# Prescription Review Program

## 2016 Annual Report

*April 1, 2017*

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**ANNUAL REPORT 2016**



**APPENDICES**



# Annual Report 2016

## Prescription Review Program Overview

The Prescription Review Program (PRP) is an education-based program of the College of Physicians and Surgeons of Saskatchewan (CPSS) that monitors medications with known misuse, abuse and diversion potential for possible inappropriate prescribing. The list of medications monitored by the PRP are listed in the CPSS Regulatory Bylaw 18.1 (Appendix A) as well as in Appendix B (*Prescription Review Program Monitored Medications*). In addition to this, Bylaw 18.1 outlines the requirements for prescribing these medications.

The PRP alerts physicians by letter of possible inappropriate prescribing or of inappropriate use of PRP medications by their patients. The PRP provides supportive information and recommendations to physicians in order to encourage appropriate prescribing practices. In some cases, physicians are required to provide explanations for their prescribing of medications to which the PRP applies. After reviewing a physician's reply, the PRP will make recommendations, following best practices, to improve patient outcomes or reduce the possibility of inappropriate use of these medications.

### Staffing and Workflow

The staffing at the PRP for 2016 included one Administrative Assistant (who also supports the Opioid Agonist Therapy Program Manager), one PRP Analyst (a registered pharmacy technician hired in August 2016) and the Program Manager (a pharmacist). In 2016, the job descriptions for all three positions were reviewed and updated.

The main role of the administrative assistant is to process and prepare all correspondence to physicians, to identify instances of double doctoring each month and send letters to physicians. This role is divided between the PRP and the Opioid Agonist Therapy Program, and as such, the administrative assistant also is responsible to coordinate the approval of methadone exemption through Health Canada.

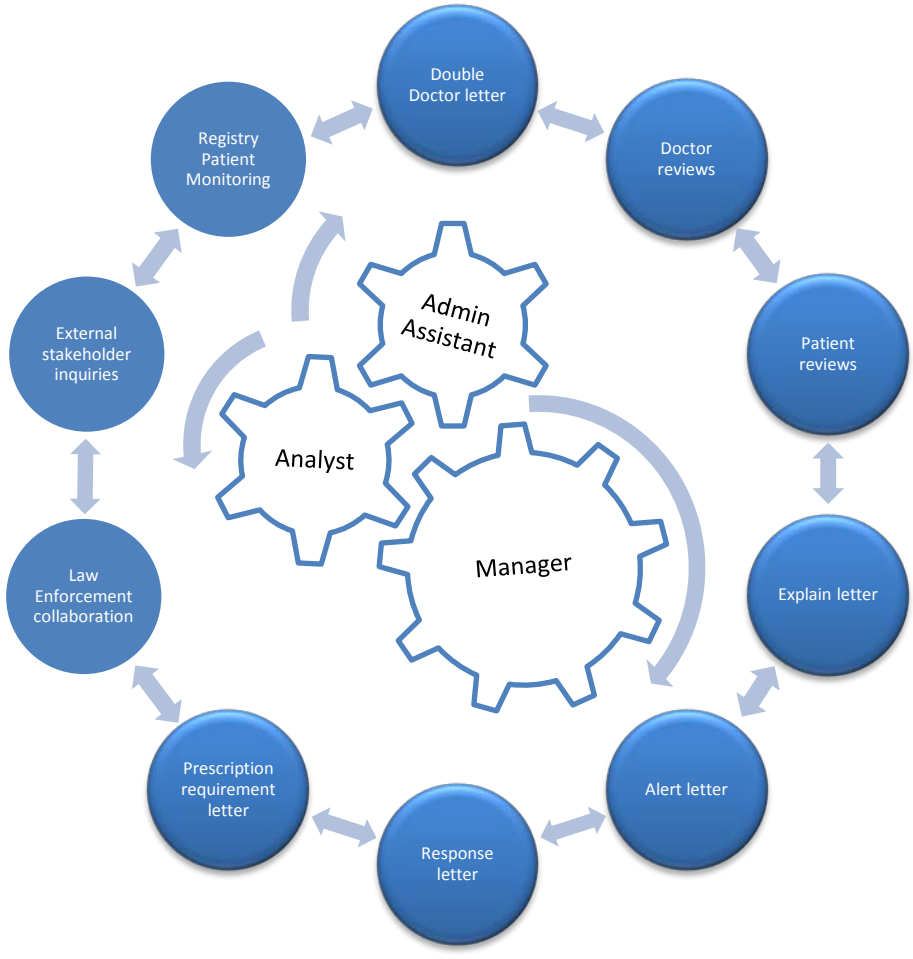
The main role of the Analyst is to monitor and review patient medication profiles, generate reports related to specific medication use or specific prescribers, and identify possible areas of concern.

The main role of the Program Manager is to work with physicians to provide education, support and recommendations related to the prescribing of PRP medications. The Program Manager also works with various stakeholder groups (e.g. FNIHB, NIHB, SCPP, Ministry of Health, and many others) to help optimize prescribing and address prescription drug abuse.

There are numerous other roles, responsibilities and activities performed by the PRP team and they vary significantly from day-to-day, to month-to-month depending on Program demands,

such as requests from Legal Counsel or the Quality of Care Department, the coordination of the annual conference, or stakeholder requests.

Generally, the day-to-day activities of the PRP for the period of this report can be summarized as follows:




Throughout 2016, the workflow and work processes were refined, altered and optimized. The PRP has focused on going paperless and has significantly reduced the amount of paper used with the integration of an electronic document management software.

## Prescription Review Program Letters

There are four categories of letters most commonly sent to physicians by the PRP: Double Doctor, Explain, Alert, and Response. These are defined in the blue box on the right-hand side of the page, and the letter counts are in the table below.

### Letter Counts for 2016

| Letter Type | # sent out in 2016 |
|---|---|
| **Double Doctor** | 6925 |
| **Explain/Alert (1st contact)** | 433 |
| **2nd Request** | 84 |
| **Response/Recommendations** | 370 |
| **Law Enforcement Requests** | 30 |
| **Coroner Requests** | 14 |

Monthly computer generated **double doctor letters** are mailed out to alert physicians that a patient to whom they have prescribed has received a prescription for a PRP medications from at least two other physicians. The reporting program cannot identify physicians working at the same clinic address, so the PRP Administrative Assistant sorts through the generated list in an effort to minimize unnecessary letters. These efforts are not always successful, resulting in some letters being sent to prescribers in the same clinic. In addition to this, the program cannot identify physicians providing services to any of the prisons, nor patients residing in facilities such as long-term care homes, also leading to unnecessary letters being sent.

**Alert letters** are also sent to prescribers as a result of calls received by the PRP staff from individuals (often anonymously) providing information that someone (who has been prescribed PRP medications) may possibly be misusing and/or diverting his/her medication. The PRP does not suggest in those letters that the physician cease prescribing to the patient. Rather, the PRP recommends that the physician put safeguards in place, such as treatment agreements, current

**TYPES OF LETTERS**

**Alert** – sent when the patient is identified as potentially misusing his/her meds (e.g. early refills, law enforcement investigation, information from public/HCP of misuse or diversion).

**Coroner Requests** – when the coroner is investigating a possible methadone-associated death, they will request confirmation that the patient was receiving the medication by prescription.

**Double Doctor** – sent when a patient received PRP meds from 3 or more physicians, at 3 different practice site addresses in a calendar month. These are system generated letters.

