

Controlled Substance Prescriptions in New Mexico, 2006-2013

Drug overdose death has become the leading cause of injury death in New Mexico and nationally over the past decade¹. New Mexico had the second-highest drug overdose death rate in the nation, after West Virginia, in 2011². In the period from 2008-2012, there were an average of 483 drug overdose deaths in New Mexico each year, more than three times as many as there were in 1990-1994³. The number of overdose deaths involving prescription drugs exceeded the number involving illicit drugs in 2006, and now outnumber illicit drug overdose deaths by 60%⁴.

The New Mexico Prescription Monitoring Program (PMP) began collecting data in July 2005. All controlled substance prescriptions filled by pharmacies are required to be reported to the PMP within seven days.

More than 3 million prescriptions for controlled substances are reported to the PMP each year. Controlled substances are a class of prescription drugs that are considered substantially more dangerous than other prescription drugs. Controlled substances were involved in 88% of the drug overdose deaths that involved prescription drugs in 2009-2013⁴ in New Mexico.

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Methods

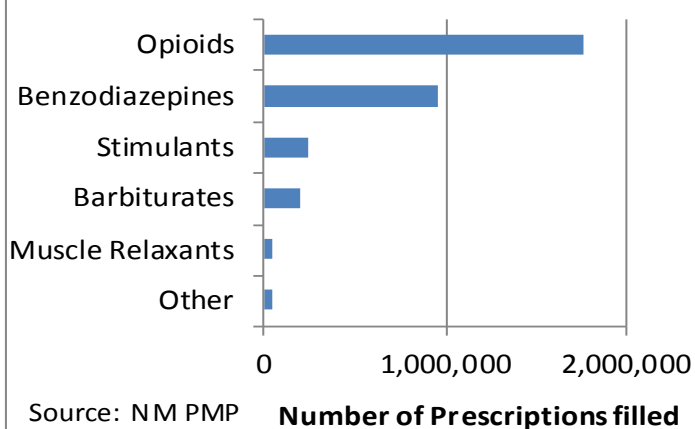
The data represent prescriptions filled, including refills, by patients in that period. Prescriptions written by veterinarians are excluded. Population estimates used for rates are from the Geospatial and Population Studies program at the University of New Mexico.

The main classes of drugs analyzed in this report are opioids and benzodiazepines. Opioids are powerful pain relievers. Examples are morphine, oxycodone and hydrocodone. Because opioids vary widely in strength, a factor is applied to each opioid to compute the morphine milligram equivalent (MME) quantity of that prescription. This allows for computing a measure of the total amount of opioids dispensed taking into account the different strengths of the drugs.

Benzodiazepines are sedative/hypnotic drugs including such drugs as diazepam (valium®) and alprazolam (xanax®). Benzodiazepines are frequently involved in overdose deaths, but they are very rarely the only drug involved. In these data, the benzodiazepine-like drugs, which are insomnia drugs like Ambien, are included in the benzodiazepine category. Like opioids, benzodiazepines vary in strength, so a factor is applied to each prescription to compute the valium milligram equivalent (VME).

Risk factors for prescription drug death include long-term use of opioids (over 90 days)^{5,6}, high doses of opioids (over 120 MME/day)^{5,6}, combining opioids and benzodiazepines^{6,7}, combining opioids, benzodiazepines and carisoprodol⁷ and multiple provider episodes (5 or more prescribers or 5 or more pharmacies in one year)⁸.

Figure 1. Prescriptions Reported to the NM PMP, 2013



Results

Opioids are by far the most commonly prescribed controlled substances. In 2013, opioids accounted for 54% of all controlled substance prescriptions filled, followed by benzodiazepines at 29% and stimulants at 8% (Figure 1).

The percentage of people receiving opioid prescriptions rose with age, and more women filled opioid prescriptions than men. In 2013, 23% of women and 16% of men aged 15-24 years filled at least one opioid prescription, rising to 45% of women and 40% of men aged 85 years (data not shown). The largest quantities, in MME, were filled among those aged 45-64 years, and men received larger quantities than women (Figure 2).

