

Use of Prescription Drug Monitoring Program Data

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Kentucky Cabinet for Health and Family Services

State Strategies for Preventing Prescription Drug Overdoses
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Controlled Substance Abuse in Kentucky

- 8.5% of Kentuckians used prescription psychotherapeutic drugs for nonmedical reasons in past year. (KY leads nation)
- 7% of Kentuckians have used prescription pain relievers such as Darvon and Percodan for nonmedical reasons in past year. (KY leads nation).
- 4.6% of Kentuckians have used prescription tranquilizers such as Valium and Xanax for nonmedical reasons in past year. (KY leads nation)
- 2.0% of Kentuckians have used prescription stimulants for nonmedical reasons in past year (KY fourth in nation)

Source: *Misuse of Prescription Drugs: Data from the 2002, 2003 and 2004 National Surveys on Drug Use and Health*, published by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies, September 2006.

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What is KASPER?

KASPER is Kentucky's Prescription Monitoring Program (PMP). KASPER tracks Schedule II – V controlled substance prescriptions dispensed within the state as reported by pharmacies and other dispensers.

KASPER is a Web accessed database that provides a tool to help address one of the largest threats to patient safety in the Commonwealth of Kentucky; the misuse, abuse and diversion of controlled pharmaceutical substances.

Controlled Substance Schedules

- Schedule I – Illegal Drugs
 - e.g. heroin, marijuana, etc.
- Schedule II – Most addictive legal drugs; high abuse potential
 - e.g. oxycodone (OxyContin, Percocet, Tylox).
- Schedule III – Less abuse potential than I or II
 - e.g. hydrocodone combinations (Vicodin, Lortab).
- Schedule IV – Less abuse potential than III
 - e.g. benzodiazepines (Xanax, Valium).
- Schedule V – least abuse potential
 - e.g. codeine containing cough mixtures.

KASPER Operation

- KASPER tracks most Schedule II – V substances dispensed in KY.
 - Approximately 10 million controlled substance prescriptions reported to the system each year.
- KASPER data is 1 to 8 days old.
 - Dispensers have 8 days to report.
 - RelayHealth processes & provides data once per day.
- Reports available by request of authorized individuals (no unsolicited reports).
 - Available via fax in 2-8 hours.
 - Available via Web typically within 15 seconds (90% of requests).
 - Available 24/7 from any PC with Web access.

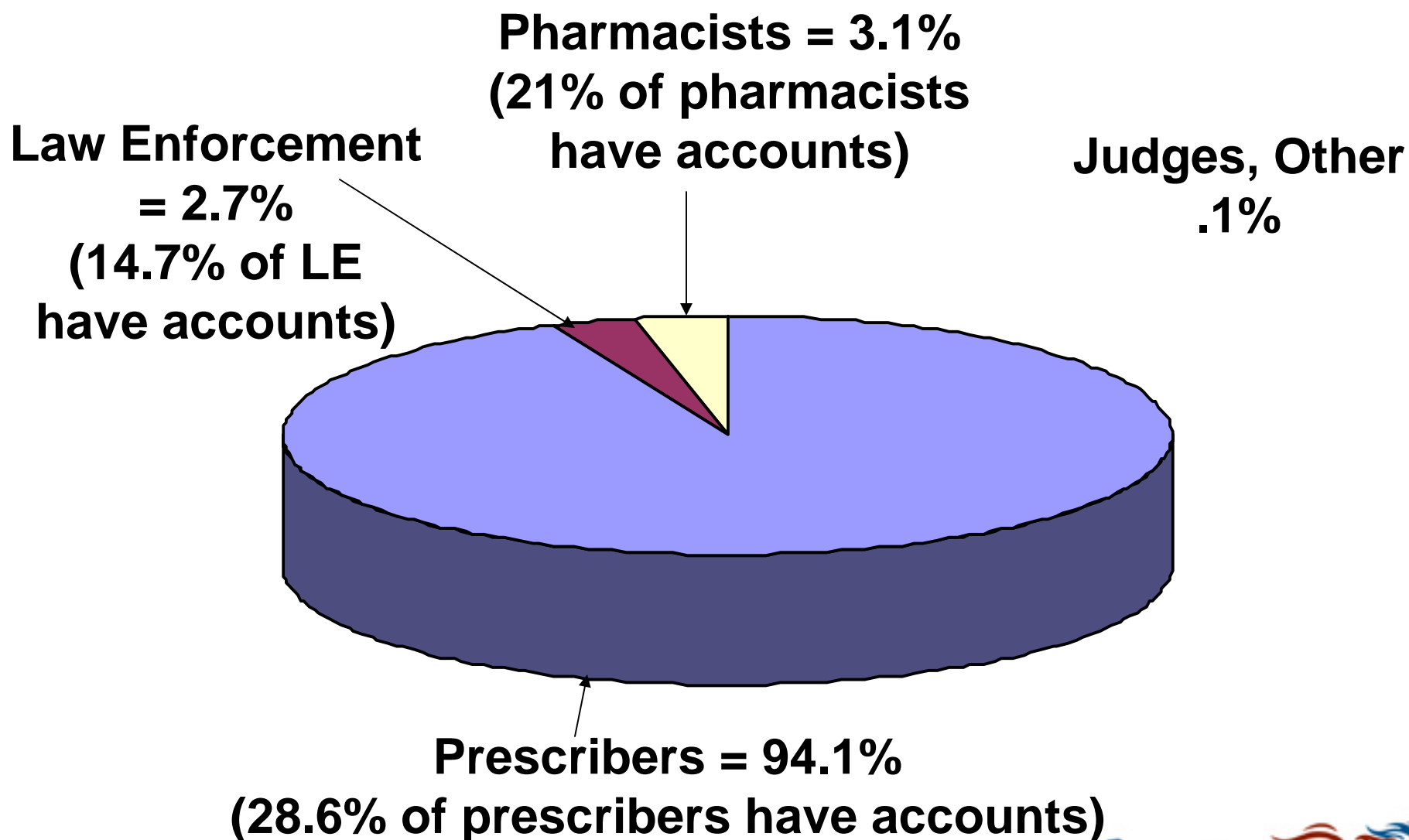
KASPER Stakeholders

- **Licensing Boards** – to investigate potential inappropriate prescribing by a licensee only.
- **Practitioners and Pharmacists** – to review a current patient’s controlled substance prescription history for medical and/or pharmaceutical treatment.
- **Law Enforcement Officers** – to review an individual’s controlled substance prescription history as part of a bona fide drug investigation – **certified by investigator and supervisor.**
- **Medicaid** – to screen recipients for potential abuse of pharmacy benefits and to determine “lock-in”; to screen providers for adherence to prescribing guidelines for Medicaid patients.
- **A judge or probation or parole officer** – to help ensure adherence to drug diversion or probation program guidelines.

KASPER Patient Report Contents

A KASPER report shows all controlled substance prescriptions an individual has had for a specified period of time, as well as the practitioner who prescribed them and the dispenser who dispensed them.

KASPER Usage 2008



Goals of KASPER

- KASPER was designed as a tool to help address the problem with prescription drug abuse and diversion by providing:
 - A source of information for health care professionals.
 - An investigative tool for law enforcement.
- KASPER was not designed to:
 - Prevent people from getting prescription drugs.
 - Decrease the number of doses dispensed.

