

# OPIOID SUBSTITUTION THERAPY RISKS & BENEFITS

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# DISCLAIMER

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In the past year I have accepted funds from Purdue for speaking

# OPIOID SUBSTITUTION

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- Methadone - Full mu receptor agonist
- Buprenorphine (Suboxone®) - Partial agonist

# TEACHING OBJECTIVES: AFTER THIS TALK THE PARTICIPANT SHOULD BE AWARE OF:

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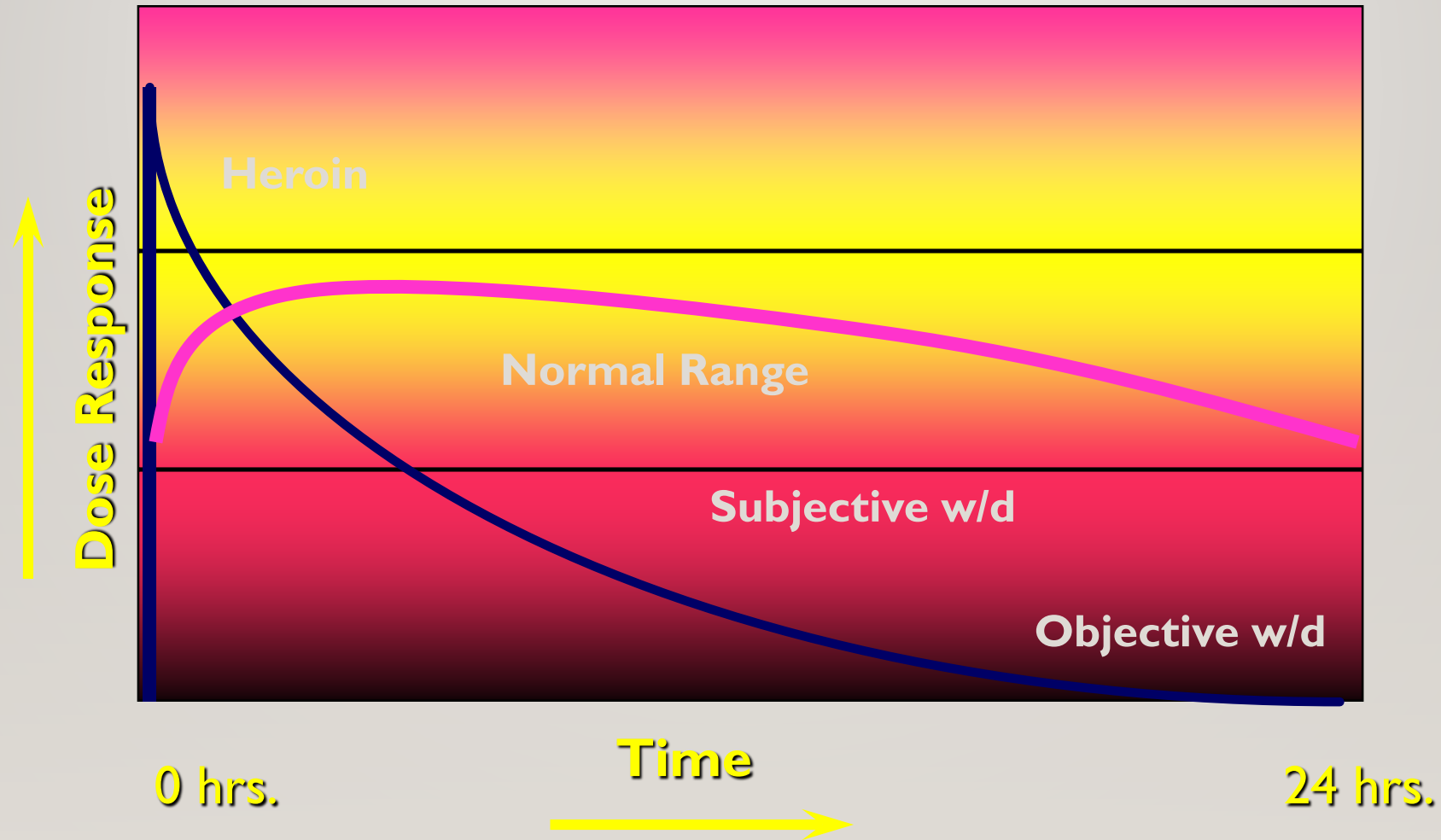
- Reduce or eliminate use of non prescribed opioid
- Reduce or eliminate use of other drugs of abuse
- Harm reduction
- Death – by any means – reduction of
- Preservation or improvement of health
- Healthy pregnancy; healthy baby
- Return or establishment of normal social/economic/family function

# REDUCTION OF NON PRESCRIBED OPIOID USE

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- Methadone and Suboxone both effective at doing this
- Methadone is effective where suboxone fails
  
- BENEFIT

# Methadone 24 Hour Dose Response



# OTHER DRUGS OF ABUSE

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- If done in isolation OST can increase use of stimulants.
- Methadone/suboxone eliminate the need to find and use opioids to prevent withdrawal.
- Frees up the polysubstance user's resources to obtain stimulant.
- Other treatment modalities must be employed in addition to OST.
  