**Explain** – letters sent to physicians to get their rationale for prescribing (e.g. provide the medical indication and dosing)

**Law Enforcement Request** – when a patient medication profile is provided to law enforcement for the purpose of an active investigation.

**Prescription** – letters to physicians regarding Bylaws 17.1 and 18.1 related to legibility and PRP requirements for a valid prescription.

**Response/Recommendations** – PRP Manager's response to a physician's explain letter response. These often contain recommendations and recommended resources.

At the end of 2016, it is estimated that the PRP had reviewed over **400,000** individual patient profiles since the inception of the program in 2006.

random urine drug testing or surprise tablet counts in order to prevent prescription drug misuse or diversion.

**Explain letters** can be sent for a variety of reasons, but are always in reference to possible inappropriate or suboptimal prescribing. Common triggers that result in an explain letter include, but are not limited to:

- Double doctoring for an extended period of time (i.e. multiple months)
- A pattern of early refills
- Chronic use of benzodiazepines
- The combined use of a benzodiazepine and opioid
- Prescribing of large quantities of immediate-release opioids repeatedly with/without the use of a sustained-release preparation
- Prescribing of opioids and benzodiazepines for patients concurrently receiving opioid substitution therapy
- Patient history of "dirty" urine drug screen results
- Large quantities of tablets being dispensed regularly (in 2016 the threshold was set at 500 units and up for most medications)
- Use of brand name preparations when a generic is available (e.g. Dilaudid vs generic hydromorphone)
- Specific medications very infrequently used (e.g. Demerol, Talwin, chloral hydrate, phenobarbital)

Once the physician provides a response to an explain letter, the PRP can make an assessment of the appropriateness of the prescribing and provide recommendations for possible medication changes or general medication management, such as urine drug screens, treatment agreements, or other approaches in the **response/recommendations letter** sent back to the physician.

# Highlights of PRP Activities for 2016

*For the activities below, the PRP team member(s) who attended are denoted by: PM – PRP Pharmacist Manager; PA – PRP Analyst; AA – PRP Administrative Assistant*

Below are the PRP activities that occurred in 2016 in relation to education to various stakeholder groups, representation within other stakeholder groups, partnerships and collaborations with various stakeholder groups, as well as educational events attended.

## Educational Outreach

- **Prescription Drug Abuse Summit** - PM
  - Presentation Title: *What is the PRP?*
  - March 9 & 10, 2016
  - Treaty 4 Governance Centre - Fort Qu'Appelle, SK

- **RCMP Northern District Intelligence Conference** – PM & AA + member of legal counsel
  - Presentation Title: *CPSS Prescription Review Program*
  - April 12, 2016
  - Cooke Municipal Golf Course - Prince Albert, SK

- **Opioid Substitution Therapy Conference (2nd annual)**
  - Hosted the conference
  - Attendance:232
    - Physicians
    - Pharmacists
    - Nurses
    - Counsellors
  - April 22 & 23, 2016
  - Travelodge Hotel – Saskatoon, SK

- **SIPPA Presentation** – PM
  - June 15, 2016; September 26, 2016
  - University of Saskatchewan

- **Suboxone CME** - PM
  - Speaker: Dr Hakique Virani
  - September 10, 2016
  - Saskatoon, SK
  - Sponsored by Indivior – CPSS assisted in communicating the event

- **Presentation to the Saskatoon Tribal Council** - PM
  - Coordinated through Iva Lafond – Program & Community Development Coordinator
  - Presentation on role and responsibility of the College and how we can work together to address prescription drug abuse
  - October 19, 2016

- **6th Conference on Implementing Best Practices for Pain Management in Saskatchewan** - PM
    - Concurrent session; Presentation title: *Prescription Review Program: an educational program to optimize prescribing of medications with abuse potential*
    - November 3 & 4, 2016
    - Ramada Plaza - Regina, SK

## Representation

- **medSask Advisory Board Meeting** - PM
    - August 26, 2016
    - University of Saskatchewan

## Partnerships and Collaborative Efforts

- **Canadian Prescription Monitoring Program Research Network** - PM
    - March 4, 2016
    - Fairmont Royal York - Toronto, ON

- **Canadian Centre on Substance Abuse (CCSA): First Do No Harm Annual NAC Meeting** – PM
    - Meeting Objective: To provide a forum for connecting, coordinating and linking activities related to the goals and recommendations of the First Do No Harm Strategy (FDNH).
    - March 30, 2016
    - Marriott Montreal Chateau Champlain - Montreal, QC

- **Thunderbird Partnership Foundation: Prescription Drug Abuse Survey Working Group Face-to-Face Meeting** – PM
    - Project Objective: The purpose of the project is to develop a PDA survey for use in First Nations communities, including the development of modules of survey questions for the PDA survey so as to provide choice to First Nations communities on what data they deem is priority for their community.
    - July 6, 2016
    - Grey Eagle Resort - Calgary, AB
    - **FNIHB Funded

2nd Meeting:
    - Meeting Objective: to validate and finalize module one of the PDA Survey and to determine a process for piloting the PDA Survey
    - December 1 & 2, 2016
    - Marriott - Ottawa, ON
    - **FNIHB Funded

- **CIHR Canadian Pain Research Summit** - PM
  - Invited Attendee
  - September 18 to 20, 2016
  - Toronto, ON
- **Sharing the Wisdom: Meeting/Conference on SK HIV Collaborative Multi-year Work Plan** - PM
  - Invited Attendee (by Dr Denise Werker)
  - October 25, 2016
  - Saskatoon, SK

- **Provincial Pain Strategy Steering Group Meeting - Inaugural meeting** – PM
  - Meeting Objective: Goal: to establish a structure that supports overall oversight for the development and activities of working groups based on four pillars – Research & Knowledge Translation; Education; Practice; and a Provincial Pain Foundation.
  - Invited attendee
  - November 3, 2016
  - Ramada Plaza - Regina, SK

## Attendance at Education Events

- **Canadian Pain Society Conference 2016** - PM
  - May 24 to 27, 2016
  - Hyatt Regency - Vancouver, BC

- **SK Region Mental Wellness & Addictions Knowledge Exchange Gathering** - PM
  - Hosted/sponsored by: SIIT & Health Canada First Nations and Inuit Health
  - Sept 27, 2016
  - Saskatoon Inn – Saskatoon, SK

- **The 4th International Conference on Academic Detailing: Innovations in Clinical Outreach Education** - PM
  - Hosted by: NaRCAD (National Resource Center for Academic Detailing) at Harvard Medical School
  - November 14 & 15, 2016
  - Boston, Massachusetts

- **Saskatchewan Addictions Awareness Week** - PA/AA
  - Hosted by: Mental Health and Addictions Services
  - November 15 & 16, 2016
  - West Winds Health Centre-Saskatoon, SK

In addition to the above listed activities, the PRP continues to collaborate with the College of Pharmacy Professionals (mainly through Lori Postnikoff, field officer) to identify apparent inappropriate dispensing of PRP drugs. The PRP also continued its work with the National Advisory Council on Prescription Drug Misuse in partnership with the Canadian Centre on Substance Abuse, a comprehensive 10 year pan-Canadian strategy, *First Do No Harm: Responding to Canada's Prescription Drug Crisis* which was released in March 2013. The strategy highlights the actions required to address the harm associated with the misuse of prescription drugs in Canada in the areas of prevention, education, treatment, monitoring and surveillance and enforcement. The PRP also continues to work with NIHB, the FNIHB Prescription Drug Abuse Saskatchewan group, both the Ministry of Health and Ministry of Justice (including Corrections, Policing and the Chief Coroner's Office), the Provincial Lab, College of Dental Surgeons, Saskatchewan Registered Nurses Association, CCENDU (PRP manages the CCENDU Saskatchewan Facebook page), and CRISM.

