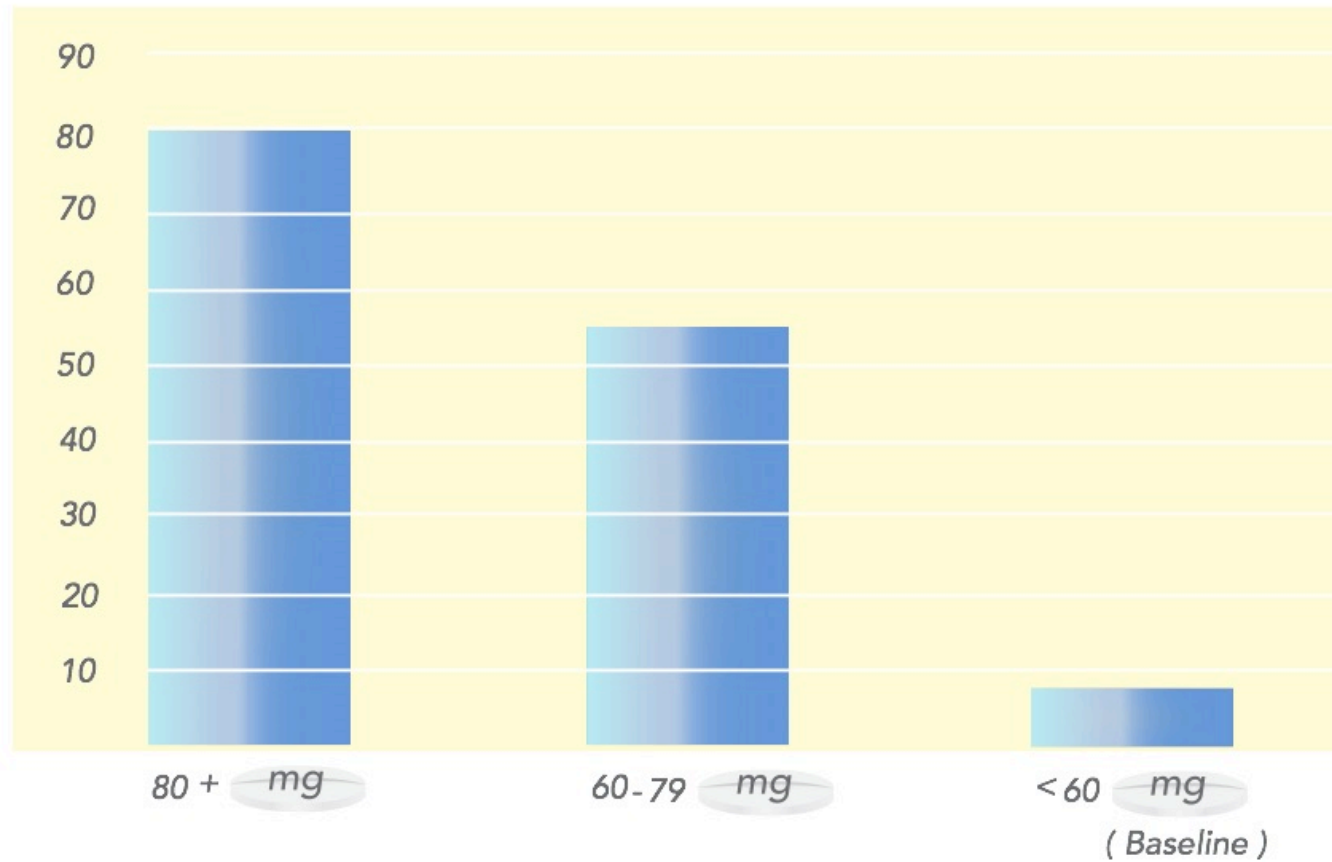


# Retention

Intervention	1-Year*
Methadone	50-80%
Suboxone	40-50%
Naltrexone	10-20%
Naloxone	
Detox	5-20%

\*1 Year Retention and/or reduction in use of opioids  
Kreek (1996, 2001)