KASPER Funding

- Web-based eKASPER developed for \$1,400,000.
- Annual Drug Enforcement Branch staffing costs approximately \$223,000 per year.
 - Costs dropped from over \$1,000,000 per year after implementation of eKASPER.
- Annual Information Technology support costs approximately \$1,040,000 (including hardware, software and development staff).
- Federal Hal Rogers Grant provides \$400,000 per year for promotion, training, and data analysis.

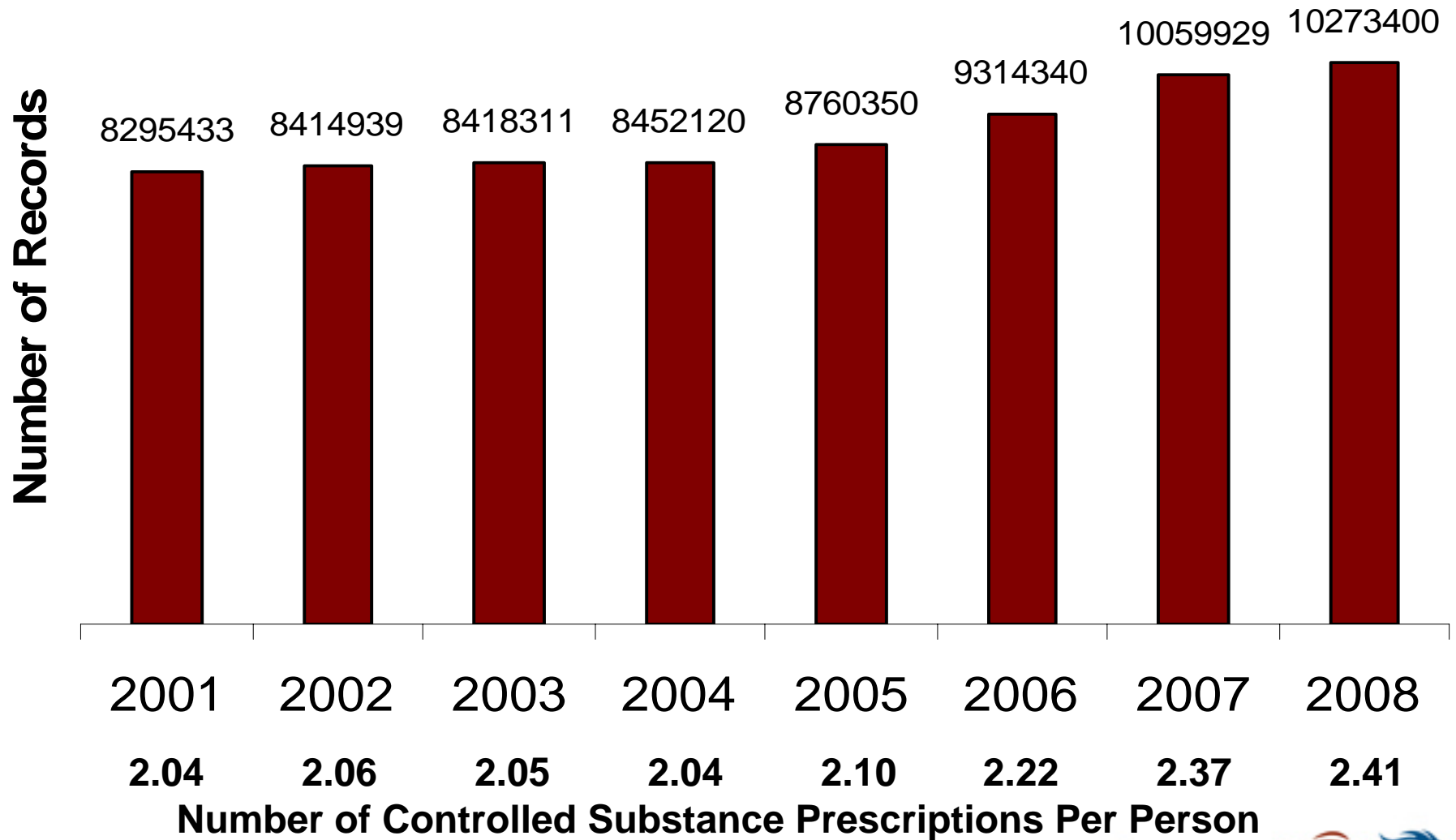
KASPER Prescription Data



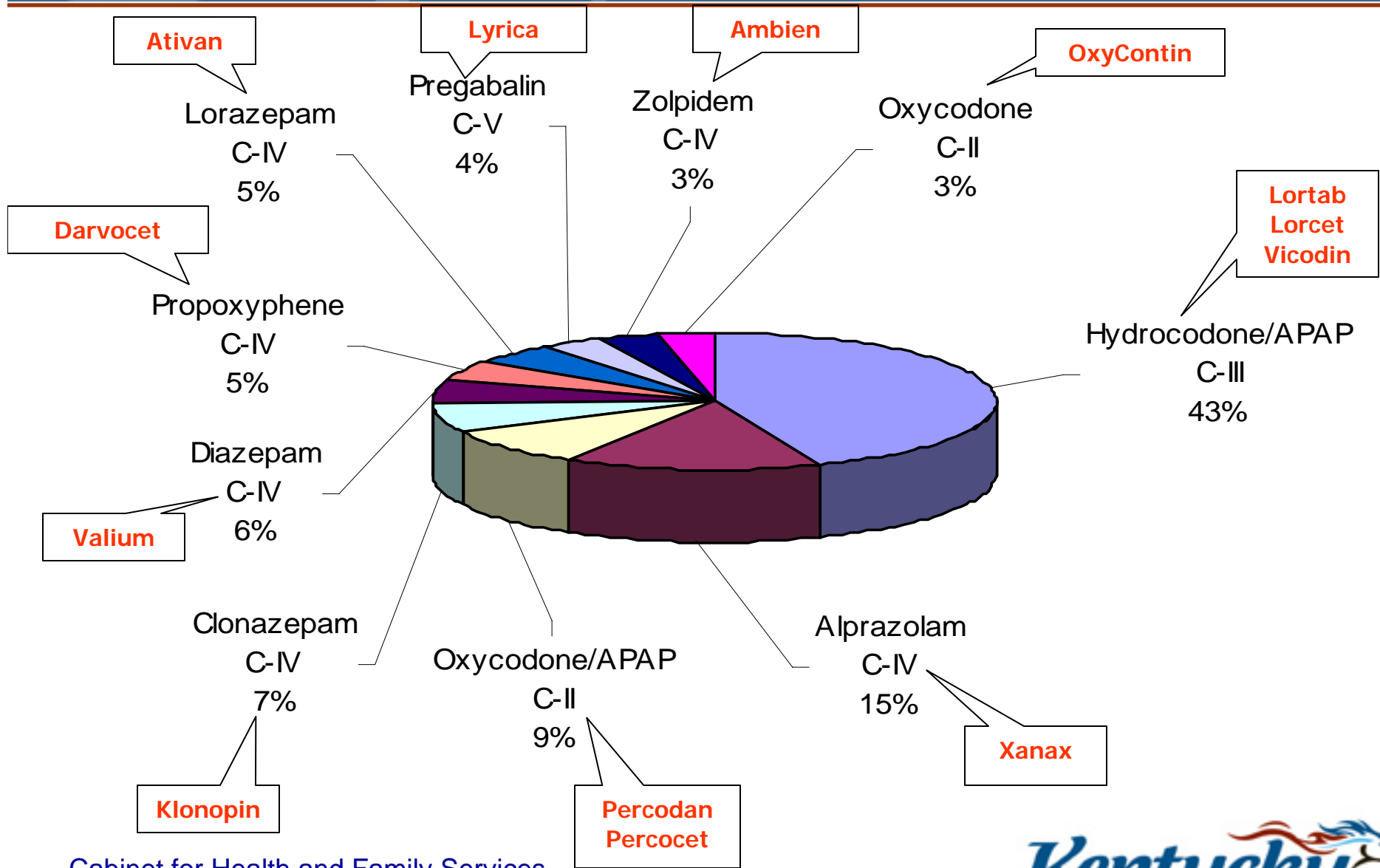
KASPER Data Available for Study

- Patient unique identifier (de-identified patient)
- Patient date of birth
- Patient gender
- Patient address (street address, city, zip code)
- Drug name
- Drug quantity
- Drug strength
- Drug therapeutic category
- Drug days supply
- Date dispensed
- Prescriber name
- Prescriber city
- Dispenser name
- Dispenser city