Other PRP activities of note include that for the first time since the PRP inception, the PRP referred two cases to discipline. Both these cases resulted in the physicians signing undertakings to restrict their prescribing of PRP medications. Both these investigations were still pending while under investigation at the end of 2016. The PRP also created a website to house valuable resources and links to other websites that will support health care providers and the public when seeking reliable, evidence-based information related to both pain and addiction.

## The Opioid Advisory Committee

The Methadone Program and PRP facilitate as needed quarterly meetings of the College's **Opioid Advisory Committee**. The PRP utilizes physician members of this committee for guidance on various issues related to opioid substitution therapy and chronic pain prescribing, when required.

The committee members for 2016 were:

- SRNA representative, Leland Sommer
- Addictions specialists Dr. Peter Butt (chair), Dr. Brian Fern, Dr. Leo Lanoie, Dr. Carmen Johnson
- Methadone Program Manager Dr. Morris Markentin
- PRP staff Julia Bareham, Laurie Van Der Woude/Liisa Scherban, and Nicole McLean

# PRP Medication Use in Saskatchewan for 2016 – Trends and Insight

An overview of the PRP medications prescribed and dispensed in Saskatchewan are available in Appendices C through F. The numbers were pulled from the PRP Drug Utilization Review (DUR) database as well as requested from the Drug Plan and represented individual units dispensed (e.g. number of capsules, tablets, vials or patches dispensed). The variance in the two sets of data were ~2 to 3%. All the numbers reported in this document are assumed to be accurate and with less than a 4% discrepancy. This is the first year that the numbers have been reported for all medications for the entire calendar year (as opposed to a single month). As such, the numbers from 2014 and 2015 were also run to allow for a comparison. Over the years, this comparison will grow demonstrating trends, whereas currently we only have a snapshot of three years.

## Stimulants (Methylphenidate)

- **Concerta** use has gradually increased from 2014 to 2016, while all other forms of methylphenidate have seen a slight decrease in 2016 as compared to 2015. It would appear that prescribers are opting for the Concerta formulation more frequently.

## Opioids

- The **fentanyl** injection, available as a 50mcg/mL vial has seen a significant increase in use from 2014 to 2016 (5.8 fold increase), whereas the fentanyl patch (all strengths) have seen a slight decline in 2016 as compared to 2015. With the exception of the 12mcg/hr patch, the use of fentanyl patches has remained fairly consistent from 2014 to 2016.

- The **hydromorphone** injection has seen a large increase in use from 2014 to 2016 (44% increase). The oral immediate-release hydromorphone saw an increase in 2016 over previous years, with the most concerning trend being that the 8mg formulation has increased by just over 10%. The population growth for Saskatchewan was only ~1% (see Appendix G), so population growth cannot explain this trend. A similar trend was evident with the sustained-release preparations (Hydromorph Contin), with the most growth occurring with the 3mg, 6mg and 12mg strengths (versus the 24mg and 30mg). Overall, the hydromorphone dispensed, in morphine equivalents has increased by just over 10% since 2014. NOTE: it is possible that the 2014 data for hydromorphone is an underestimation. There was an eHealth error in February 2014 that skewed the totals lower than what was actually dispensed.

- The **morphine** injection has seen a decline in use from 2016 as compared to 2014 by about 20%. The decrease could be explained by the increase in the hydromorphone injection. The use of the oral syrup has remained very consistent for the 1mg/mL strength, but has increased for the 5mg/mL strength. The recommendation to avoid codeine in pediatrics and the aging population may account for these trends, but these are just assumptions. The use of 5mg immediate-release morphine has steadily increased since 2014 (by 16%), whereas the 10mg strength has decreased. This could be explained by a supplier shortage on the 10mg that occurred in 2016. The sustained-release preparations for morphine (both 12-hour and 24-hour preparations) in the upper

strengths (50 mg, 60mg, 100mg and 200mg) have seen a trend downward since 2014. Kadian 10mg and 20mg, as well as morphine SR 15mg have seen increases.

- **Oxycodone** has seen an increase in the use of the immediate-release preparations across all three strengths (5mg, 10mg and 20mg), with the 10mg strength seeing the most use and most growth (~37% increase from 2014 to 2016). The use of the sustained-release product, OxyNEO, stayed relatively consistent across all three years and saw a bit of a decline. The morphine equivalent of oxycodone in dispensed in Saskatchewan in 2014 was ~3% great than in 2016.

- **Acetaminophen/codeine combination products** have seen very consistent use over the three years, with the 30mg codeine containing product (e.g. Tylenol #3) being prescribed ~10-20x more commonly than the 20mg and 60mg codeine-containing preparations (Tylenol #2 and Tylenol #4).

## Opioid-Associated Deaths

- According to the Office of the Chief Coroner report entitled 'Drug Overdose Deaths' (see Appendix H), there were 35 opioid associated deaths (all but one accidental) in 2016. However, this statistic is subject to change in 2017 as new investigations are undertaken and/or on-going investigations are concluded. In 2015, there were 128 deaths (accidental, suicide and undetermined), and 2014 had 89 deaths. Saskatchewan saw a significant increase in the opioid associated deaths from 2014 to 2015, but it will take the passage of some time to determine if this trend continued into 2016.

## Gabapentin

- The 300mg capsule is the most commonly used preparation (300mg capsules were dispensed at quantities exceeding 220% of the next most commonly dispensed strength, 100mg capsules [8,973,000 units vs 4,061,000 units for 2016]).

## Benzodiazepines

- The most commonly dispensed benzodiazepines in 2016 was **clonazepam** (specifically the 0.5mg strength) followed closely by **lorazepam** (specifically the 1mg strength). With the exception of clonazepam, the quantity of all other benzodiazepines listed decreased slightly in 2016.

# Appendix A: CPSS Regulatory Bylaw 18.1

## 18.1 The Prescription Review Program

(a) Panel of Monitored Drugs – The Prescription Review Program shall apply to all dosage forms of the following drugs, except where indicated otherwise:

ACETAMINOPHEN WITH CODEINE - in all dosage forms except those containing 8 mg or less of codeine

ACETYLSALICYLIC ACID (ASA) WITH CODEINE - in all dosage forms except those containing 8 mg or less of codeine

AMPHETAMINES - in all dosage forms

ANABOLIC STEROIDS ANILERIDINE - in all dosage forms

BARBITUATES

BENZODIAZEPINES – in all dosages and forms

BUPRENORPHINE – in all dosages and forms

BUTALBITAL - in all dosage forms

BUTALBITAL WITH CODEINE - in all dosage forms

BUTORPHANOL

CHLORAL HYDRATE

COCAINE - in all dosage forms

CODEINE - as the single active ingredient, or in combination with other active ingredients, in all dosage forms except those containing 20 mg per 30 ml or less of codeine in liquid for oral administration

DIETHYLPROPION - in all dosage forms

FENTANYL - in all dosage forms

GABAPENTIN

HYDROCODONE - DIHYDROCODEINONE - in all dosage forms

HYDROMORPHONE - DIPHRYDROMORPHONE - in all dosage forms

LEVORPHANOL - in all dosage forms

MEPERIDINE - PETHIDINE - in all dosage forms

METHADONE - in all dosage forms

METHYLPHENIDATE - in all dosage forms

MORPHINE - in all dosage forms

NORMETHANDONE-P-HYDROXYEPHEDRINE - in all dosage forms

OXYCODONE - as the single active ingredient or in combination with other active ingredients in all dosage forms

OXYMORPHONE

PANTOPON - in all dosage forms

PENTAZOCINE - in all dosage forms

PHENTERMINE - in all dosage forms

PROPOXYPHENE - in all dosage forms (

b) Prescriptions for drugs covered by the Prescription Review Program shall be issued by physicians according to the policies and procedures agreed to and amended from time to time by the College of Dental Surgeons of Saskatchewan, the College of Physicians and Surgeons of Saskatchewan, the Saskatchewan Registered Nurses Association and the Saskatchewan College of Pharmacists.