- RISK

# ALCOHOL

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- This is a dose reduction risk
- Patient can mitigate their methadone withdrawal symptoms with alcohol.
- Roughly 85% of our patients are Hepatitis C Positive
- Do not foolishly encourage dose reduction.



# HARM REDUCTION

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- Harm reduction means finding ways of allowing your patient to continue to use in a way that will be less dangerous and harmful to them
- OST is Treatment, not Harm Reduction.
- If done poorly, ie, continued prescribing despite patient persistent use of stimulant or liberal carry policy with patients who may sell their methadone, this is Harm Augmentation.
- Diversion

# DEATH – BY ANY MEANS –REDUCTION OF

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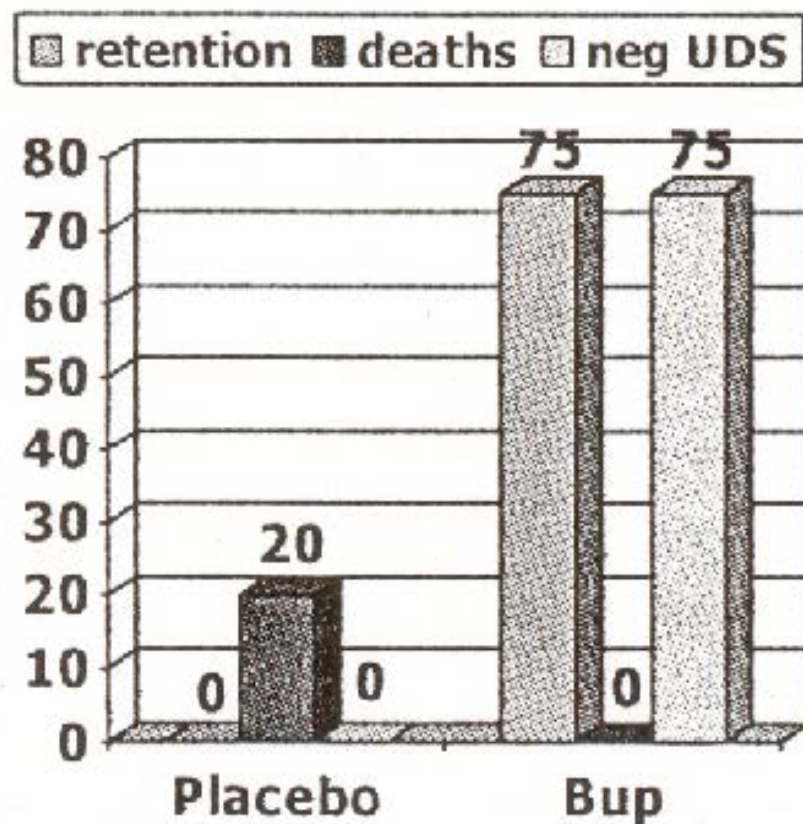
- Addiction is a very deadly illness, even if treated
- Mortality rates can be reduced by treatment, but never to the level of the non addicted population.