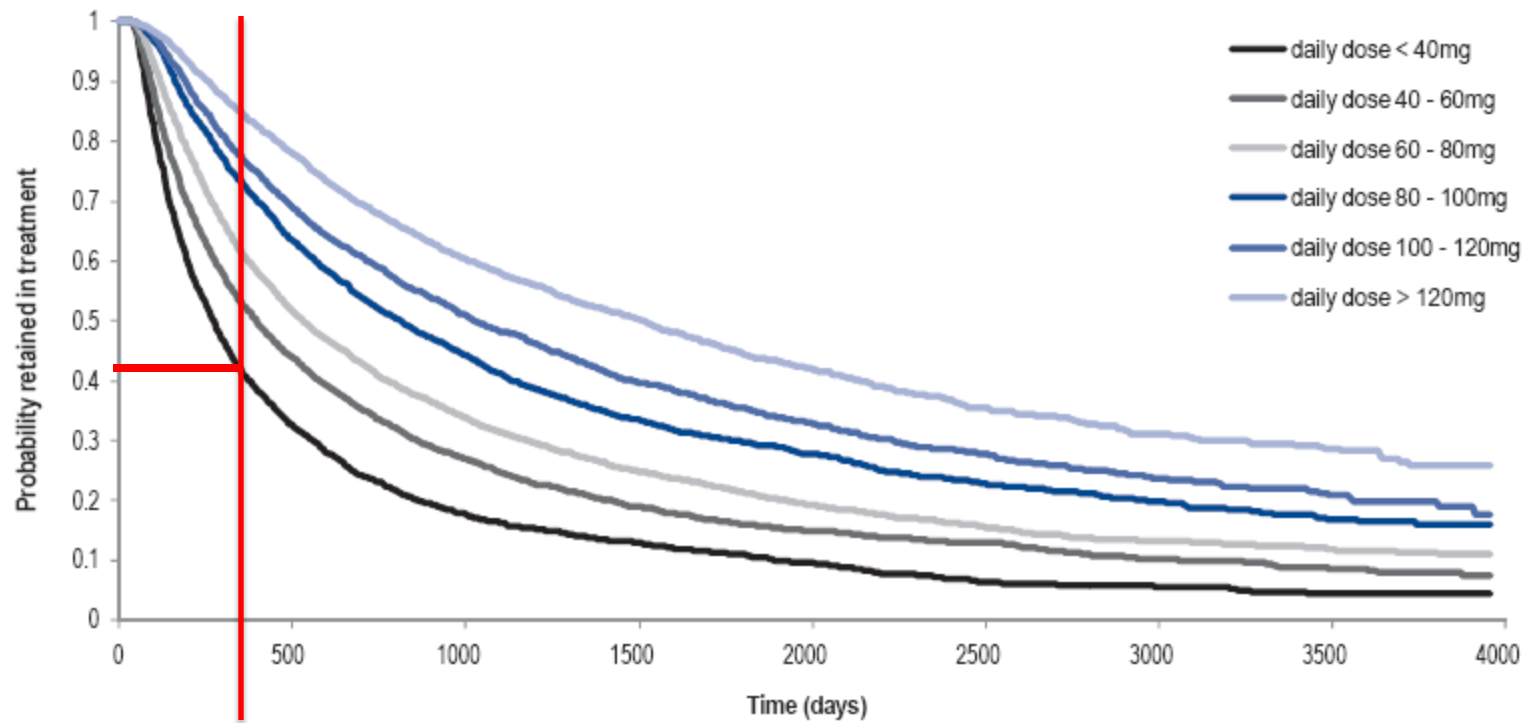
# Methadone Retention in Treatment



Payte — Adapted from Caplehorn and Bell: The Medical Journal of Australia

# Retention Data BC

Figure 9. Effect of Daily Dose on Methadone Maintenance Treatment Retention (Kaplan-Meier Curve)



