



***DATA BLITZ!!***  
***Ten Year Trends from the  
Massachusetts Prescription  
Monitoring Program Database***

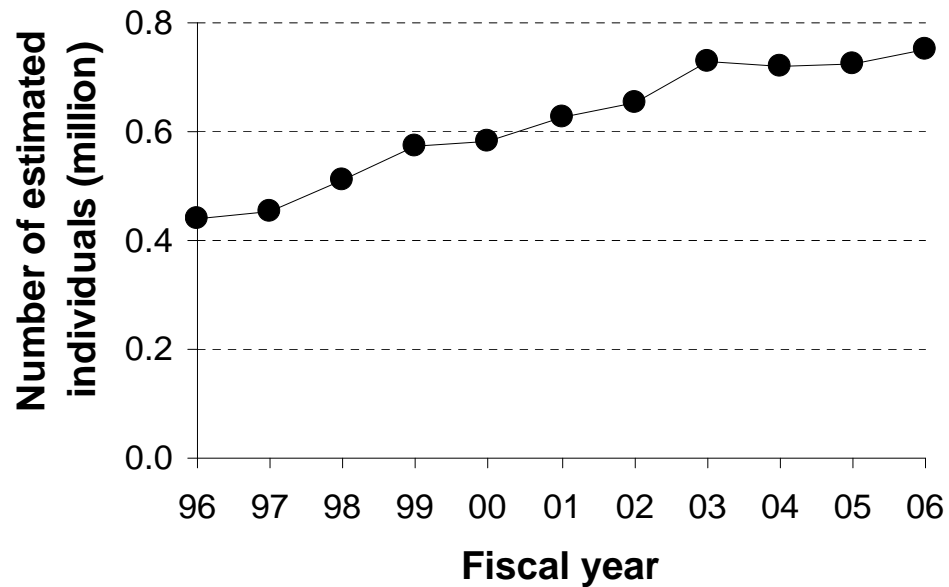
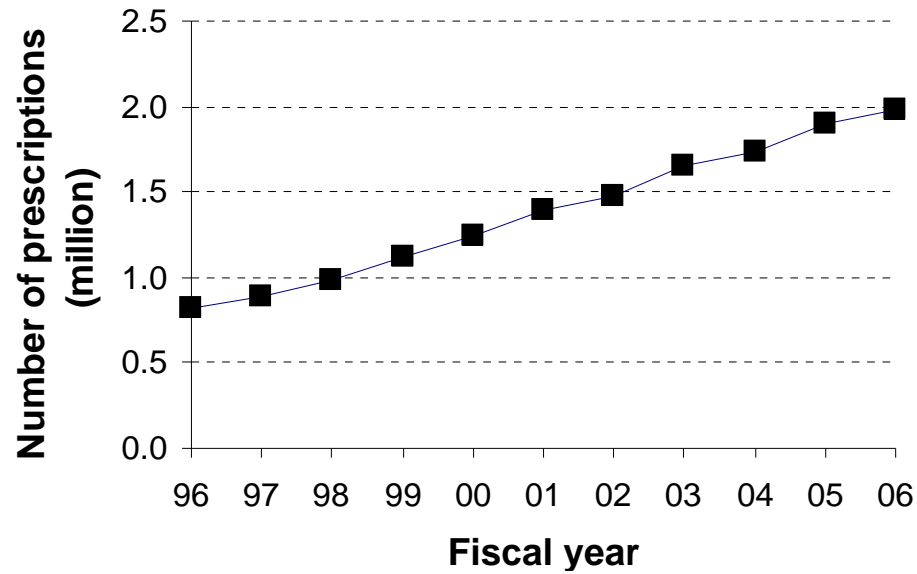
**Cindy Parks Thomas PhD**  
**Brandeis University**  
**April 2, 2009**