(c) In order to prescribe a drug to which the Prescription Review Program applies, physicians shall complete a written prescription which meets federal and provincial legal requirements and includes the following:

(i) The patient's date of birth;

(ii) The patient's address;

(iii) The total quantity of medication prescribed, both numerically and in written form;

(iv) The patient's health services number; and,

(v) The prescriber's name and address.

(d) For the purpose of this bylaw, "written prescription" includes an electronic prescription that meets the requirements for electronic prescribing under the Pharmaceutical Information Program.

(e) A physician who prescribes a drug to which the Prescription Review Program applies, and who provides the prescription directly to a pharmacy by electronic prescribing, by email or by FAX, or who transmits a prescription in accordance with the policies and protocols of the Pharmaceutical Information Program, need not include both the quantity numerically and in written form.

(f) If a physician is registered on the Educational Register, the physician shall, in addition to the information in paragraph (c) above, include the following in a prescription for a drug to which the Prescription Review Program applies:

(i) The training level of the physician writing the prescription;

(ii) The legibly printed name of the Most Responsible Physician (the physician to whom queries regarding the prescription should be addressed);

(iii) The legibly printed name of the physician writing the prescription.

(g) Physicians shall only prescribe part-fills of medications to which the Prescription Review Program applies if the following information is specified in the prescription:

(i) The total quantity;

(ii) The amount to be dispensed each time; and

(iii) The time interval between fills.

(h) The office of the Registrar may gather and analyze information pertaining to the prescribing of medications to which the Prescription Review Program applies in Saskatchewan for the purpose of limiting the inappropriate prescribing and inappropriate use of such drugs. In order to fulfill that role, the office of the Registrar may, among other activities:

(i) Generally, provide education to physicians in order to encourage appropriate prescribing practices by physicians registered by the College;

(ii) Alert physicians to possible inappropriate use of medications to which the Prescription Review Program applies by patients to whom they have prescribed such drugs;

(iii) Alert physicians to possible inappropriate prescribing of medications to which the Prescription Review Program applies;

(iv) Make recommendations to a physician with respect to the physician's prescribing of medications to which the Prescription Review Program applies;

(v) Require physicians to provide explanations for their prescribing of medications to which the Prescription Review Program applies. In making requests for explanations, the office of the Registrar may require the physician to provide information about the patient, the reasons for prescribing to the patient, and any knowledge which the physician may have about other narcotics or controlled drugs received by the patient;

(vi) Cause information, concerns or opinions of general application to the profession to be communicated to the physicians registered by the College without identifying the particular physician to whom such information relates;

(vii)Provide information gathered in connection with the Prescription Review Program to another health professional body including the College of Dental Surgeons of Saskatchewan, the Saskatchewan College of Pharmacists or the Saskatchewan Registered Nurses Association, provided the information gathered is required by that body to perform and carry out the duties of that health professional body pursuant to an Act with respect to regulating the profession. Where the personal health information relates to a member of the health professional body seeking disclosure, disclosure by the Registrar of that information may only be made in accordance with The Health Information Protection Act, and in particular section 27(5) or that Act.

(i) Physicians shall respond to such requests for explanation, as described in paragraph (h)(v) above, from the office of the Registrar within 14 days of receipt of such a request for information.

(j) The Registrar, Deputy Registrar, or Prescription Review Program Supervisor may extend the deadline for reply at their discretion, upon receipt of a written request for extension from the physician.

(k) All physicians who receive such a request for information will comply, to the best of their ability, fully and accurately with such requests for information.

(l) Failure to comply with paragraphs (h)(v), (i) and (k) above is unbecoming, improper, unprofessional or discreditable conduct.

(m) Members shall keep a record of all drugs to which the Prescription Review Program applies that are purchased or obtained for the member's practice and a record of all such drugs administered or furnished to a patient in or out of the physician's office, showing:

(i) the name, strength and quantity of the drug purchased or obtained;

(ii) the name, strength, dose and quantity of the drug administered or furnished;

(iii) the name and address of the person to whom it was administered or furnished, and, if applicable, the name and address of the person who took delivery of the drug; and

(iv) the date on which the drug was obtained and the date(s) on which the drug was administered, furnished or otherwise disposed of.

(n) The record referred to in paragraph (m) shall be kept separate from the patient's medical record.

# Appendix B: Prescription Review Program Monitored Medications

The following section lists the chemical name of the monitored medication, the type of dosage form that is monitored, and all the tradename (or brand name) products that are currently available.

**ACETAMINOPHEN WITH CODEINE** - in all dosage forms except those containing 8mg or less of codeine

- EXCLUDES: Tylenol #1, Mersyndol
- Tylenol #2
- Tylenol #3
- Tylenol #4

**ACETYLSALICYLIC ACID (ASA) WITH CODEINE** - in all dosage forms except those containing 8 mg or less of codeine

- EXCLUDES: 222
- 282
- 292

**AMPHETAMINES** - in all dosage forms

- Adderall XR
- Dexedrine
- Vyvanse

**ANABOLIC STEROIDS (testosterone)**

- Andriol
- Androgel
- Testim
- Androderm
- Delatestryl

**ANILERIDINE** - in all dosage forms

**BARBITUATES**

- Phenobarbital

**BENZODIAZEPINES** – in all dosages and forms

- Alprazolam (Xanax)
- Bromazepam (Lectopam)
- Chlordiazepoxide
- Clonazepam (Rivotril)
- Clorazepate
- Diazepam (Valium)
- Flurazepam
- Lorazepam (Ativan)
- Nitrazepam (Mogadon)
- Oxazepam
- Temazepam (Restoril)
- Triazolam

**BUPRENORPHINE** – in all dosages and forms

- Butran Patch
- Suboxone (naloxone combo product)

**BUTALBITAL** - in all dosage forms **& BUTALBITAL WITH CODEINE** - in all dosage forms

- Fiorinal, Fiorinal C1/2, Fiorinal C1/4 (ASA, caffeine, codeine [15mg or 30mg], butalbital)

**BUTORPHANOL**

**CHLORAL HYDRATE**

**COCAINE** - in all dosage forms

**CODEINE** - as the single active ingredient, or in combination with other active ingredients, in all dosage forms except those containing 20 mg per 30 ml or less of codeine in liquid for oral administration

Controlled-release:

- Codeine Contin

**DIETHYLPROPION** - in all dosage forms

**FENTANYL** - in all dosage forms

- Duragesic patch
- Onsolis buccal film (cancelled post market)
- Abstral sublingual
- Fentora sublingual

**GABAPENTIN**

- Neurontin

**HYDROCODONE** - DIHYDROCODEINONE - in all dosage forms

- Dalmacol
- Hycodan
- Tussionex

**HYDROMORPHONE** - DIPHRYDROMORPHONE - in all dosage forms

Immediate-release:

- Dilaudid

Controlled-release:

- Hydromorph-Contin

**LEVORPHANOL** - in all dosage forms

**MEPERIDINE** - PETHIDINE - in all dosage forms

- Demerol

**METHADONE** - in all dosage forms

- Metadol

**METHYLPHENIDATE** - in all dosage forms

- Ritalin & Ritalin SR
- Biphentin
- Concerta

**MORPHINE** - in all dosage forms

Immediate-release:

- M.O.S.
- MS-IR
- Statex

Controlled-release:

- MS Contin
- MOS-SR
- M-Eslon
- Kadian

**NORMETHANDONE-P-HYDROXYEPHEDRINE** - in all dosage forms

**OXYCODONE** - as the single active ingredient or in combination with other active ingredients in all dosage forms

Immediate-release:

- OXY-IR
- Supeudol

Controlled-release:

- OxyNEO

**OXYMORPHONE**

**PANTOPON** - in all dosage forms

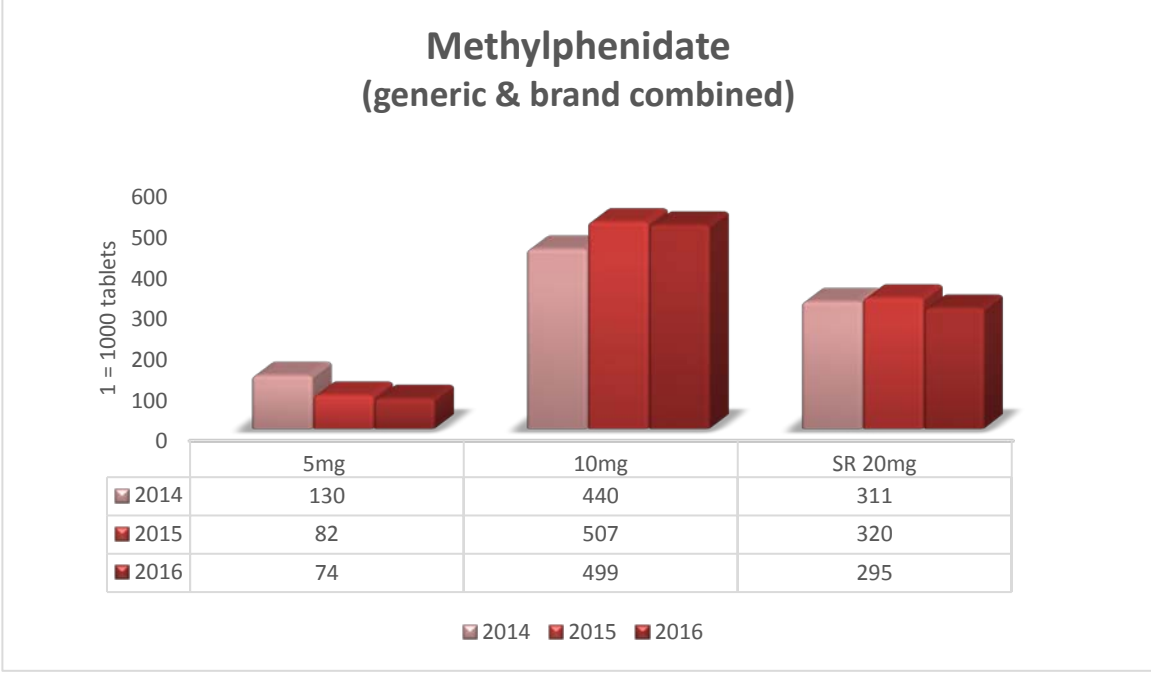