# Kakko et al, Lancet Feb 22, 2003

## One Year Outcome

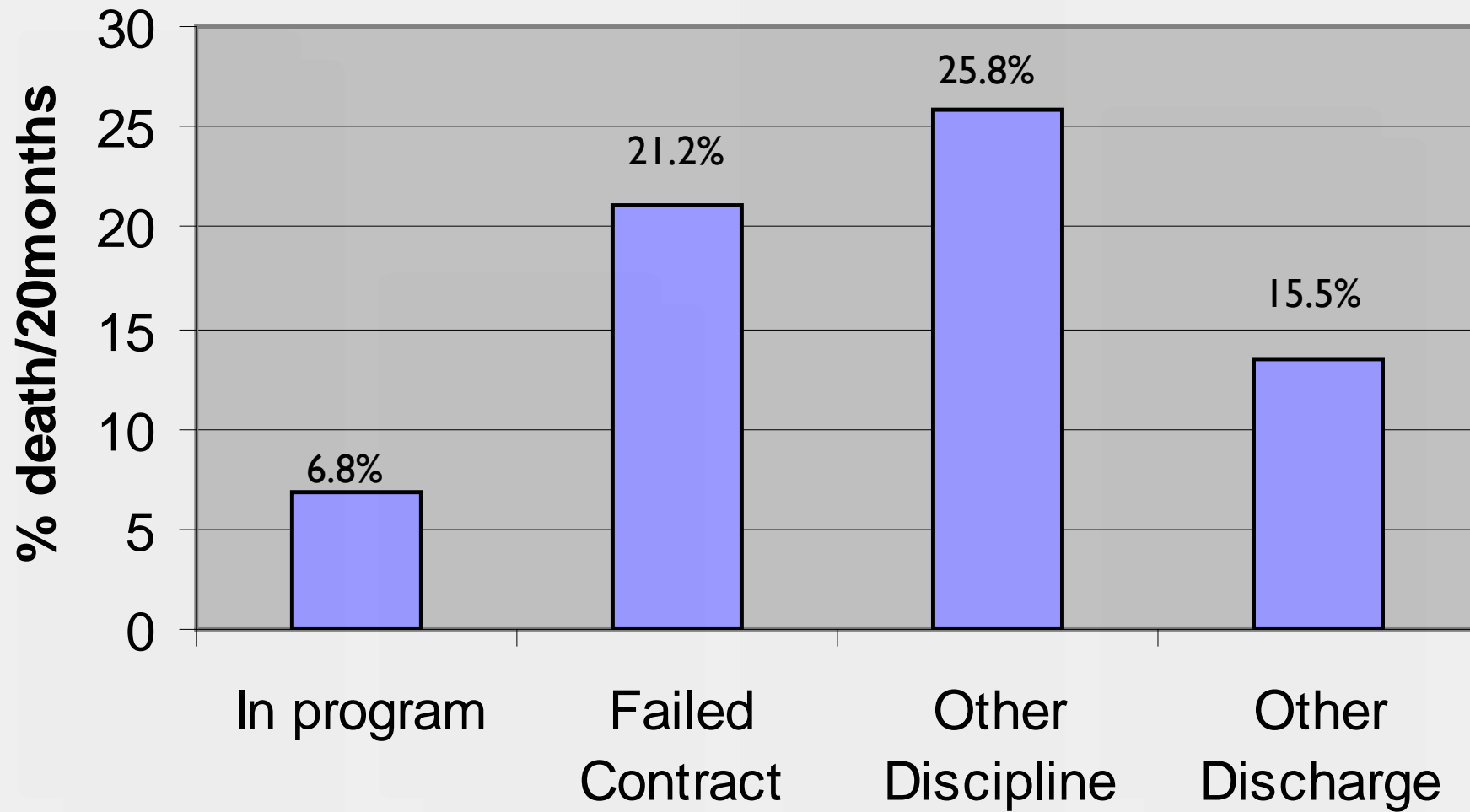
(%) \*

- Swedish placebo study
  - argued as ethical because 4yr rule for MM
- N=40 heroin injectors
- Placebo Tx Group
  - Bup induction
    - Then 6 day taper;
  - Weekly cog-bev tx individual, group, plus emergency contacts
- Bup Tx Group
  - Fixed 16mg dose
  - Same psychosocial therapy