Analyses based on Katz et al, manuscript under review

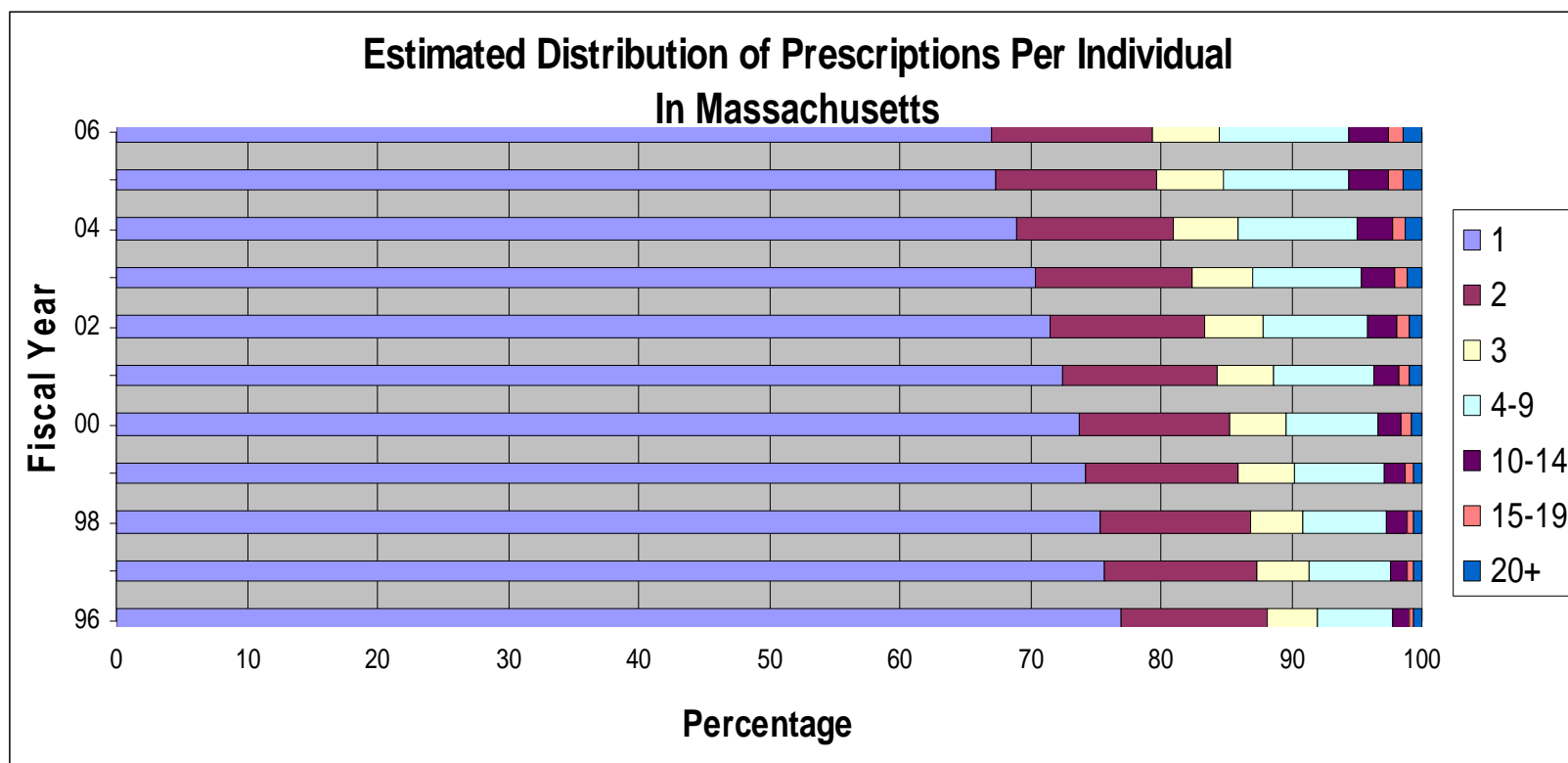
# *Background*

- Schedule II only
- 2.8 million schedule II prescriptions in 2006
- 1200 pharmacies
- Limitation: unique ID missing in 25% of prescriptions, or multiple IDs for same individual results in underestimate of prevalence of questionable activity
- Estimated lower bound number of individuals receiving schedule II prescriptions in 2006: 562,592
- When adjusted for missing data, we estimate approximately 11% of Massachusetts population was dispensed a Schedule II opioid