**PENTAZOCINE** - in all dosage forms

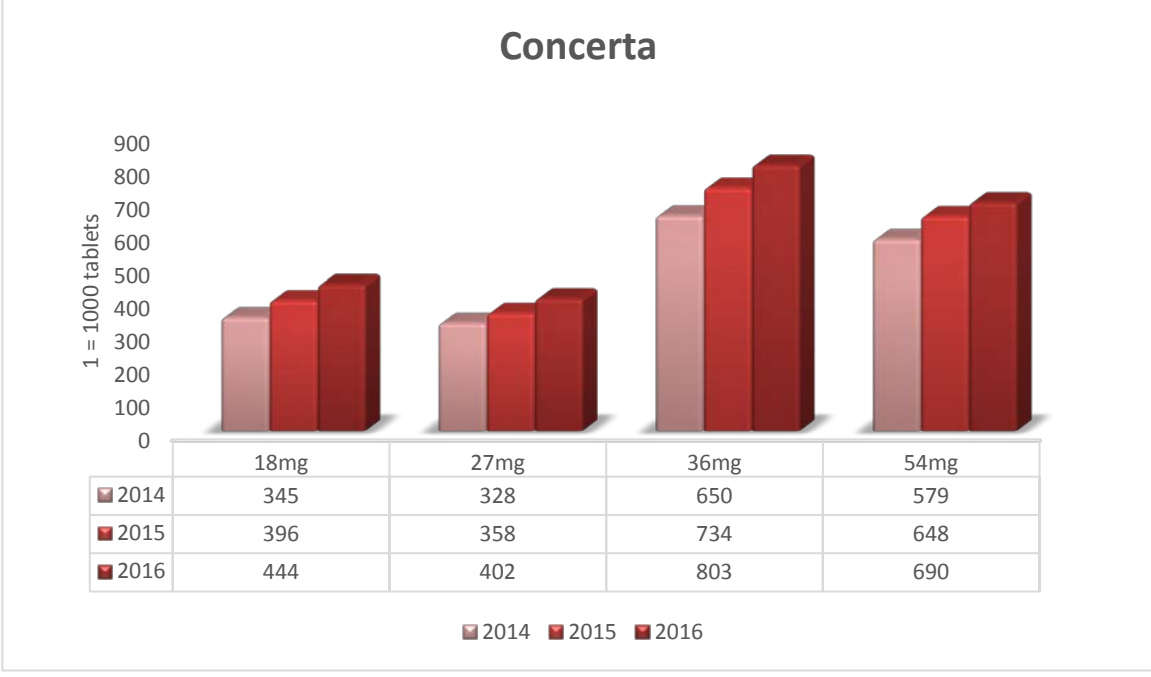
- Talwin

**PHENTERMINE** - in all dosage forms

**PROPOXYPHENE** - in all dosage forms

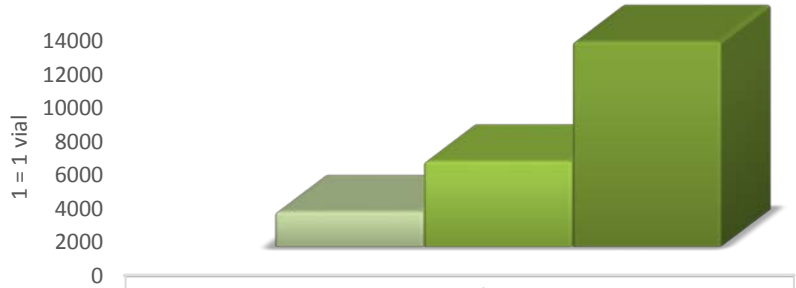
# Appendix C: Stimulants



# Appendix D: Opioids

## Fentanyl Citrate INJECTION



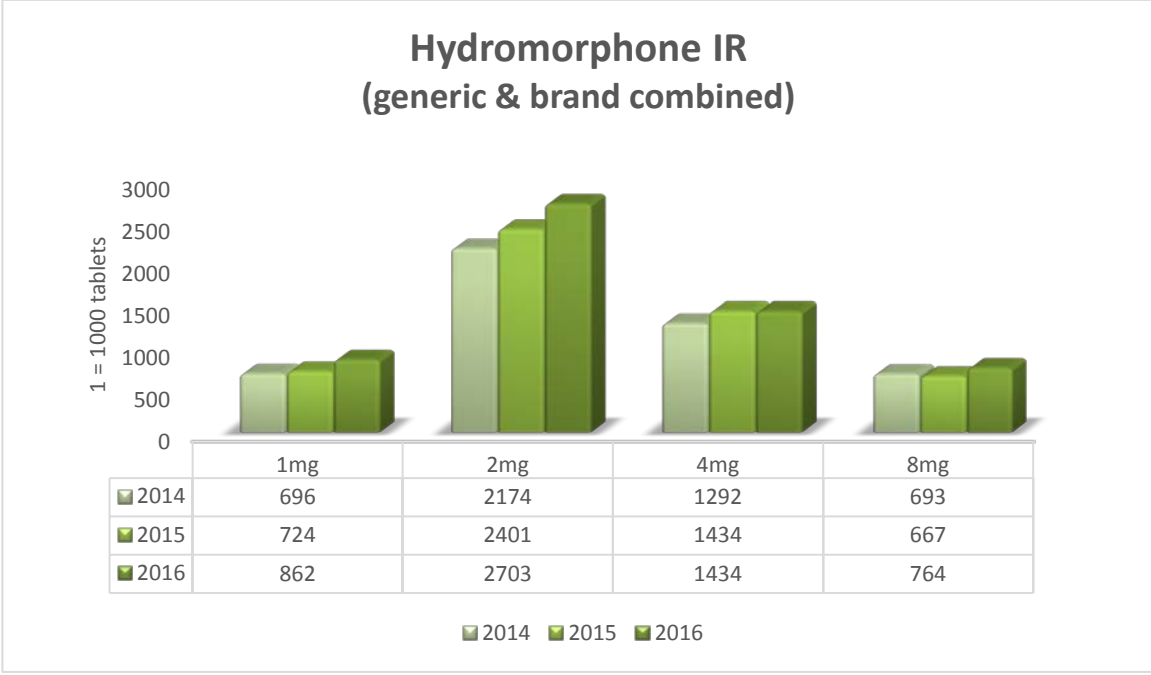

| | 50mcg/ml |
|---|---|
| 2014 | 2093 |
| 2015 | 5100 |
| 2016 | 12166 |

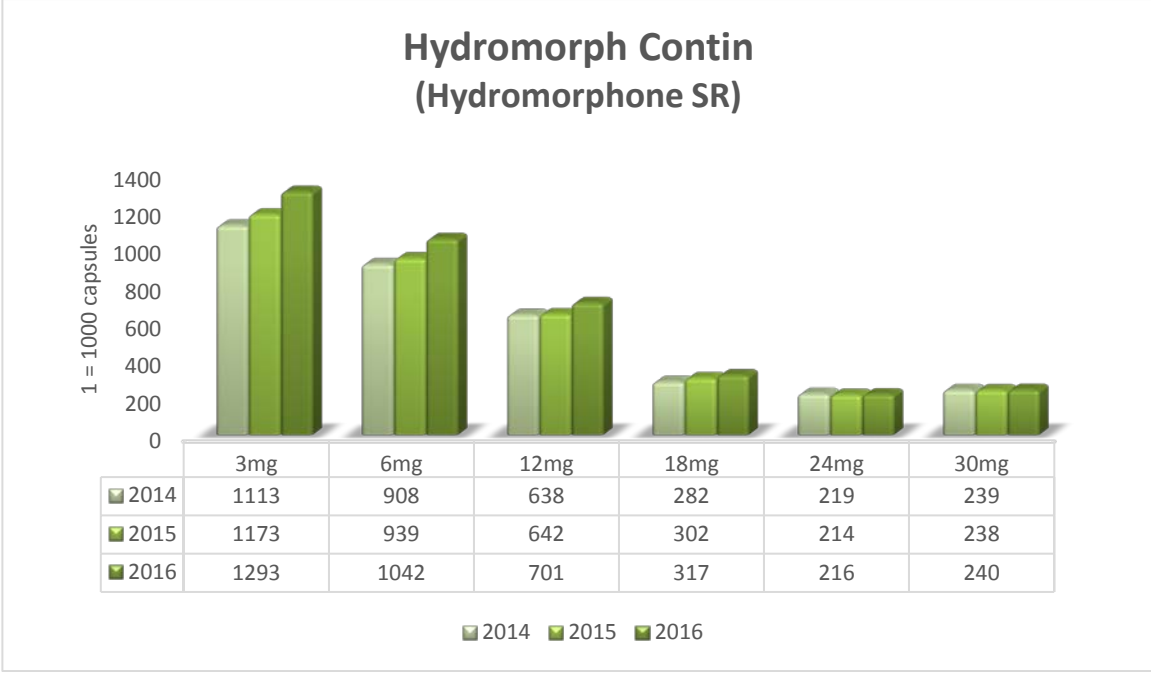
2014 2015 2016

## Fentanyl PATCH


| | 12mcg | 25mcg | 37mcg (Non-formulary) | 50mcg | 75mcg | 100mcg |
|---|---|---|---|---|---|---|
| 2014 | 19 | 68 | 2 | 55 | 39 | 82 |
| 2015 | 48 | 70 | 0 | 57 | 38 | 83 |
| 2016 | 45 | 65 | 0.8 | 48 | 38 | 77 |