\*Note studies using 8mg dose with lower retention ~ 20%

# Death After Discharge from Methadone

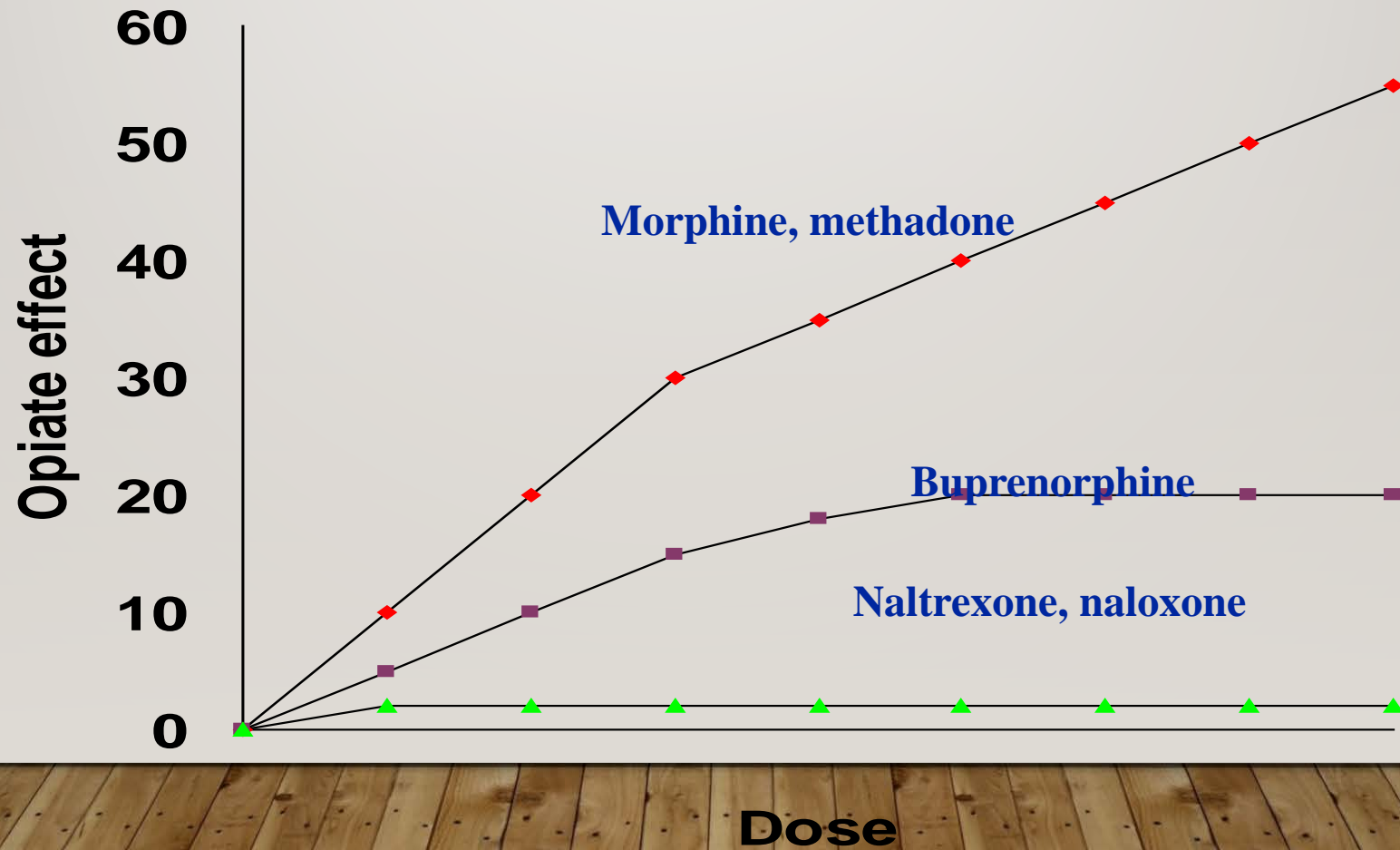
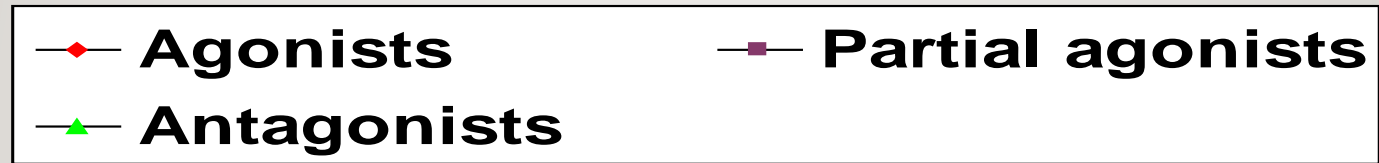


# DEATH BY OVERDOSE

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- Suboxone has a “ceiling effect” – Difficult to overdose
- “Methadone doesn’t have a sense of humour” Doug Gourlay
- Most death occur within the first three days of induction, almost all within the first ten day.
- Remember that patients lose their tolerance.
- Methadone/suboxone block mu receptor so it is protective against overdose with most opioids (fentanyl is the exception)