KASPER Records Total/Per Person 2001-2008

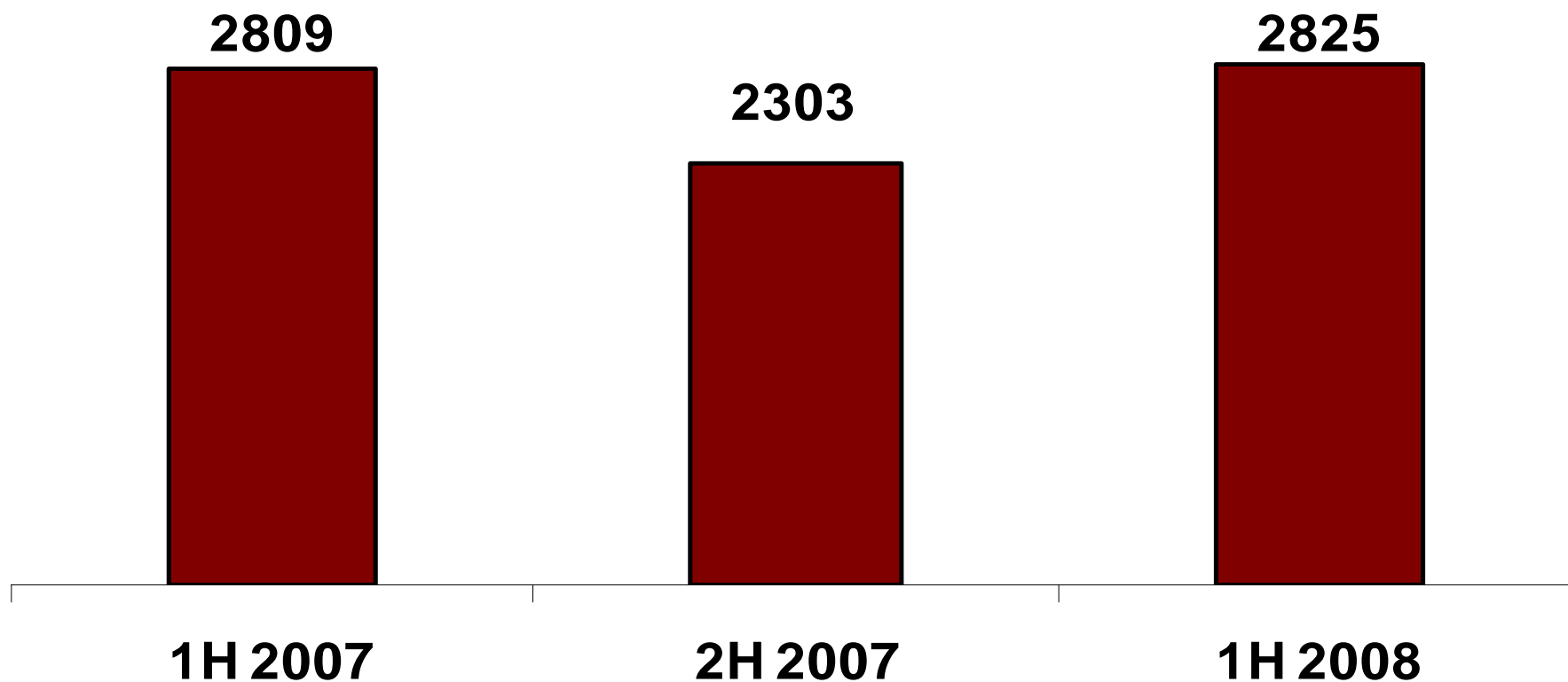


Top Prescribed Controlled Substances by Therapeutic Category by Doses - 2008



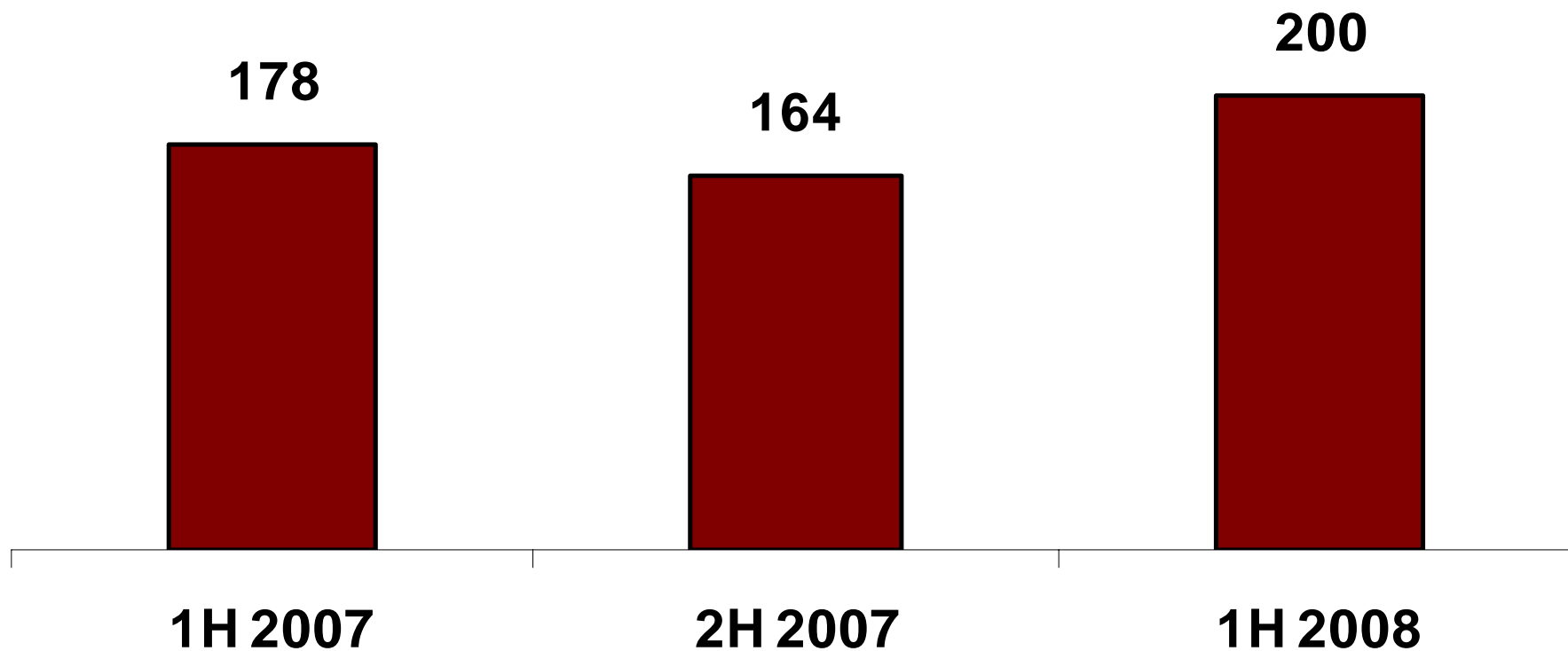
Provider Shoppers Schedule II - IV

**5 or More Different Prescribers
AND 5 or More Different Dispensers**



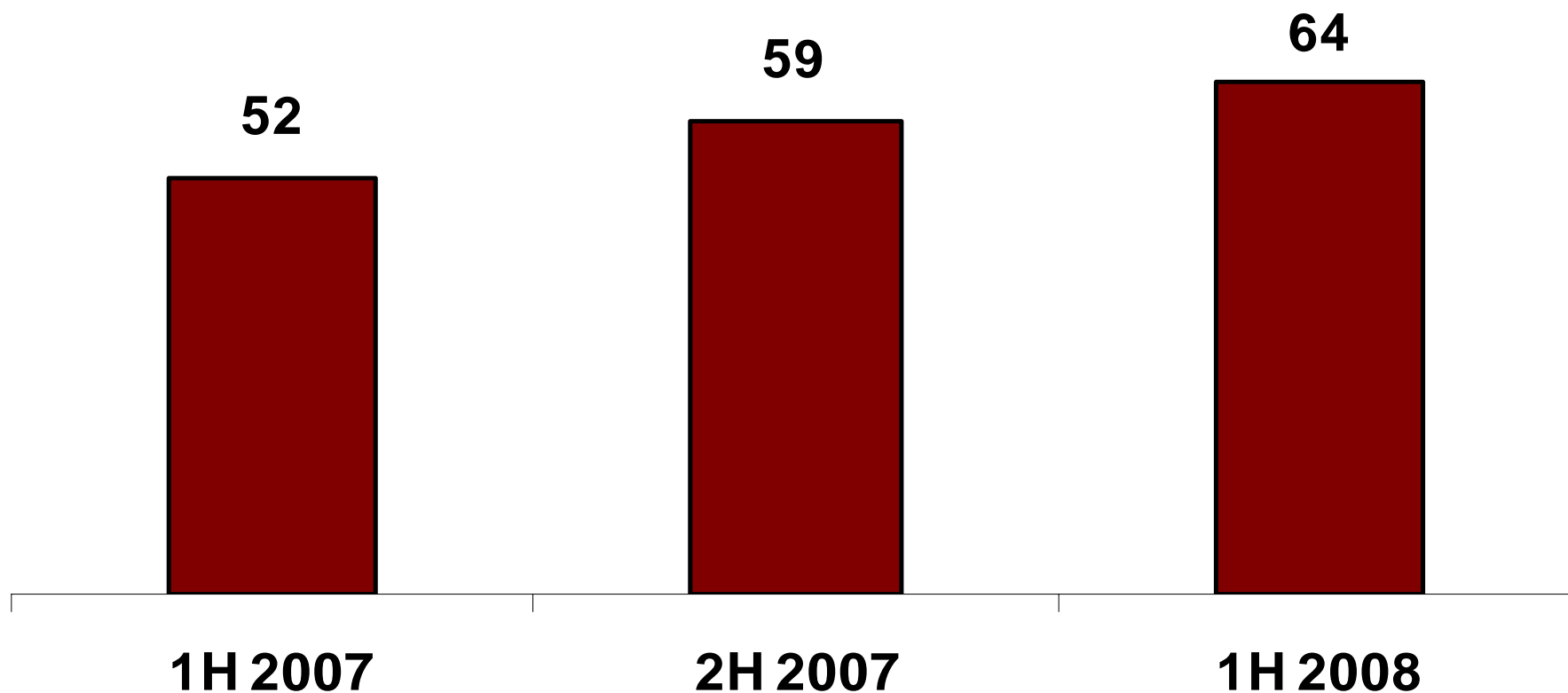
Provider Shoppers Schedule II - IV

**10 or More Different Prescribers
AND 10 or More Different Dispensers**