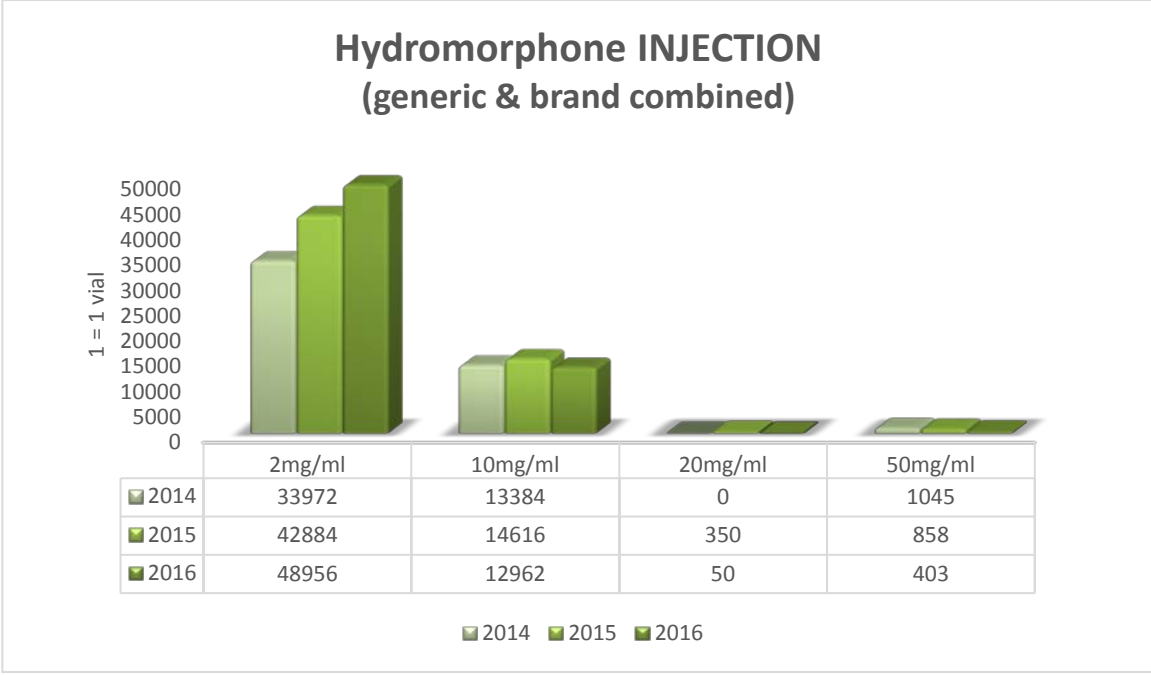
2014 2015 2016



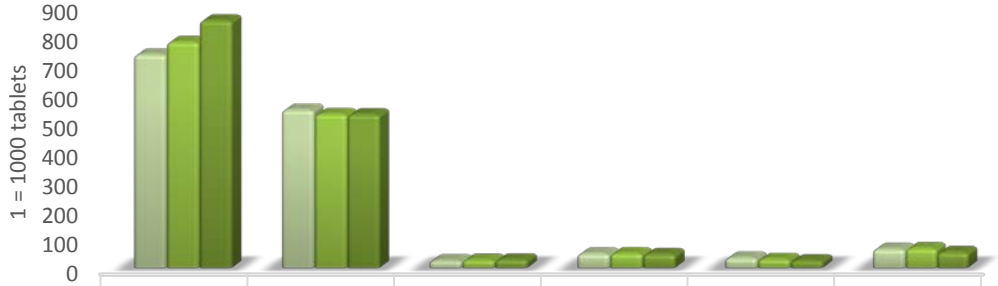

## Morphine equivalence – hydromorphone specific

| 2014 | 2015 | 2016 |
|---|---|---|
| 248,505,000 | 255,835,000 | 273,770,000 |




| | 2mg/ml | 10mg/ml | 20mg/ml | 50mg/ml |
|---|---|---|---|---|
| 2014 | 33972 | 13384 | 0 | 1045 |
| 2015 | 42884 | 14616 | 350 | 858 |
| 2016 | 48956 | 12962 | 50 | 403 |

## Morphine IR
### (generic & brand combined)



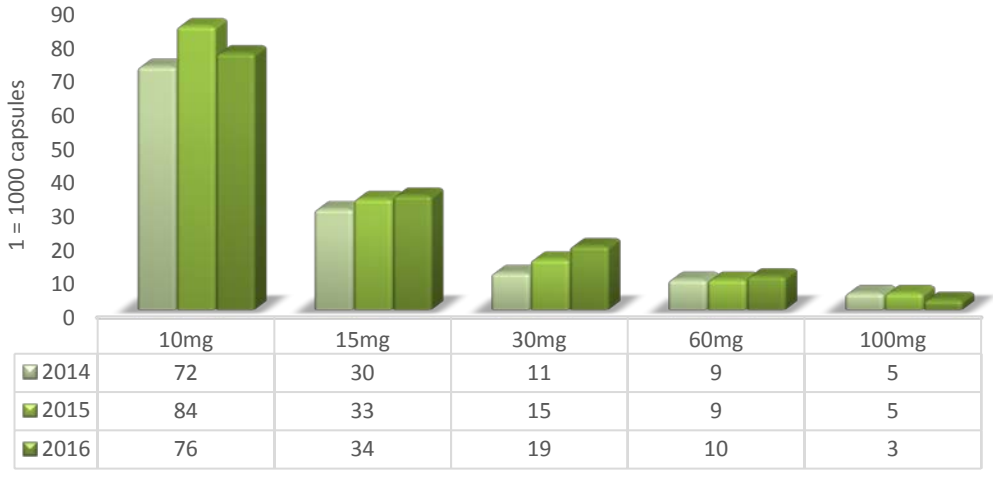

| | 5mg | 10mg | 20mg | 25mg | 30mg | 50mg |
|---|---|---|---|---|---|---|
| 2014 | 732 | 542 | 25 | 49 | 35 | 65 |
| 2015 | 775 | 527 | 27 | 50 | 30 | 67 |
| 2016 | 849 | 526 | 28 | 47 | 24 | 54 |

2014 2015 2016

## Morphine SR - 12 hour
### (generic & brand combined)


| | 15mg | 30mg | 60mg | 100mg | 200mg |
|---|---|---|---|---|---|
| 2014 | 191 | 129 | 127 | 52 | 17 |
| 2015 | 146 | 126 | 109 | 48 | 15 |
| 2016 | 156 | 104 | 84 | 44 | 12 |

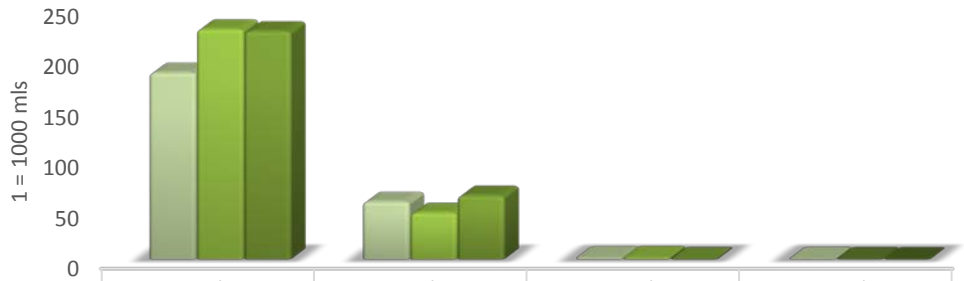
2014 2015 2016




| | 10mg | 15mg | 30mg | 60mg | 100mg |
|---|---|---|---|---|---|
| 2014 | 72 | 30 | 11 | 9 | 5 |
| 2015 | 84 | 33 | 15 | 9 | 5 |
| 2016 | 76 | 34 | 19 | 10 | 3 |


| | 10mg | 20mg | 50mg | 100mg |
|---|---|---|---|---|
| 2014 | 22 | 28 | 45 | 51 |
| 2015 | 27 | 33 | 43 | 50 |
| 2016 | 32 | 39 | 41 | 46 |