# CLASSIFICATION OF OPIOIDS

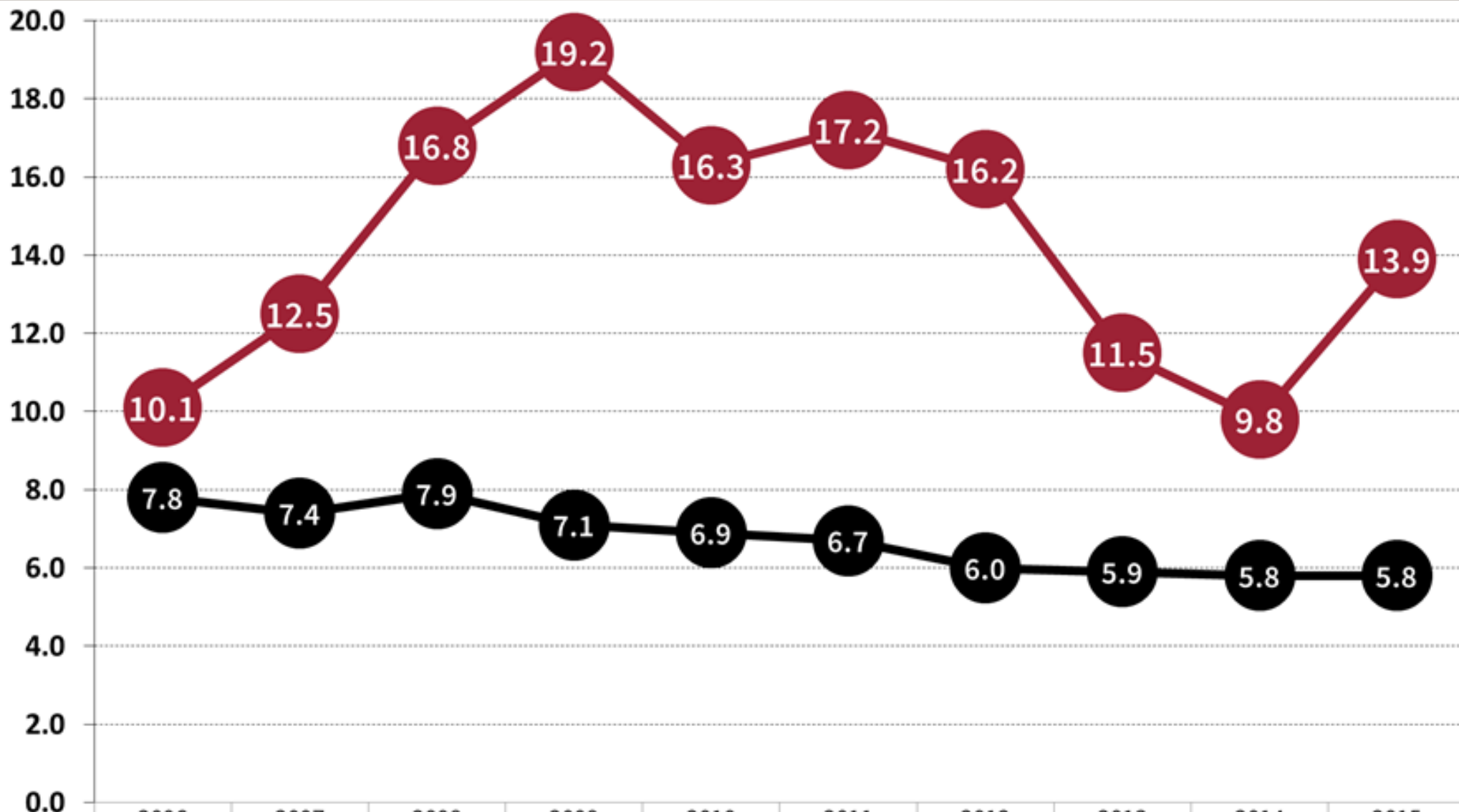


# PRESERVATION OR IMPROVEMENT OF HEALTH

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- Greatly reduces risk of BBV infection