Provider Shoppers Schedule II - IV

**15 or More Different Prescribers
AND 15 or More Different Dispensers**



KIPRC Study

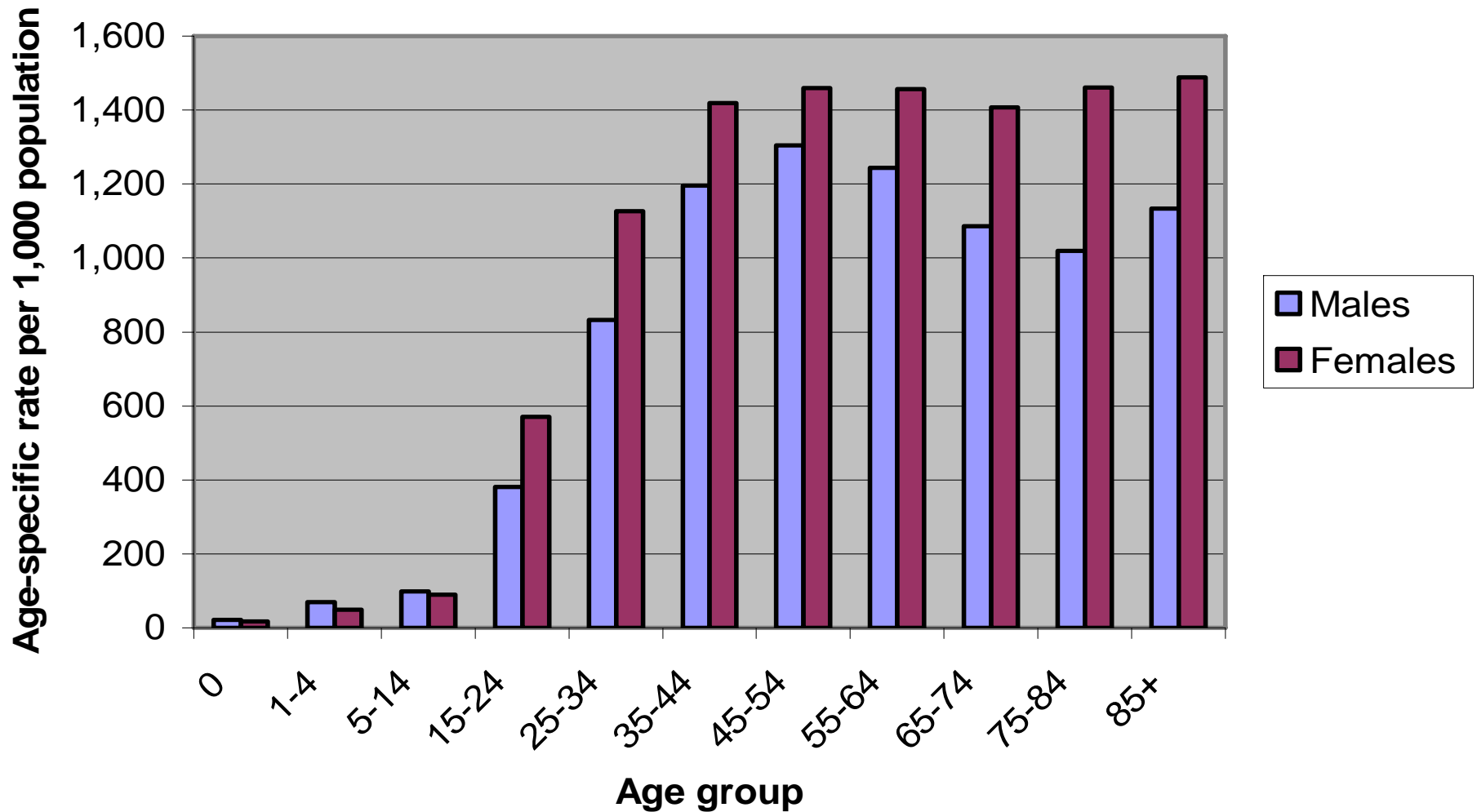


Kentucky
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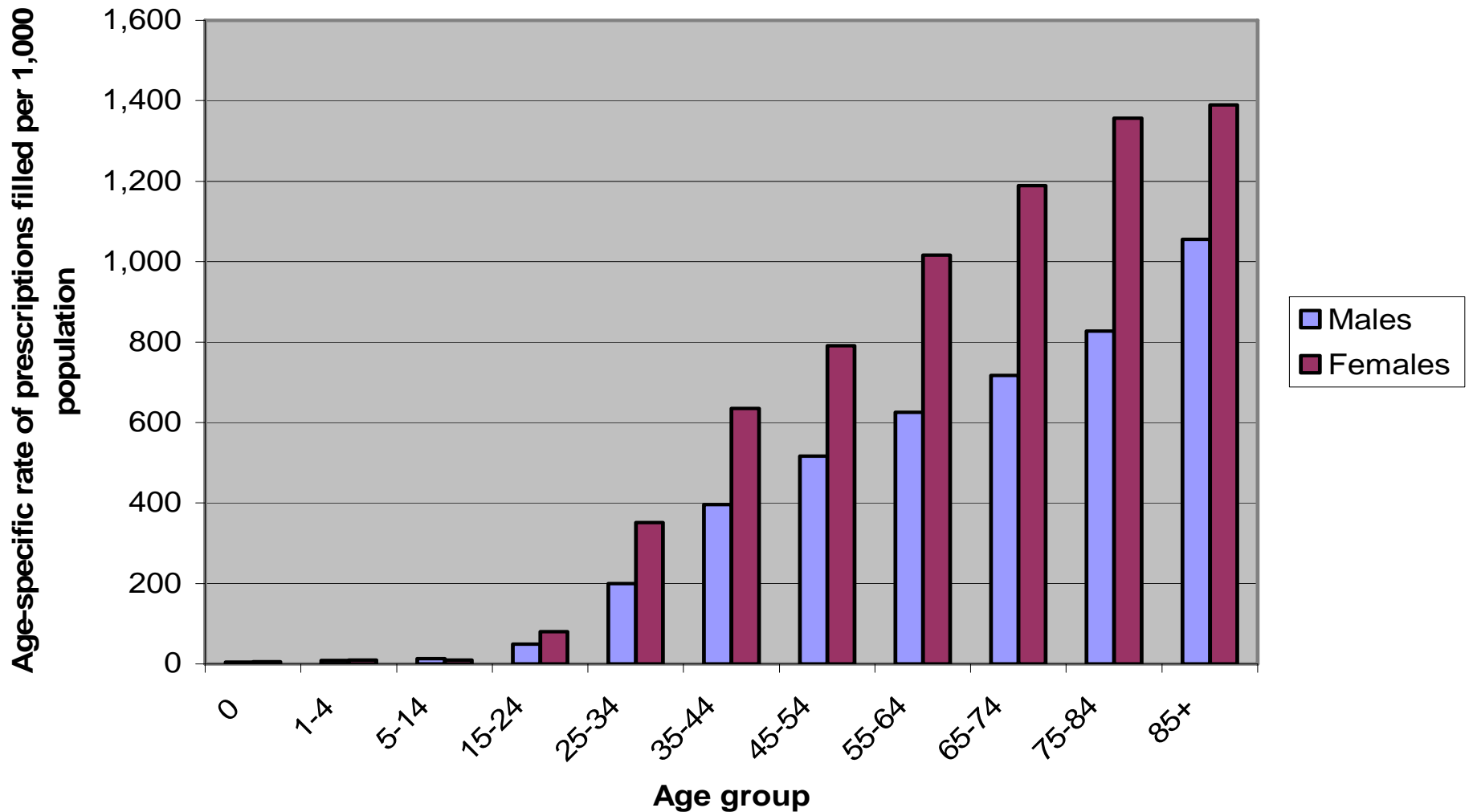
Prescription Drugs and Injuries in KY

- Kentucky Injury Prevention and Research Center
 - University of Kentucky Department of Public Health
- Conducted March through June 2005
 - KASPER Data (2000 – 2002)