## Overall MA Schedule II Prescribing Trends 1996-2006

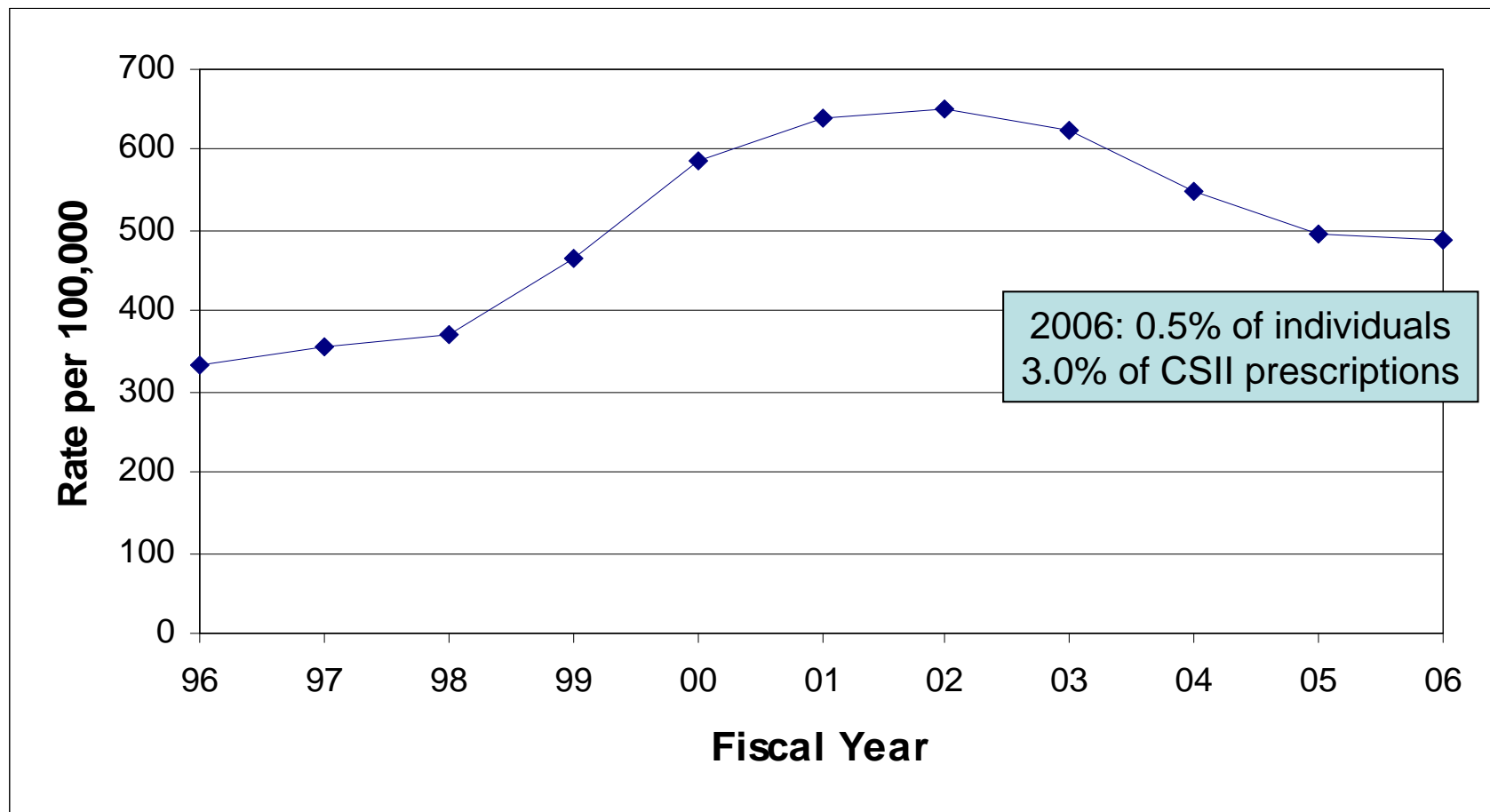


# Massachusetts Distribution of Schedule II Prescription Use



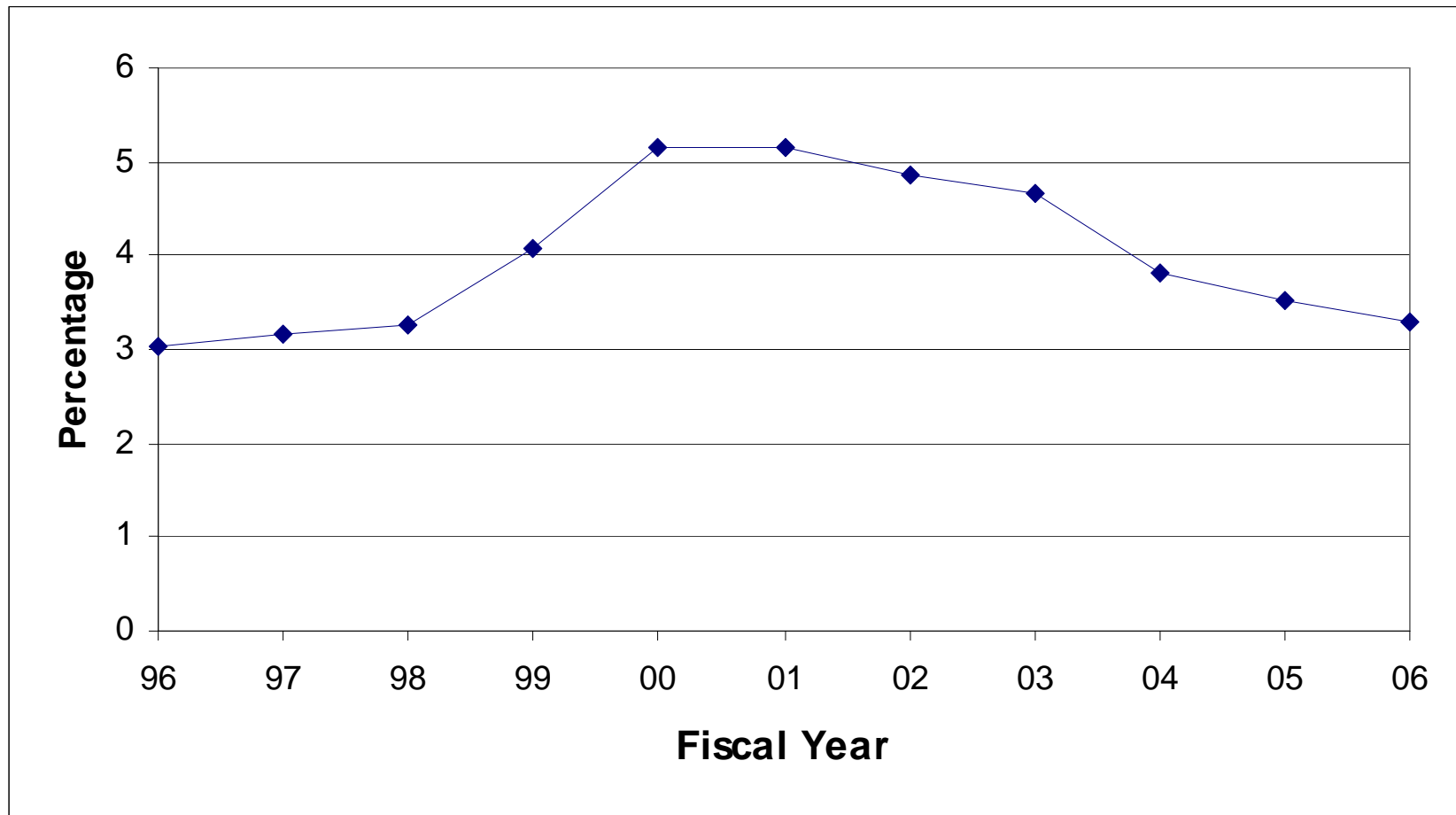
*Note: In FY 2005, slightly more than half (52%) of total schedule II prescriptions were accounted for by individuals with 5 or more prescriptions during the year.*