Persons newly diagnosed with HIV  
per 100,000 population

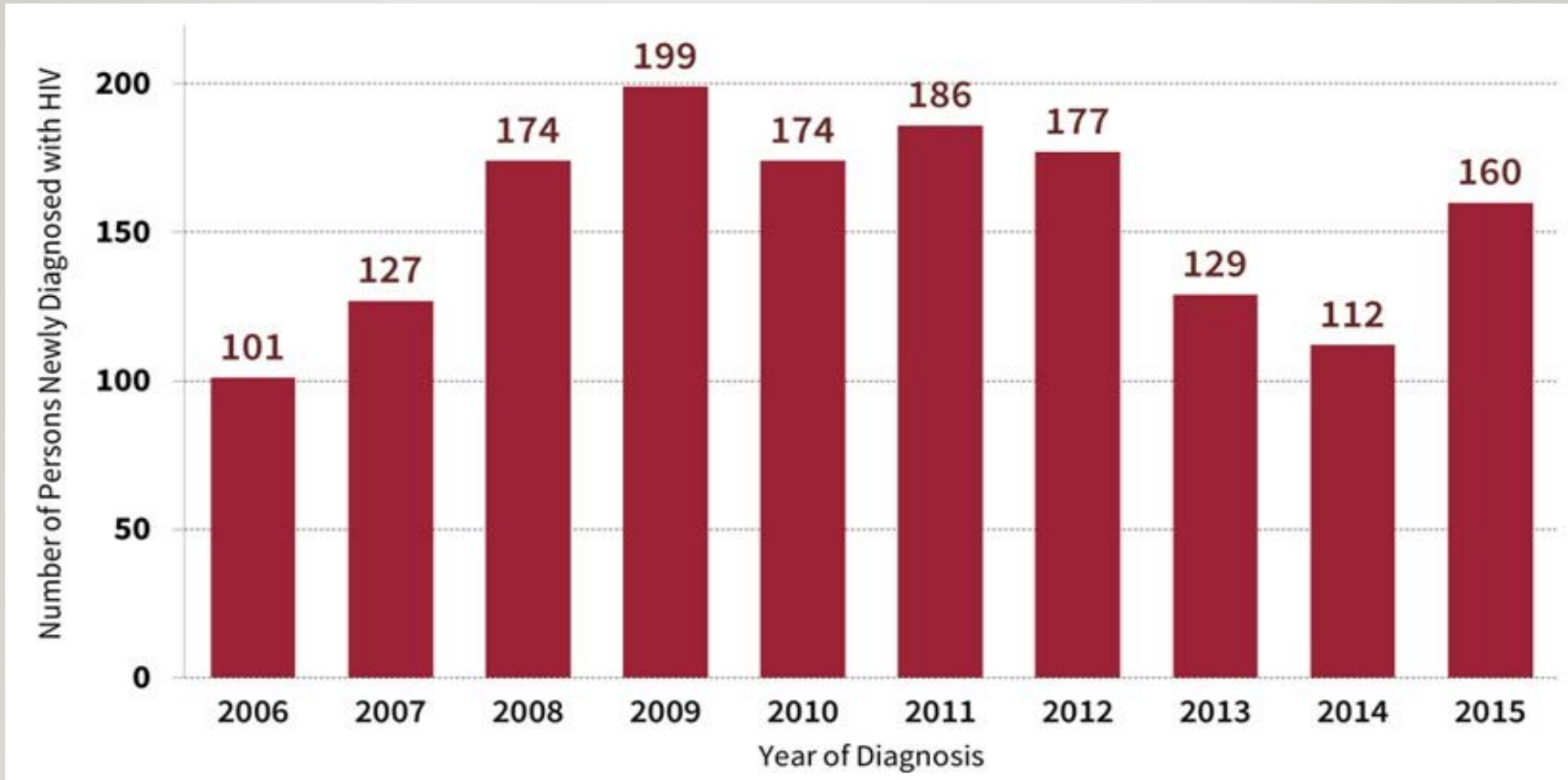


SK	10.1	12.5	16.8	19.2	16.3	17.2	16.2	11.5	9.8	13.9
Canada	7.8	7.4	7.9	7.1	6.9	6.7	6.0	5.9	5.8	5.8
Comparison SK vs Canada	1.3	1.7	2.1	2.7	2.4	2.6	2.7	1.9	1.7	2.4

Year of Diagnosis

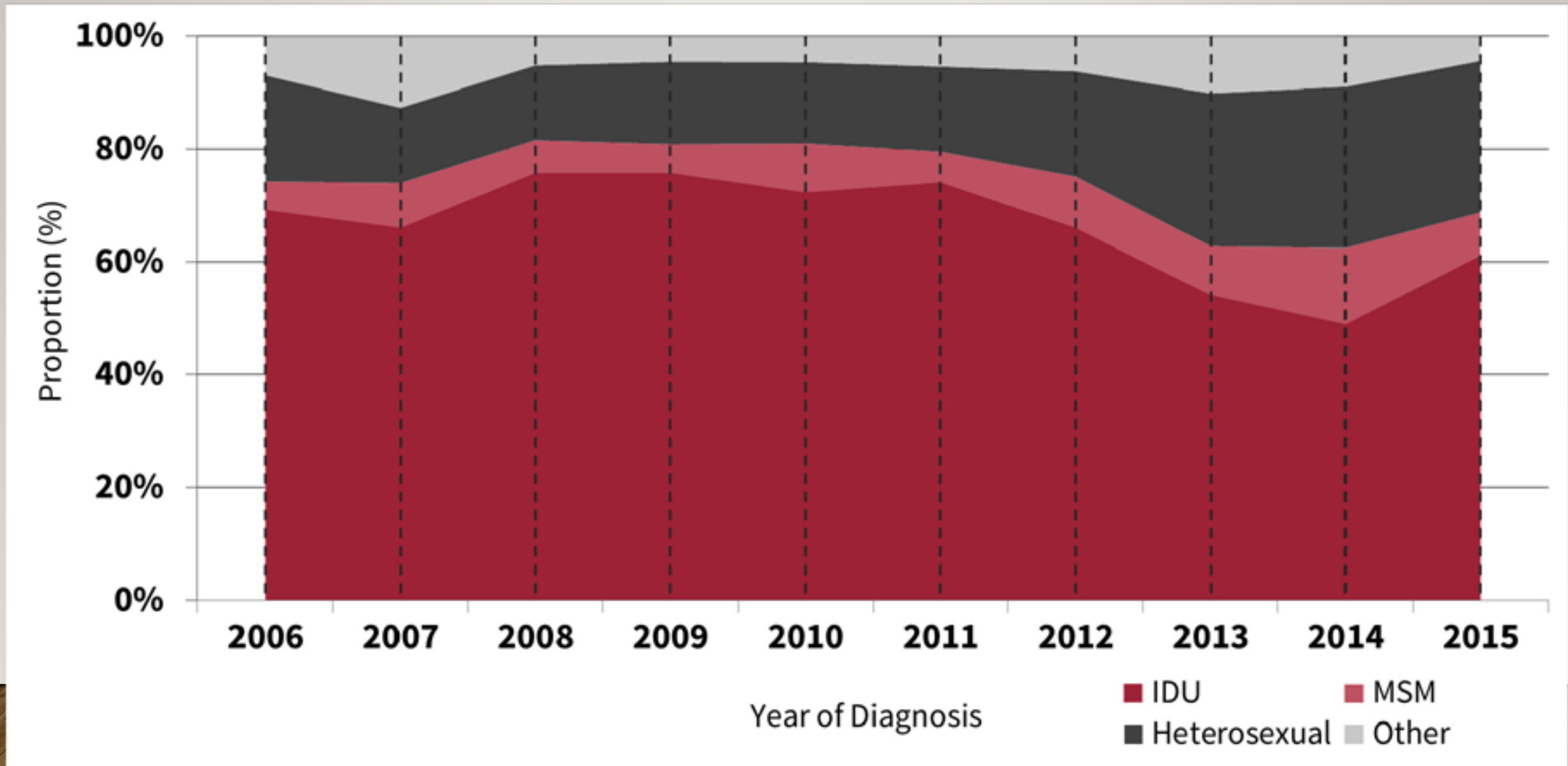


**FIGURE 1. Persons newly diagnosed with HIV by year of diagnosis, 2006-2015**



The peak of 199 HIV cases in 2009 related, in part, to enhanced efforts to find people who may have been infected for a number of years but had not been tested. The increase again in 2015 may also be related to case finding and public education activity resulting in people who had contact with identified HIV cases coming forward for testing.