Noysk et al

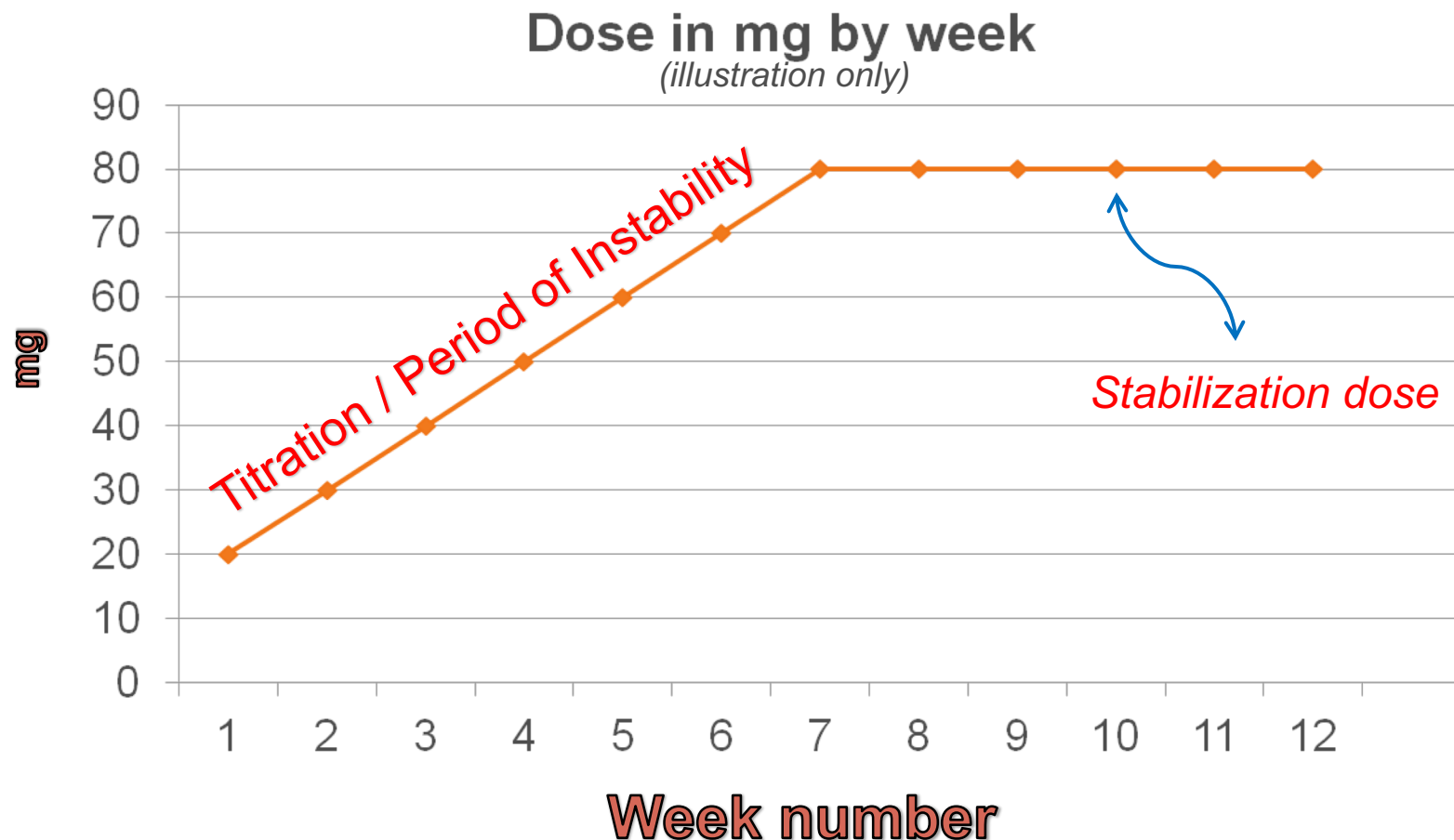
BC Methadone performance measures (2012) **Office of the Provincial Health Officer**