## *Estimated Number of Individuals per 100,000 Showing Questionable Activity\* by Fiscal Year*



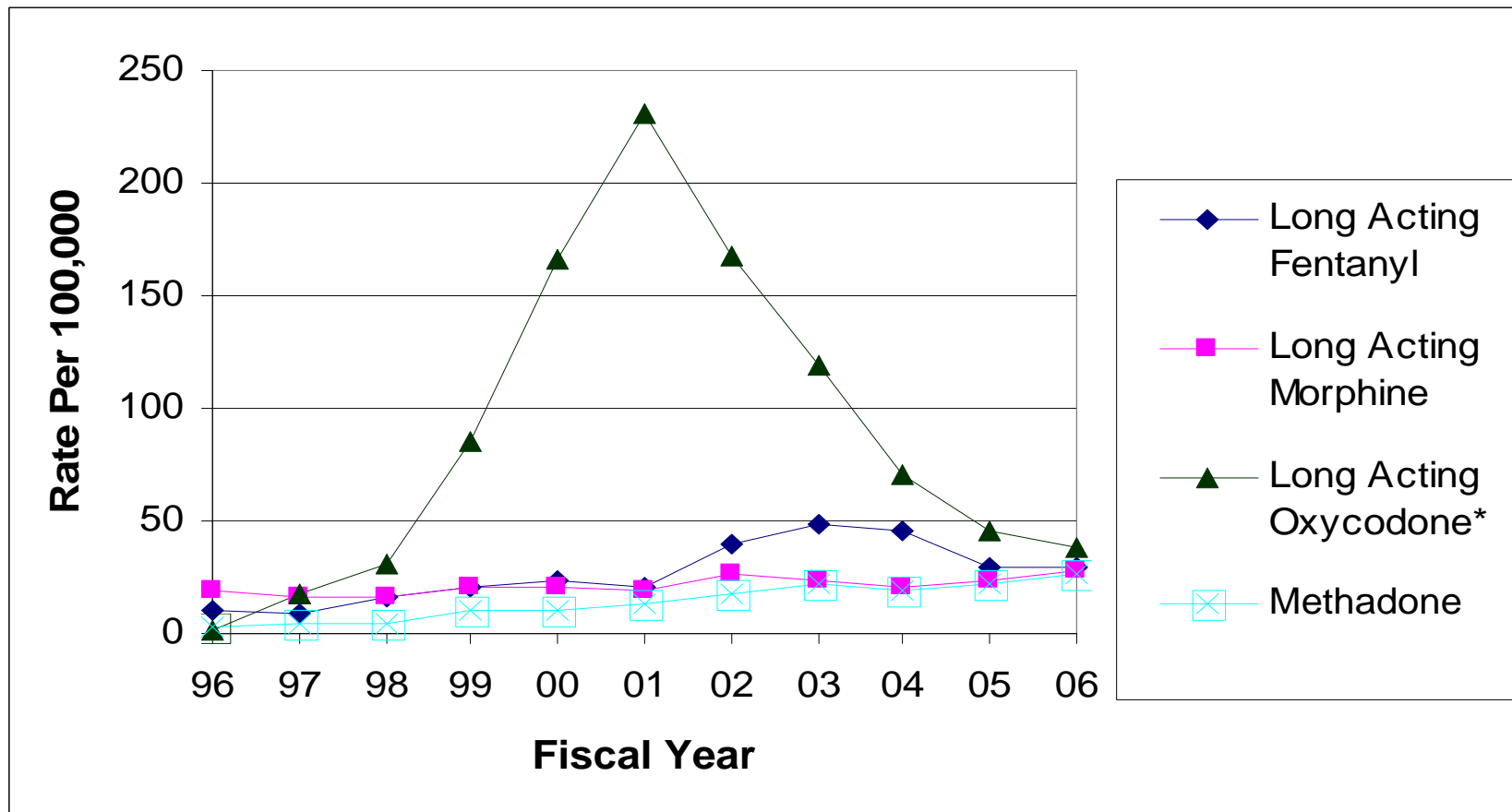
\* Questionable Activity = Obtained Schedule II opioid prescriptions from multiple physicians and multiple pharmacies above a threshold during the year.

# ***Estimated Percentage of Schedule II Opioid Prescriptions Dispensed to Individuals Showing Questionable Activity\* by Fiscal Year***



\* Questionable Activity = Obtained Schedule II opioid prescriptions from multiple physicians and multiple pharmacies above a threshold during the year.