**FIGURE 9 & TABLE 10. Newly diagnosed persons self-reporting primary risk factors for acquiring HIV infection, 2006-2015**



# PRESERVATION OR IMPROVEMENT OF HEALTH

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- Greatly reduces risk of BBV infection, Staphylococcus infection (osteomyelitis, endocarditis)
- Better nutrition, healthier life style
- Regular contact with health care professionals
  
- Constipation
- Hormonal dysregulation
- Wt gain
- Sweating
- Tooth decay

# HEALTHY PREGNANCY; HEALTHY BABY

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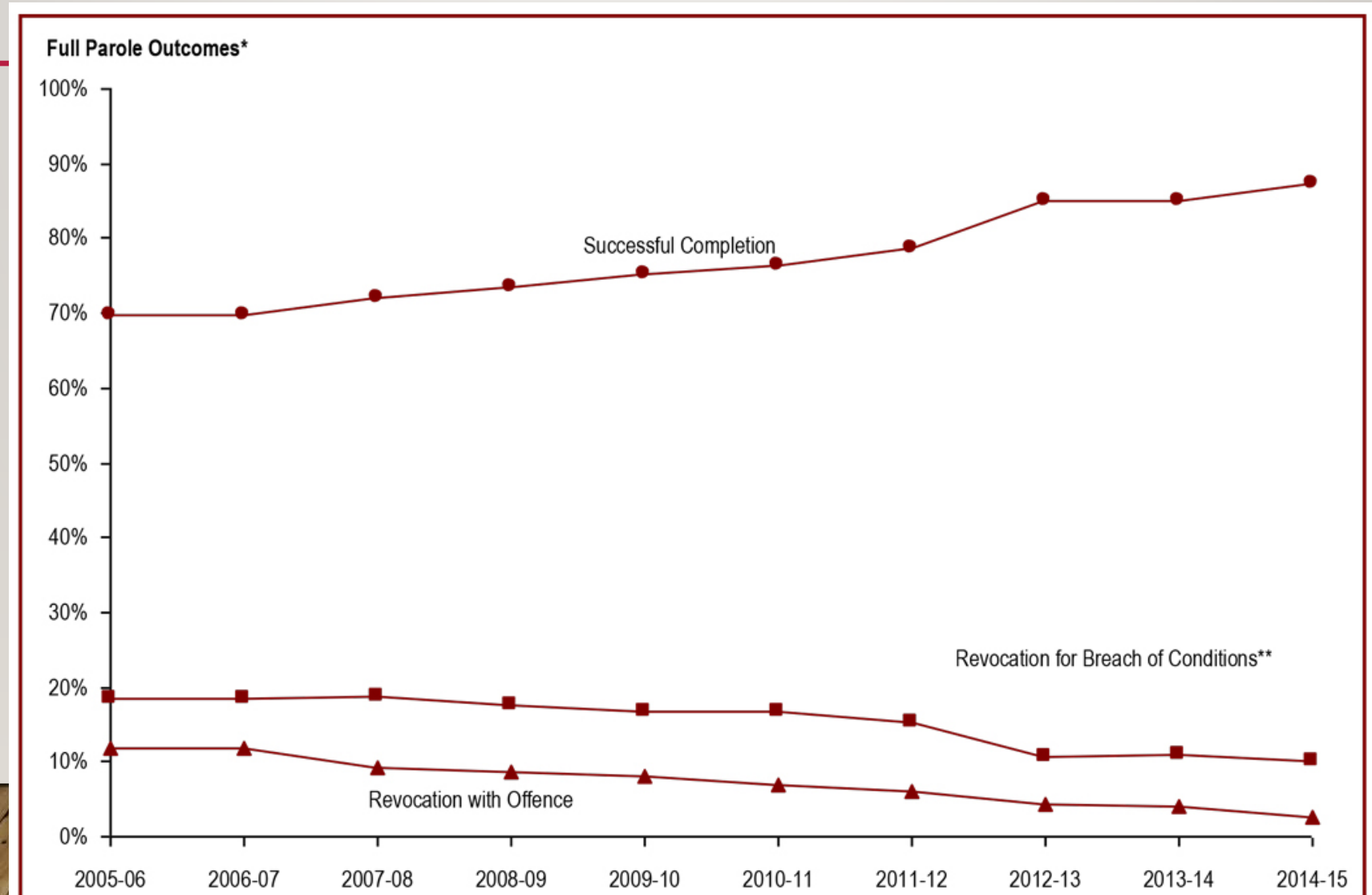
- OST reduces fetal wastage (withdrawal kills fetuses)
- Neonatal abstinence syndrome
- NAS less severe in mothers treated with Suboxone.
- Fewer pregnant women drop out of Methadone Maintenance than they do out of Suboxone Maintenance.
  