- Contract funded through federal Hal Rogers Grant
- Based on KASPER data from 2000 – 2002
- Objectives:
 - Summarize demographic/geographic prescription trends from 2000 – 2002
 - Summarize demographic/geographic trends in leading causes of death and hospitalization due to injuries
 - Identify geographic associations between volume of prescriptions filled and incidence of injury

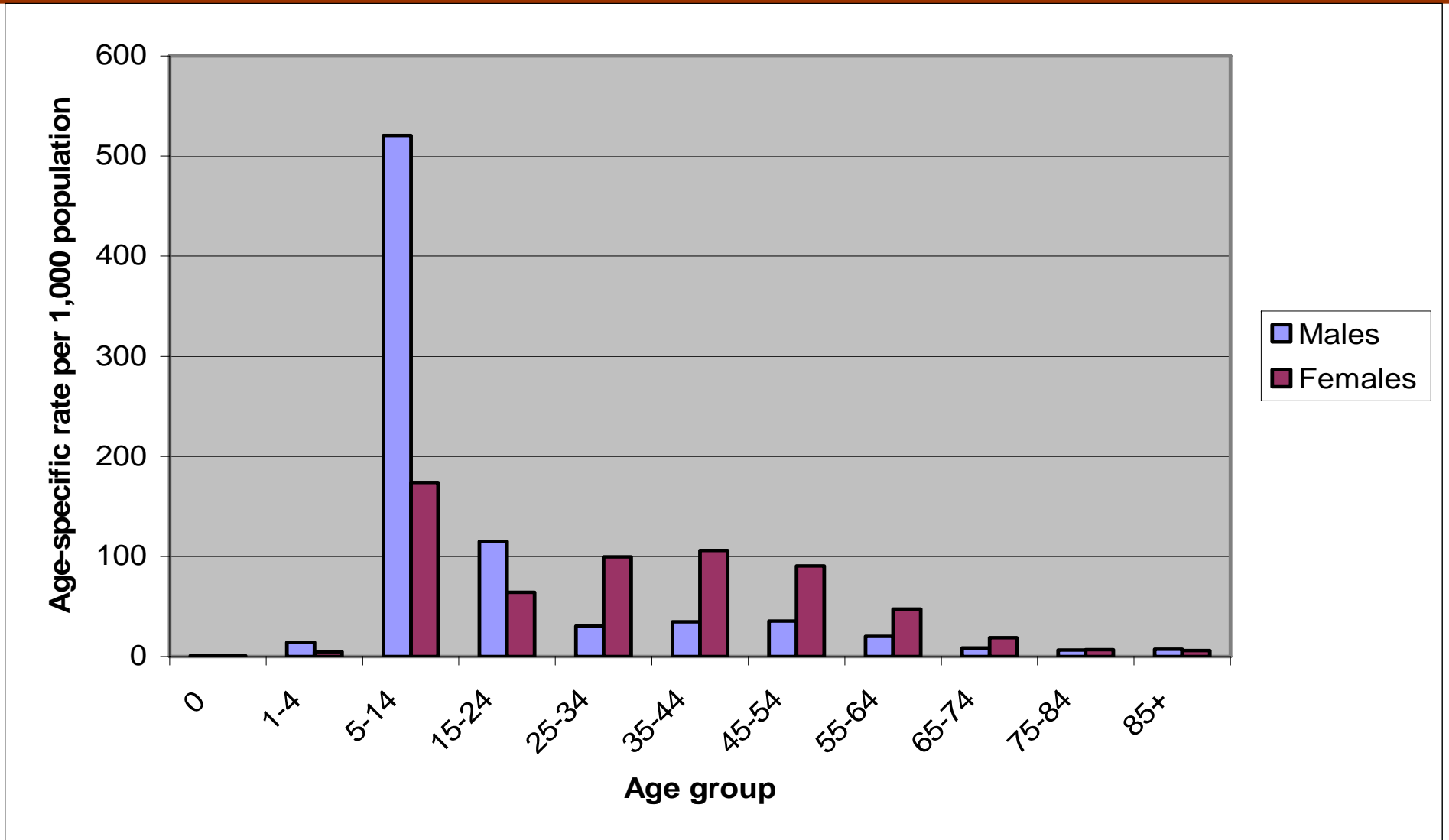
Narcotic Analgesics – Age Specific Rates