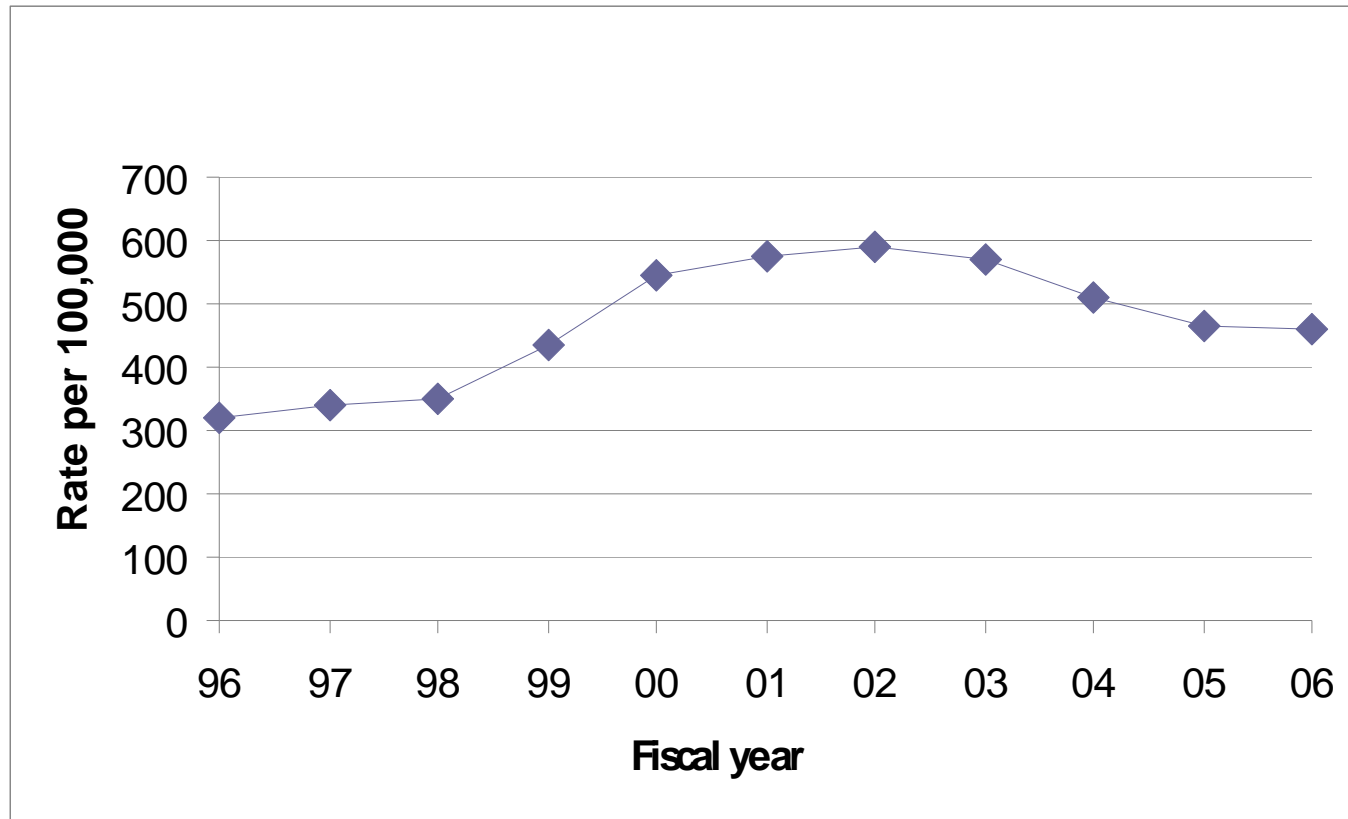
## Questionable Activity<sup>1</sup>: Estimated Number of Individuals per 100,000: Long Acting Opioids



<sup>1</sup>Questionable Activity = Used multiple pharmacies and multiple physicians during year