# Review of 44 Methadone Programs

Dose of methadone single most important factor affecting retention in treatment

The higher the dose of methadone the longer patients remained in treatment

# Methadone Initiation



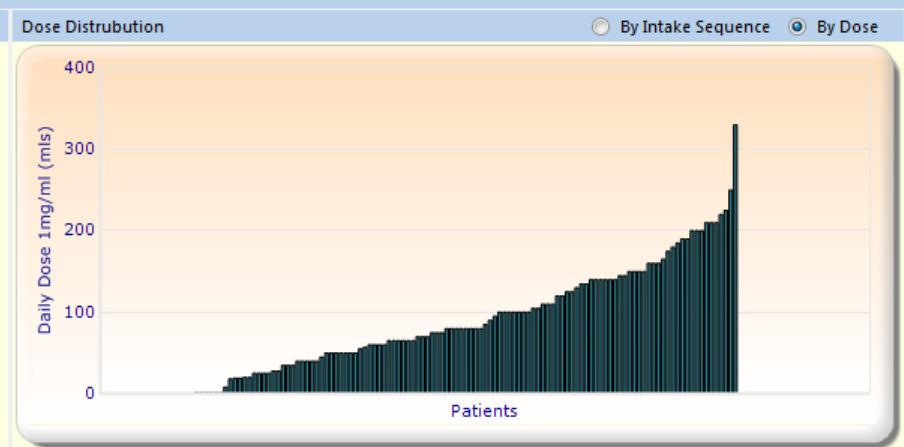
*Most patients will receive stability on maintenance doses of 60–120 mg daily. Methadone doses must always be individualized and based on clinical response.*

Practice Profile Refresh Data

**Caseload Summary**

Monday, July 08, 2013 9:04:29 PM

Number of Registrants: 113



**Dose Target**

Average Dose: 94.1 mls

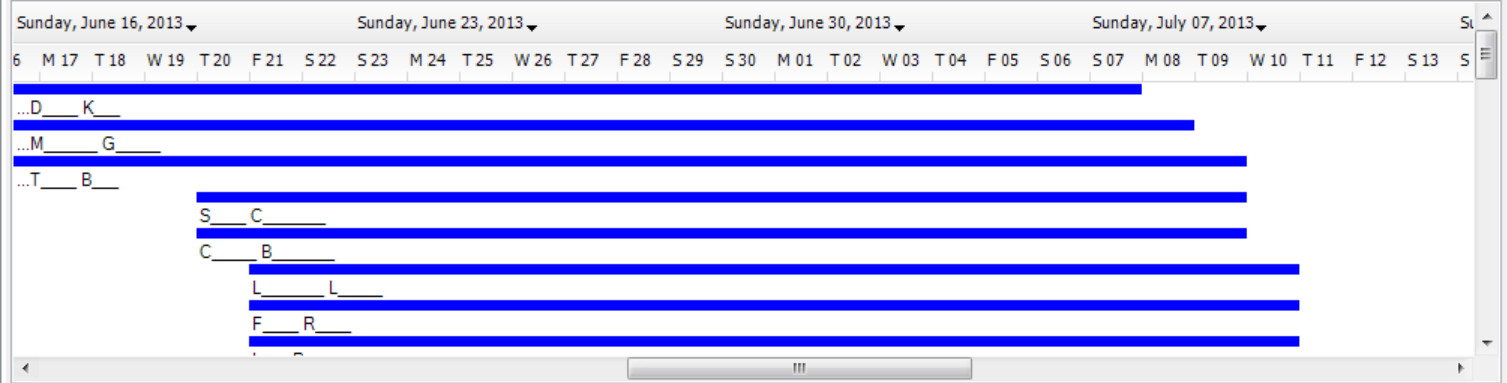
60 mls or greater: 67.5%

60 - 120 mls: 36.0%

120 mls or greater: 31.6%

**Notifications**

**Case Timeline**



**Patient List**

Patient List Patient Events Console

**Search**

Name:

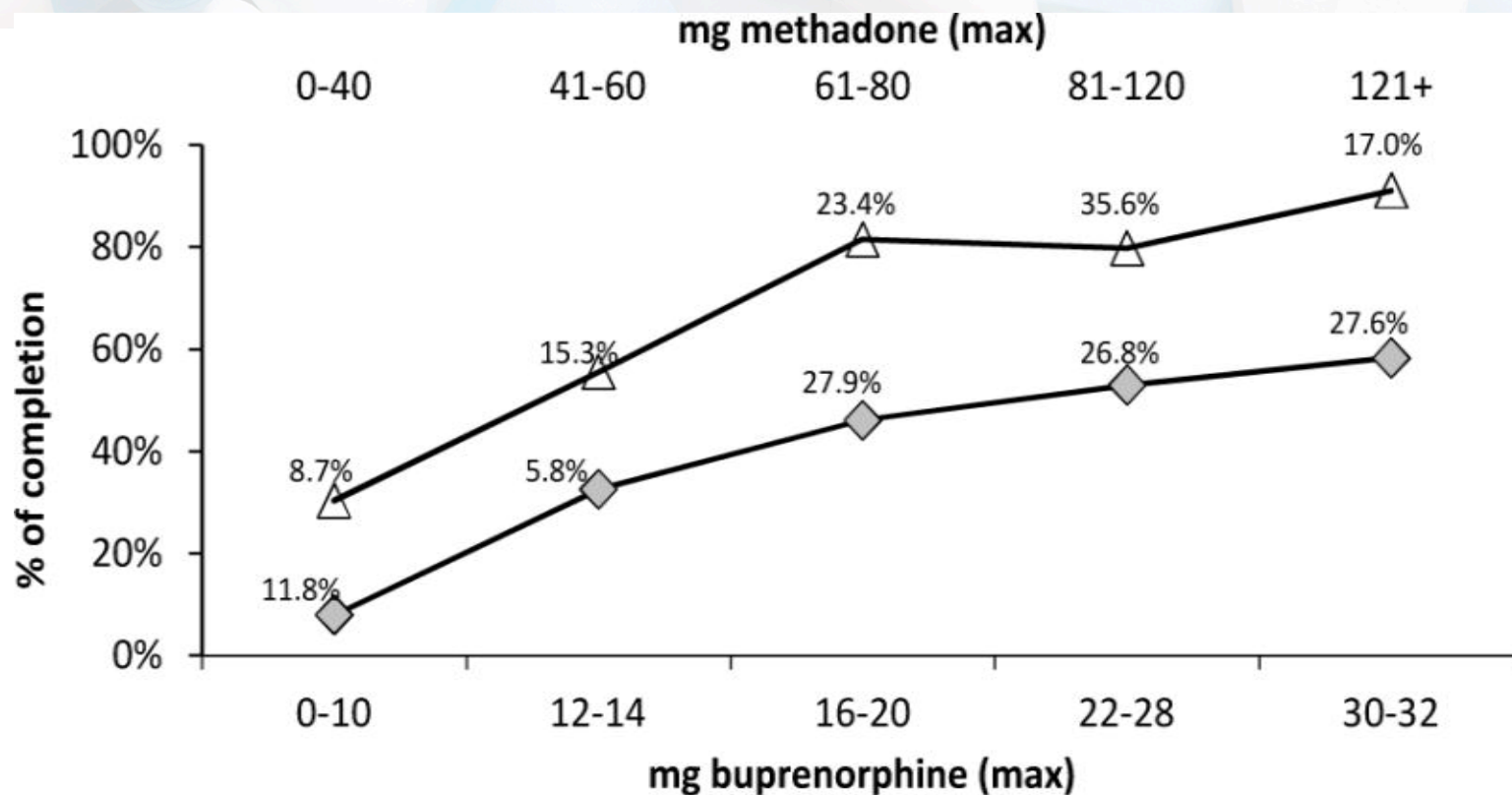
**Cases Due**

- Overdue (7)
- Today (2)
- Tomorrow (6)
- Future (98)