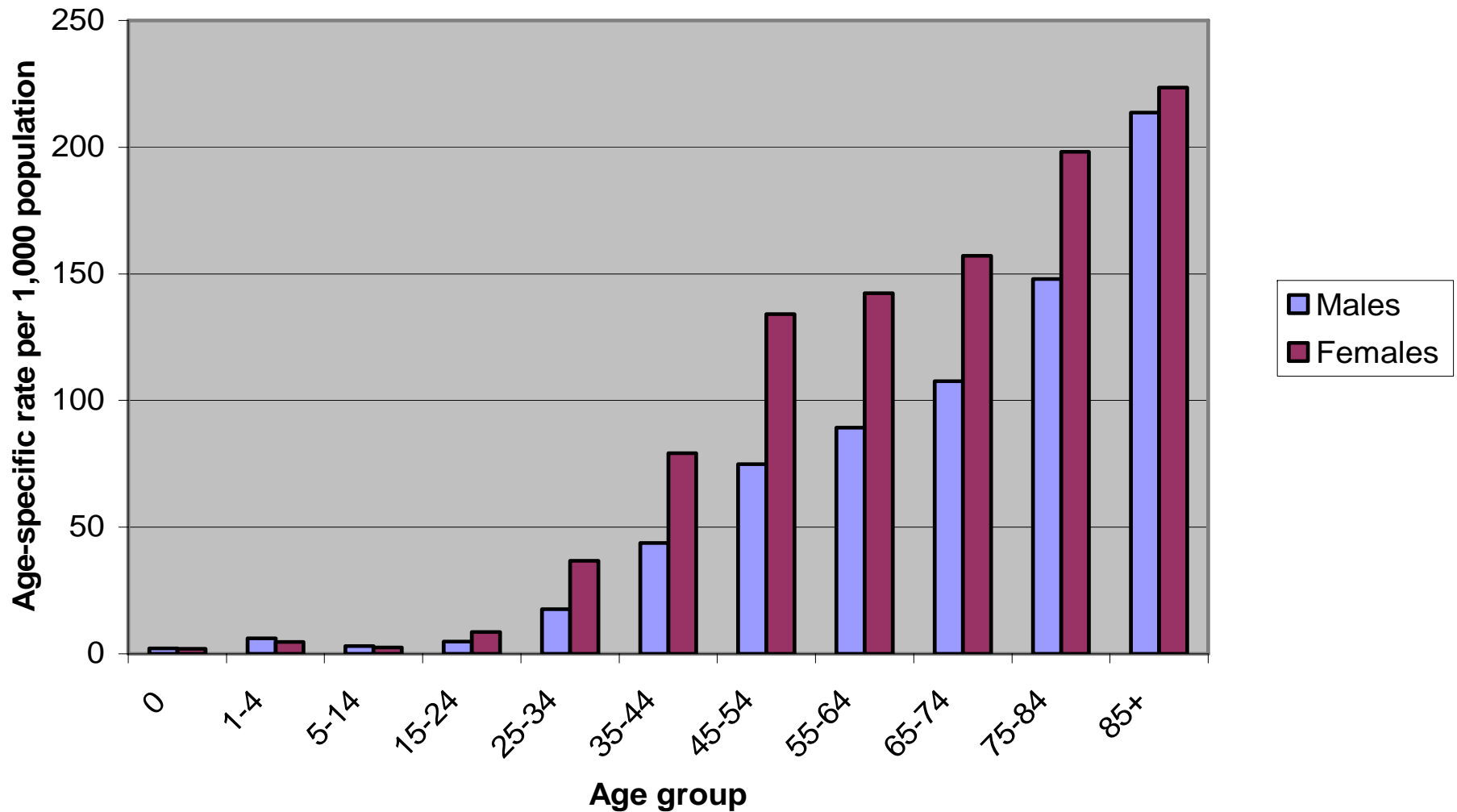
Benzodiazepines – Age Specific Rates



Stimulants – Age Specific Rates



Sedatives – Age Specific Rates



KIPRC Study Findings

- Narcotic Analgesics and Benzodiazepines leading drugs mentioned on hospital discharges for drug overdoses.
- Benzodiazepines should be considered a high priority in terms of adverse affect on health and safety based on role in:
 - Intentional and unintentional drug overdoses
 - Motor vehicle accidents
 - Falls in elderly
- Preliminary investigation of correlations between NA and BZ and injuries in KY largely inconclusive. More extensive study needed.