\* Includes Oxycotin®

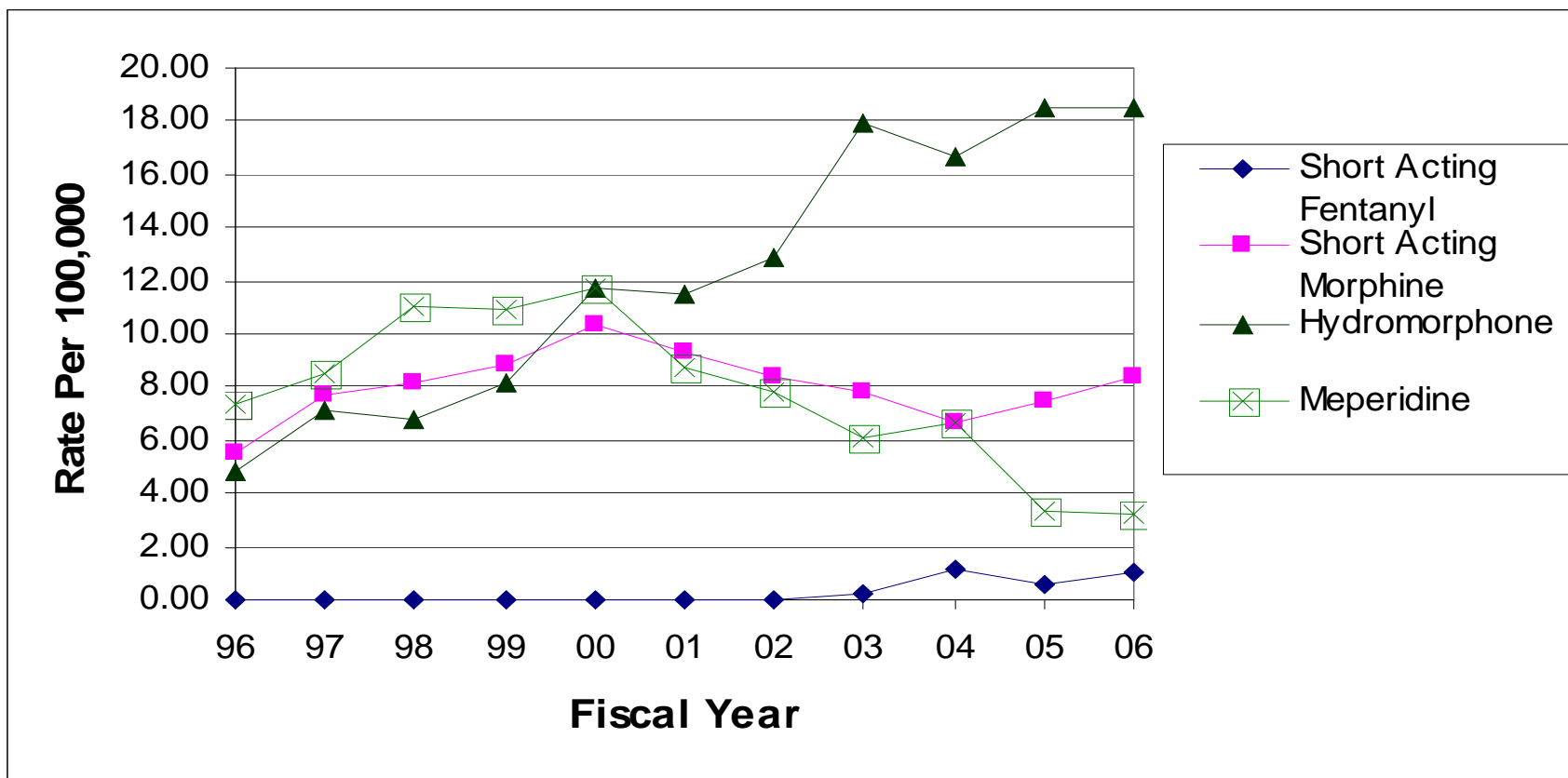
# ***Questionable Activity:<sup>1</sup> Estimated number of individuals: short acting oxycodone /combinations***



<sup>1</sup> Questionable Activity = Used multiple pharmacies and multiple physicians above a threshold during the year