- Infant less likely to be apprehended if mother doing well on OST

# RETURN OR ESTABLISHMENT OF NORMAL SOCIAL/ECONOMIC/FAMILY FUNCTION

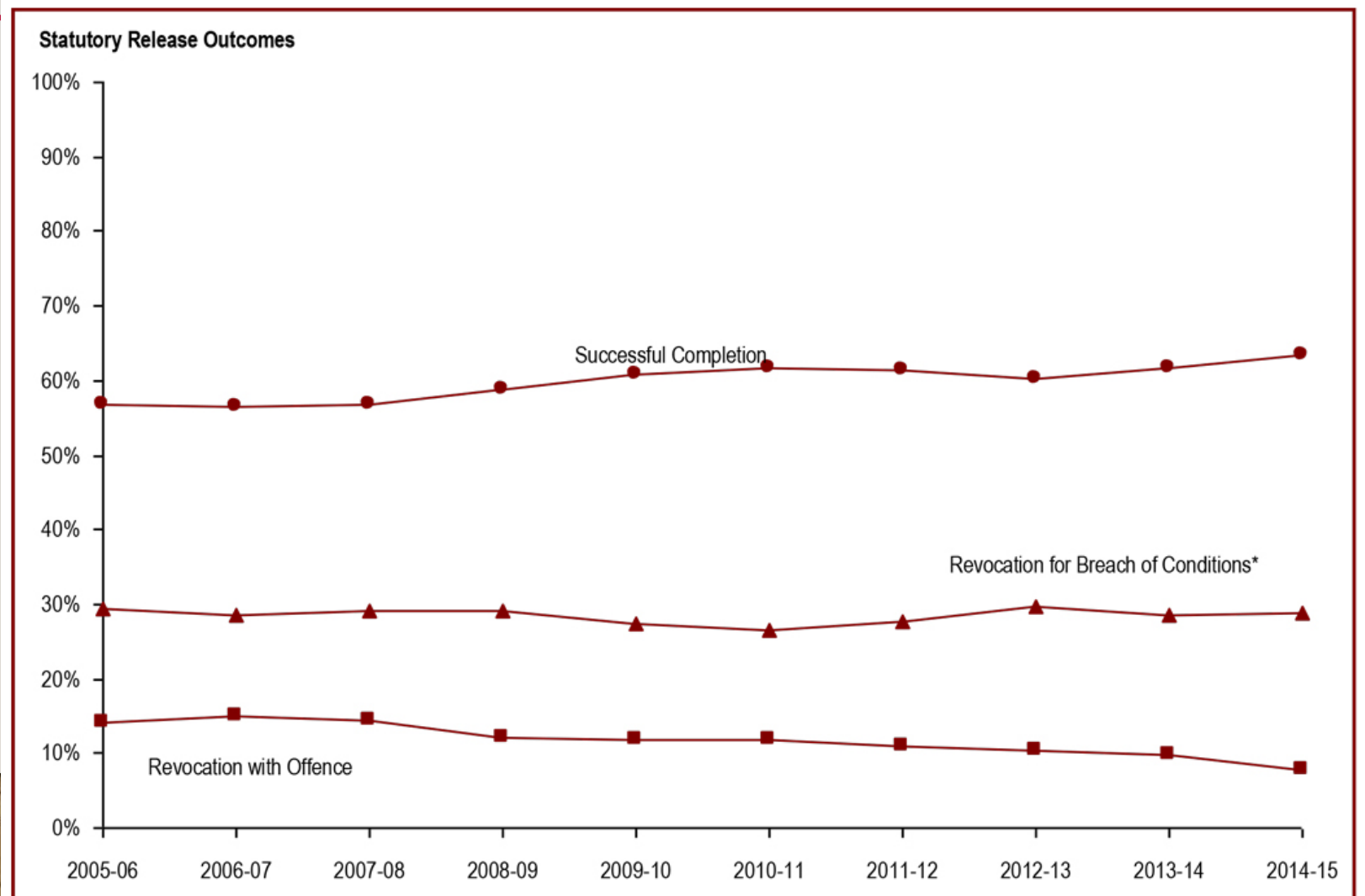
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- “you have given me my life back”
- Children returned from care
- Job
- Education
- Stay out of Jail

# PAROLE -



# STATUTORY RELEASE – 2/3 RDS SENTENCE



# FINAL THOUGHTS

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- Wisely managed Opioid Substitution Therapy carries minimal risk
- Suboxone is safer for the unwise (patient, physician, diverter) than is methadone
- Untreated opioid addiction invariably leads to an early death.
  
- The benefits of OST far outweigh any risk.