KASPER Trend Reports



KASPER Trend Reports

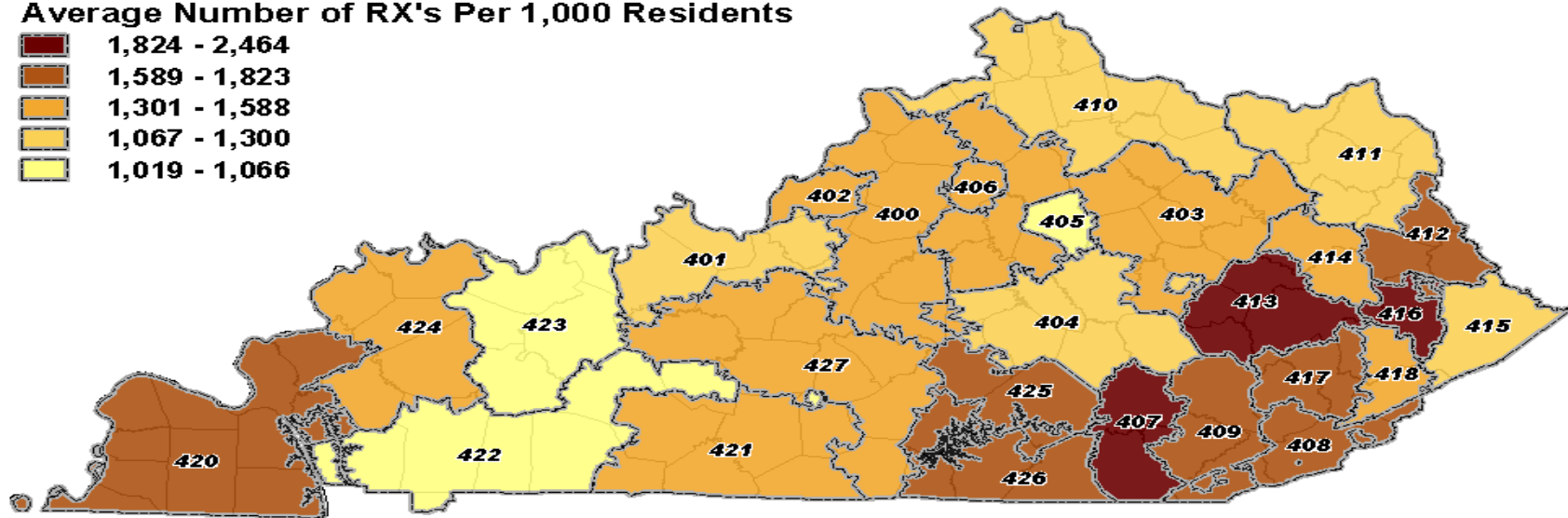
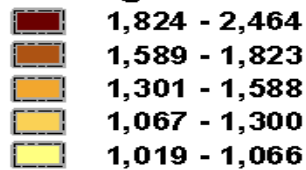
The KASPER legislation required the Cabinet to develop trend reporting criteria and publish a quarterly trend report.

- Criteria developed in collaboration with:
 - Licensure Boards.
 - Law enforcement focus group.
- Utilizing geographic information system (GIS) software to provide graphical representation of the data.

Controlled Substance Usage

2005-2007 PER CAPITA CONTROLLED SUBSTANCE PRESCRIPTIONS BY PATIENT ADDRESS

Kentucky Three Digit Zip Code Areas
Average Number of RX's Per 1,000 Residents



0 15 30 60 90 120 150
Miles



Map created by Michael J. Wolff, CHFS OIT FSSMB

04/08/2008

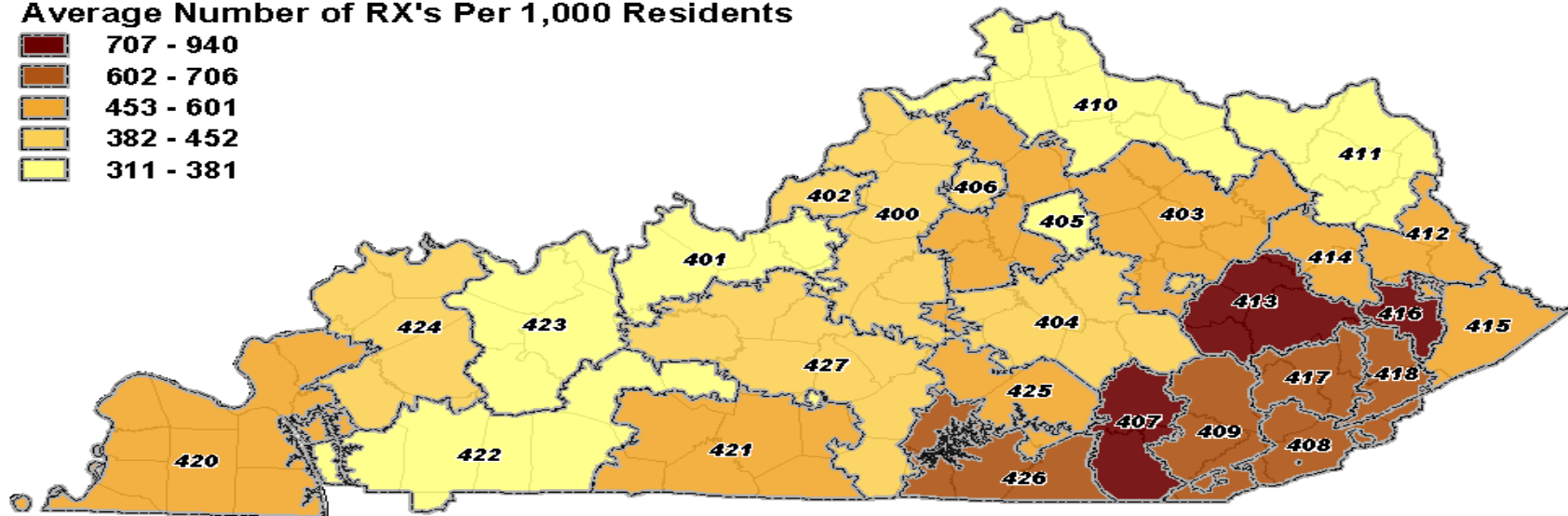
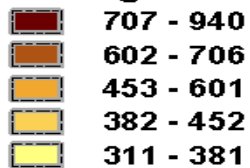
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Hydrocodone Usage

2005-2007 PER CAPITA HYDROCODONE PRESCRIPTIONS BY PATIENT ADDRESS

Kentucky Three Digit Zip Code Areas
Average Number of RX's Per 1,000 Residents



0 15 30 60 90 120 150
Miles



Map created by Michael J. Wolff, CHFS OIT FSSMB

04/08/2008

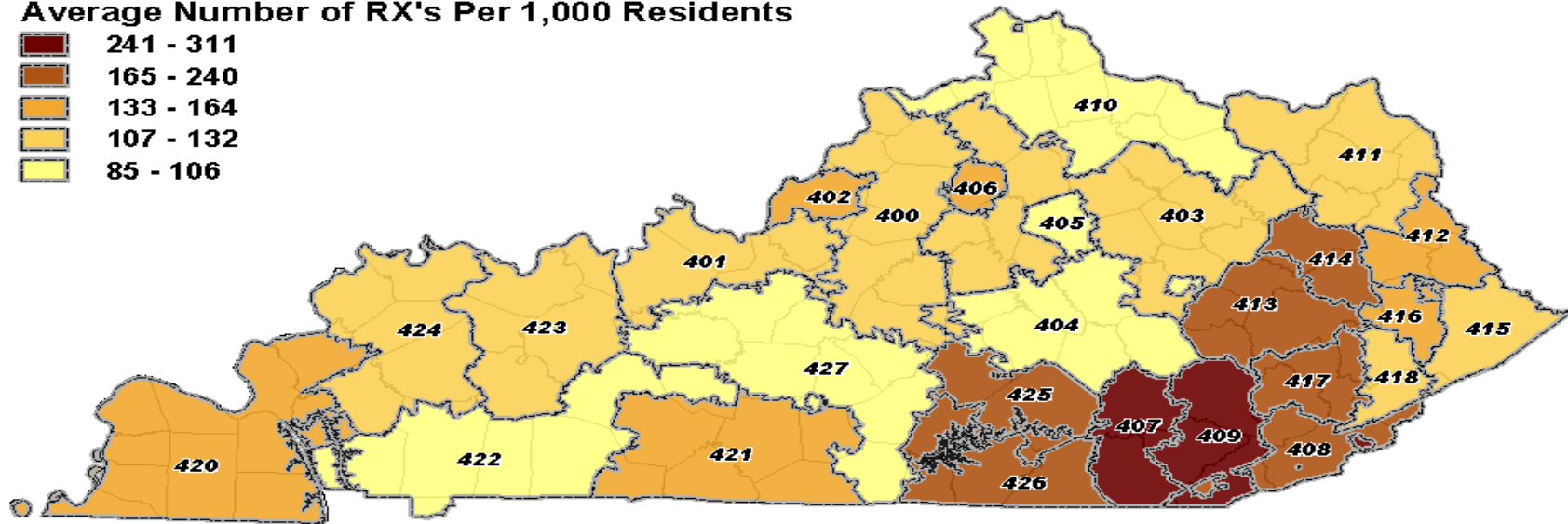
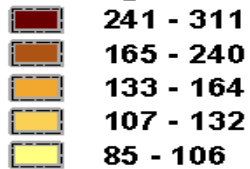
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Xanax Usage