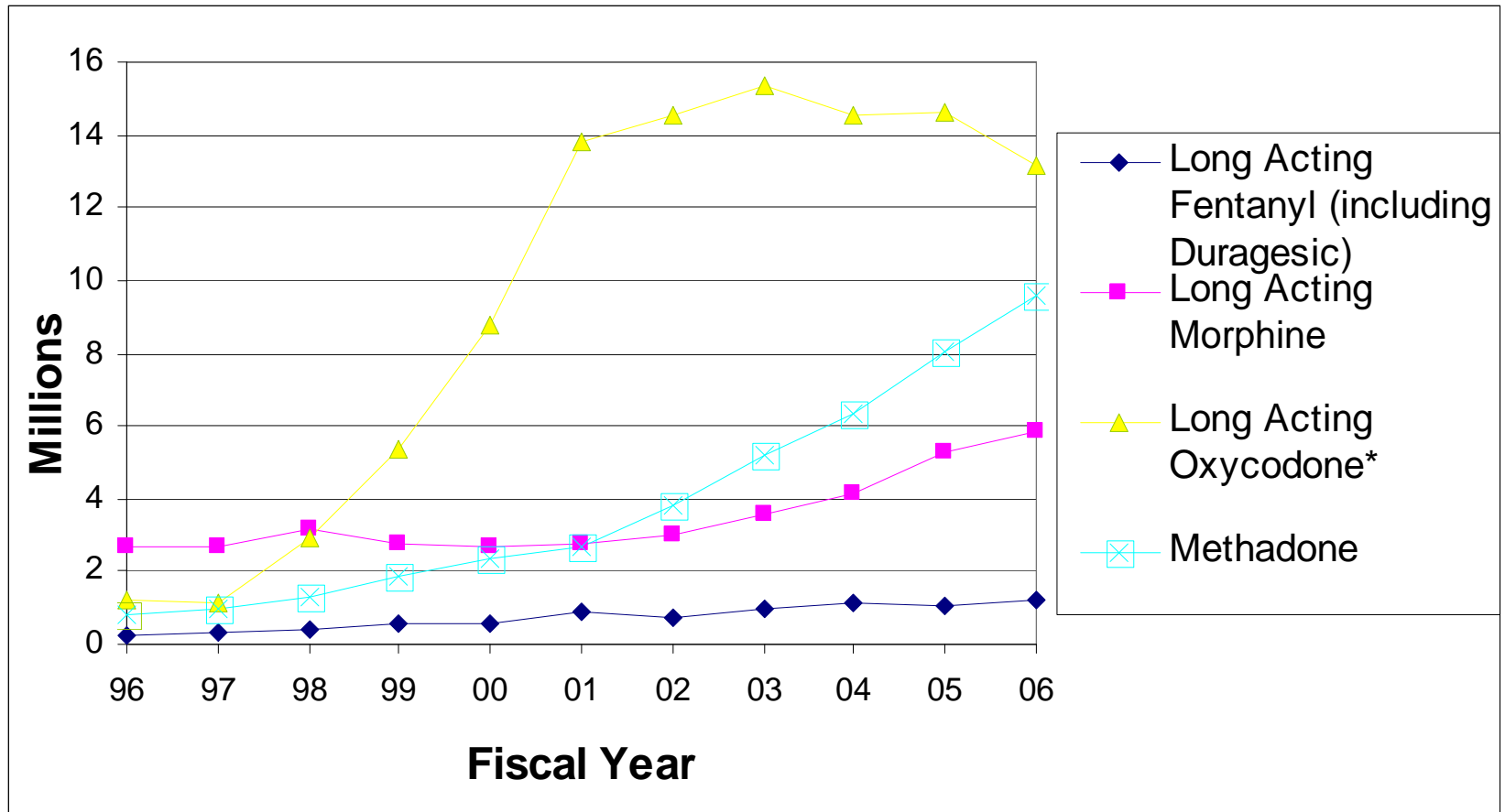


## **Questionable Activity<sup>1</sup>: Estimated Number of Individuals per 100,000 (Other Short Acting Opioids)**



<sup>1</sup> Questionable Activity = Used multiple pharmacies and multiple physicians above a threshold during the year

# Total Dispensed Dosage Units of Long Acting Opioids



\*Includes Oxycontin®

# *Summary of Trends*

- Dispensing of schedule II increased by 142% from 1996-2006; number of estimated individuals by 71%
- Majority of individuals had 1-2 prescribers, one pharmacy, no early refills
- Level of questionable activity depends on definition, but trends are same
- When >4 pharmacies and >4 physicians are used as threshold, questionable activity associated with 0.5% of individuals, 3.1% of schedule II prescriptions.
- The medication most closely associated with questionable activity was short-acting oxycodone, peaking in 2002