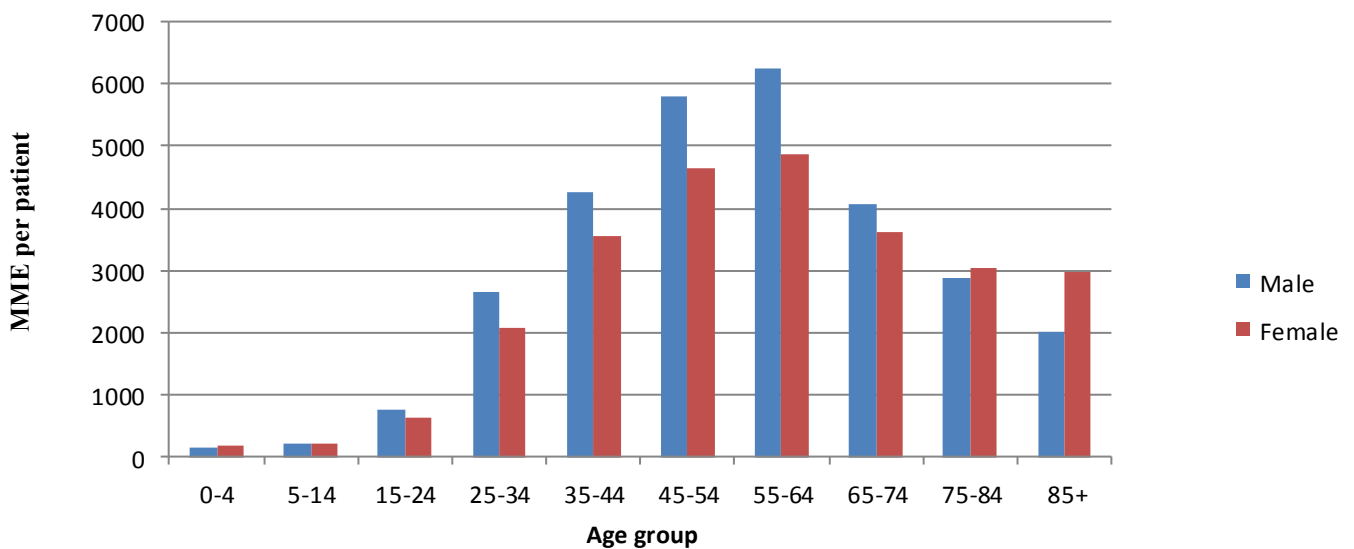
The rate of benzodiazepine prescriptions also rose with age and women were also more likely to fill benzodiazepine prescriptions. The largest quantities were also filled by those aged 45-64 years, and males aged < 45 years received larger quantities than females; among those aged ≥ 45 years, quantities were similar across genders.

The number of patients filling opioid prescriptions increased by 16% from 2006 to 2013. The total amount of opioids per patient decreased by 19% from 2010 to 2013 (Figure 3), while the number of patients per 1000 population increased by 9% (data not shown).

The rate of patients filling benzodiazepine prescriptions and the quantity of benzodiazepines per patient (Figure 3) were relatively stable over the period, but the number of benzodiazepine patients per 1,000 population decreased slightly from 2010 to 2013.

The southwestern quadrant of New Mexico plus Taos and Rio Arriba counties had the highest rates of opioid MME per patient. Eastern and northwestern New Mexico had the lowest rates. Sierra and Rio Arriba counties had the highest rates of MME dispensed per 1,000 population in 2013, at 1.9 million and 1.8 million MME/1,000 population—both more than double the state rate of 0.84 million MME/1,000 population (Figure 4).