2005-2007 PER CAPITA XANAX PRESCRIPTIONS BY PATIENT ADDRESS

Kentucky Three Digit Zip Code Areas
Average Number of RX's Per 1,000 Residents



0 15 30 60 90 120 150
Miles



Map created by Michael J. Wolff, CHFS OIT FSSMB

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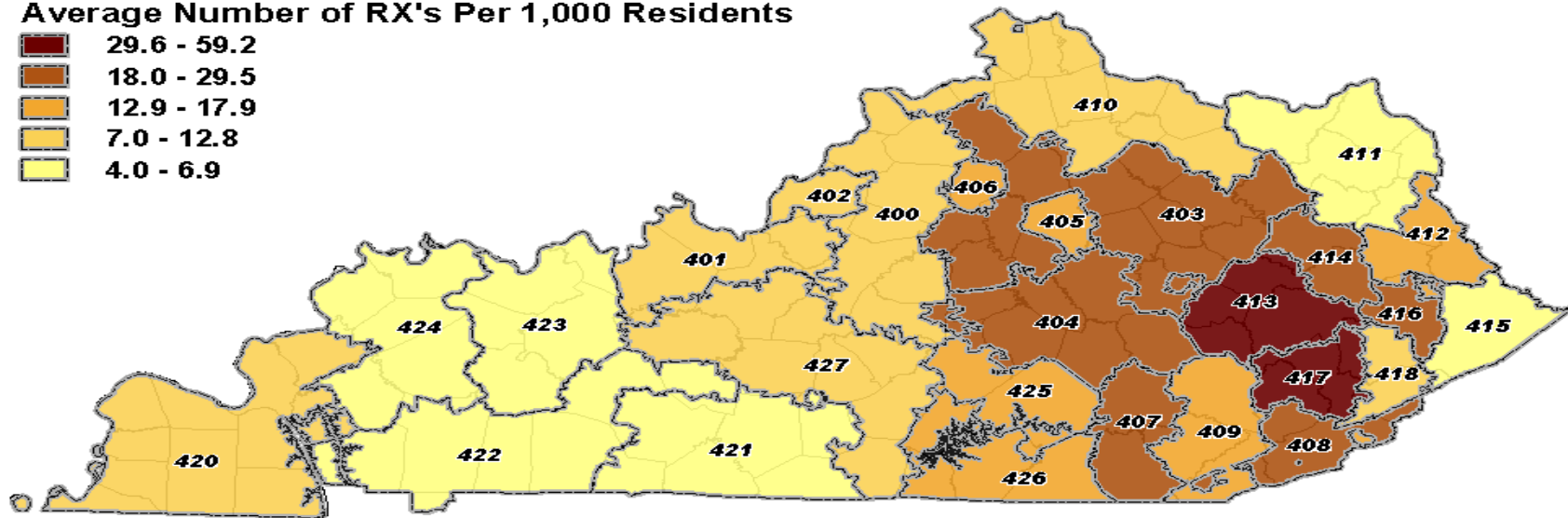
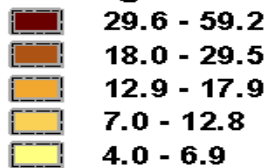
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Methadone Usage

2005-2007 PER CAPITA METHADONE PRESCRIPTIONS BY PATIENT ADDRESS

Kentucky Three Digit Zip Code Areas
Average Number of RX's Per 1,000 Residents



0 15 30 60 90 120 150
Miles



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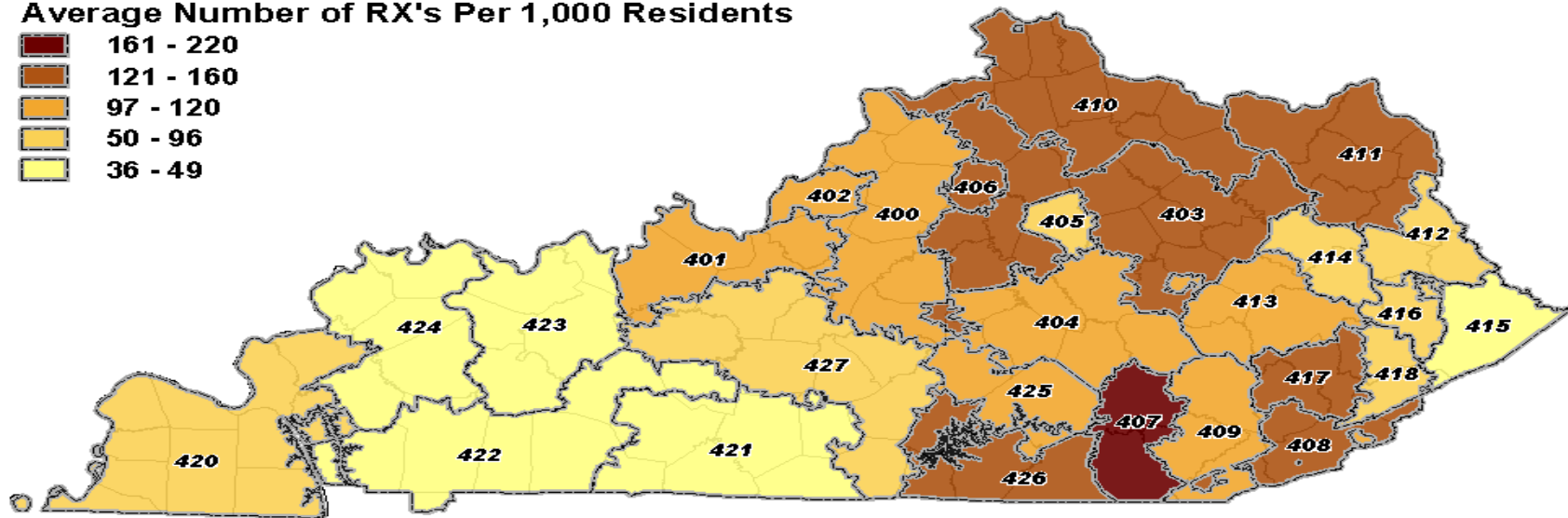
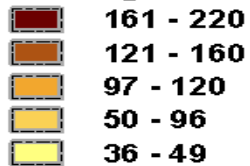


Oxycodone Usage

2005-2007 PER CAPITA OXYCODONE PRESCRIPTIONS BY PATIENT ADDRESS

Kentucky Three Digit Zip Code Areas

Average Number of RX's Per 1,000 Residents



0 15 30 60 90 120 150 Miles



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Challenges

- Allowable access to data for research
 - State statutes and regulations
- Staffing
 - Availability of technical and epidemiology support resources
 - Funding
- HIPAA
 - De-identified data sets
- Determining health and public safety actions based upon the data

QUESTIONS?

Visit the KASPER Web Site: www.chfs.ky.gov/kasper