**Case Details**

**Case Properties**

# Completion / retention @ 24 weeks

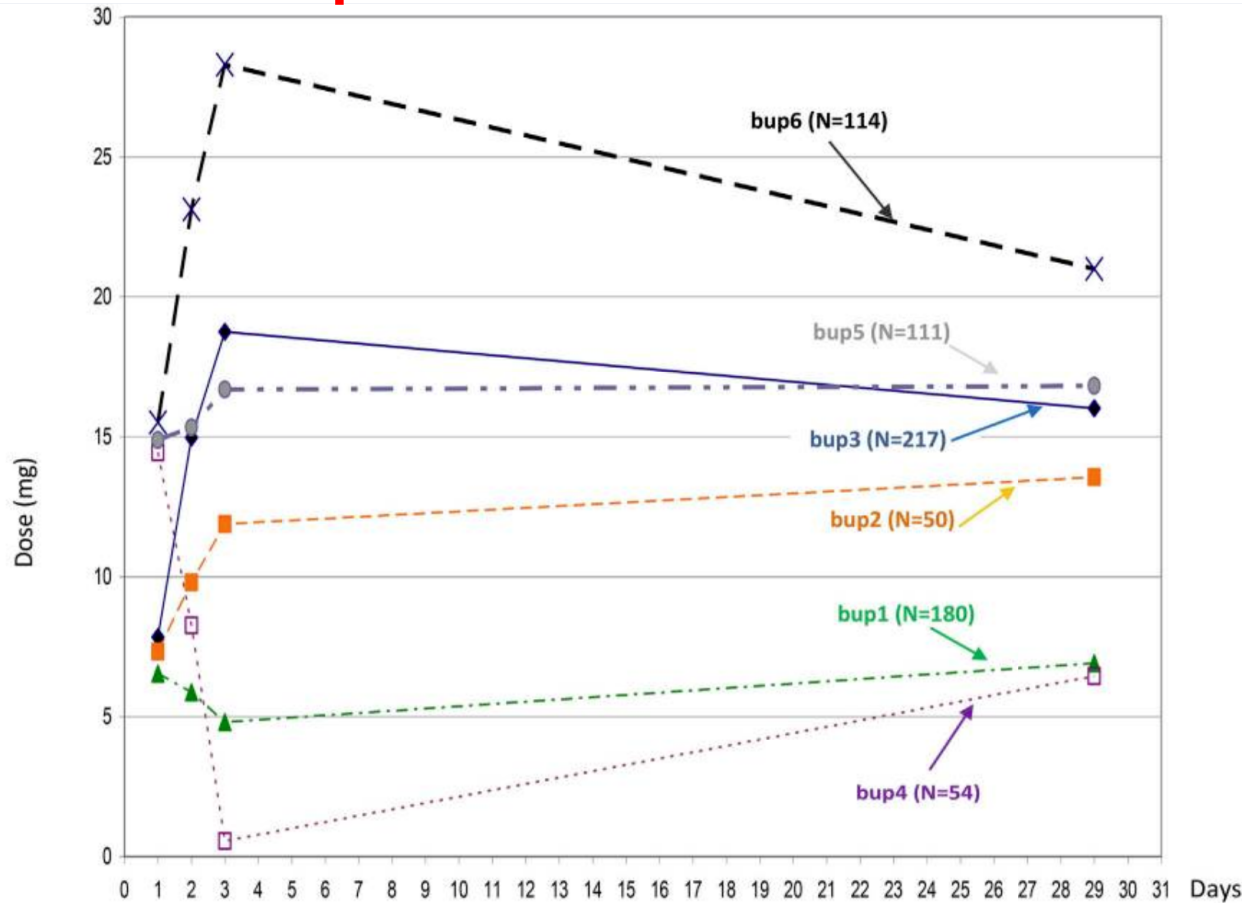


◆ Buprenorphine (% = % of buprenorphine participants prescribed in that dose range)

▲ Methadone (% = % of methadone participants prescribed in that dose range)

Hser. Addiction (2014) Treatment retention among patients randomized to buprenorphine/naloxone compared to methadone in a multi-site trial

# Different Bup-Nix Induction Patterns



Jacobs et al (2015) Am Journal Addiction

**bup1:** Started and remained on low\* dose

**bup2:** Started on low, shifted gradually to moderate\*\* dose

**bup3:** Started on low, shifted quickly to moderate dose

**bup4:** Started on moderate, shifted to low dose

**bup5:** Started and remained on moderate dose

**bup6:** Started on moderate, shifted to high\*\*\* dose

For the purpose of this study:

\* Low BUP dose is  $\leq 8$  mg

\*\* Moderate BUP dose is  $> 8$  mg  $\leq 24$  mg

\*\*\* High BUP dose  $> 24$  mg





THANK YOU!