Figure 2. Opioid MME per Patient, NM, 2013



Source: NM PMP

Recommendations

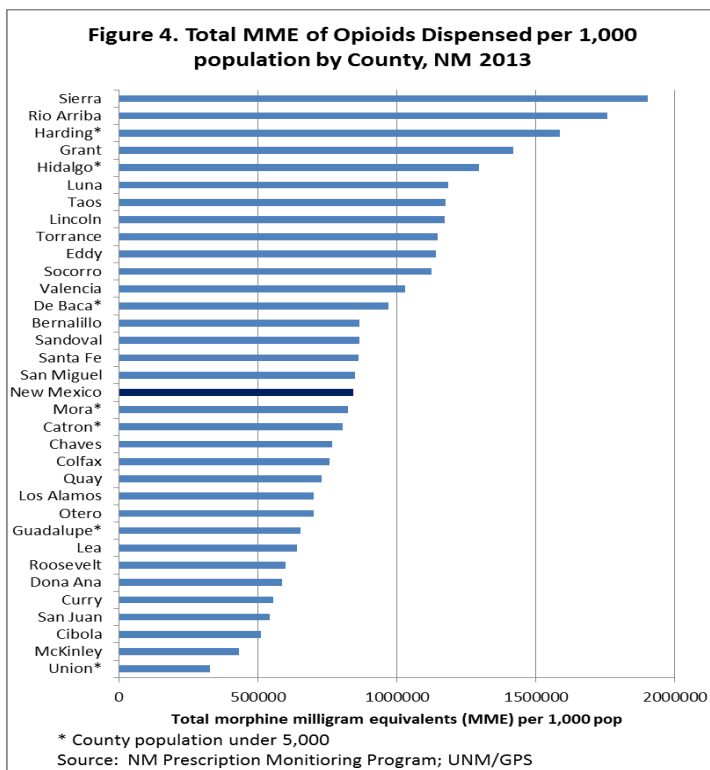
1. Continue use of the PMP data to track trends in controlled substance prescriptions.
2. Provide education for both prescribers and pharmacists on the current research on controlled substance drugs and their effects.
3. Prescribers and pharmacists should consistently use the PMP to reduce inappropriate prescribing and use of controlled substances.
4. Reduce the reporting interval to the PMP from seven days to one day.
5. Educate patients on the proper use and disposal of controlled substance prescriptions.
6. Use PMP data to identify prescribers who appear to be prescribing controlled substance inappropriately for further investigation by the appropriate licensing board.

Acknowledgements

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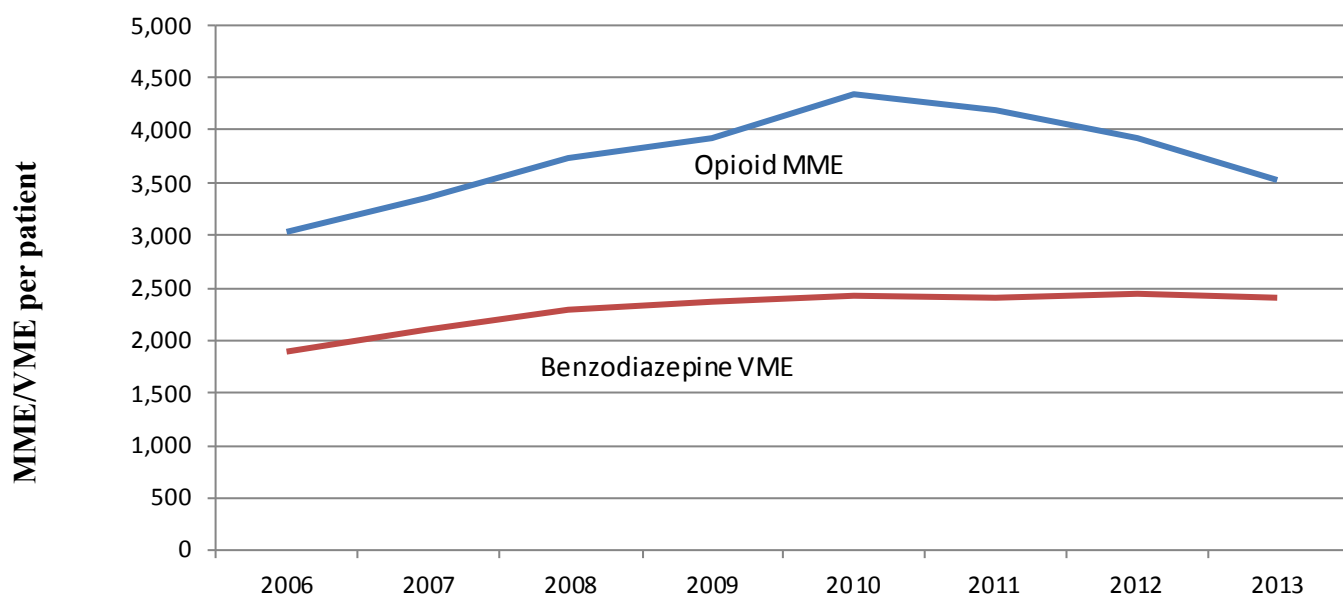
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Figure 3. Opioid and Benzodiazepine Quantity per Patient, NM, 2006-2013



Source: NM PMP; UNM/GPS population