## Morphine SYRUP
### (generic & brand combined)



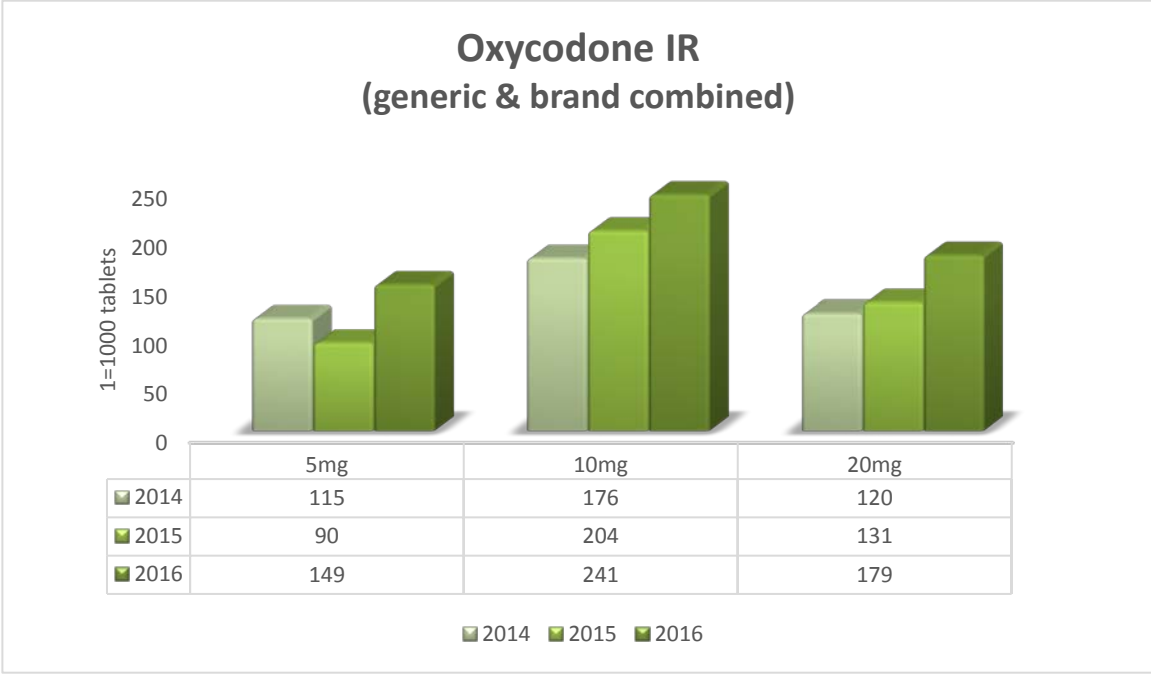

| | 1mg/ml | 5mg/ml | 10mg/ml | 20mg/ml |
|---|---|---|---|---|
| 2014 | 184 | 57 | 1.8 | 0.6 |
| 2015 | 227 | 46 | 2 | 0.1 |
| 2016 | 225 | 63 | 0.3 | 0 |

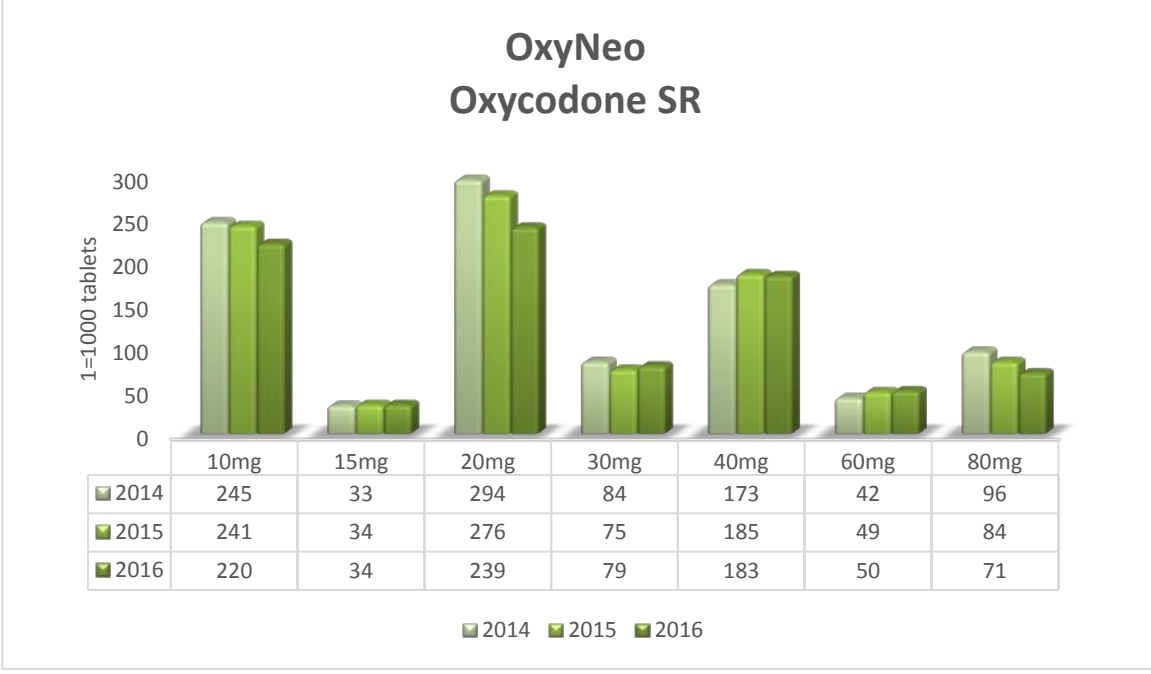
2014 2015 2016

## Morphine INJECTION
### (generic & brand combined)


| | 1mg/ml | 2mg/ml | 10mg/ml | 15mg/ml | 50mg/ml |
|---|---|---|---|---|---|
| 2014 | 350 | 1322 | 27417 | 2029 | 322 |
| 2015 | 11 | 1309 | 26273 | 1724 | 200 |
| 2016 | 0 | 1316 | 22573 | 2385 | 200 |

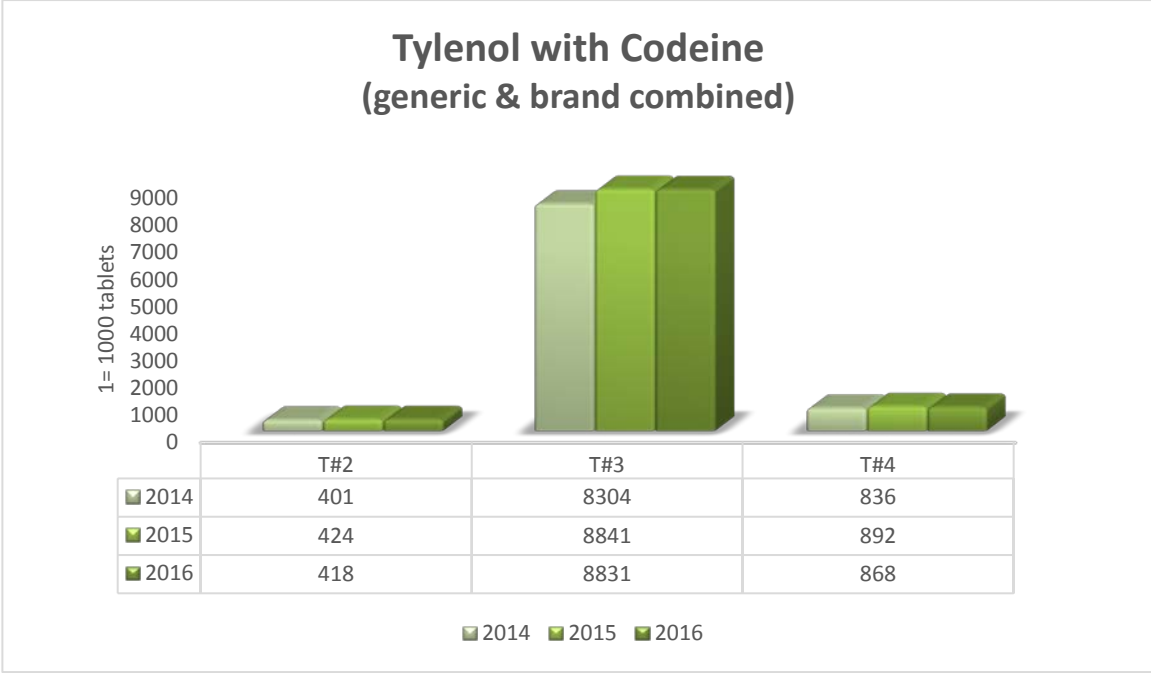
2014 2015 2016



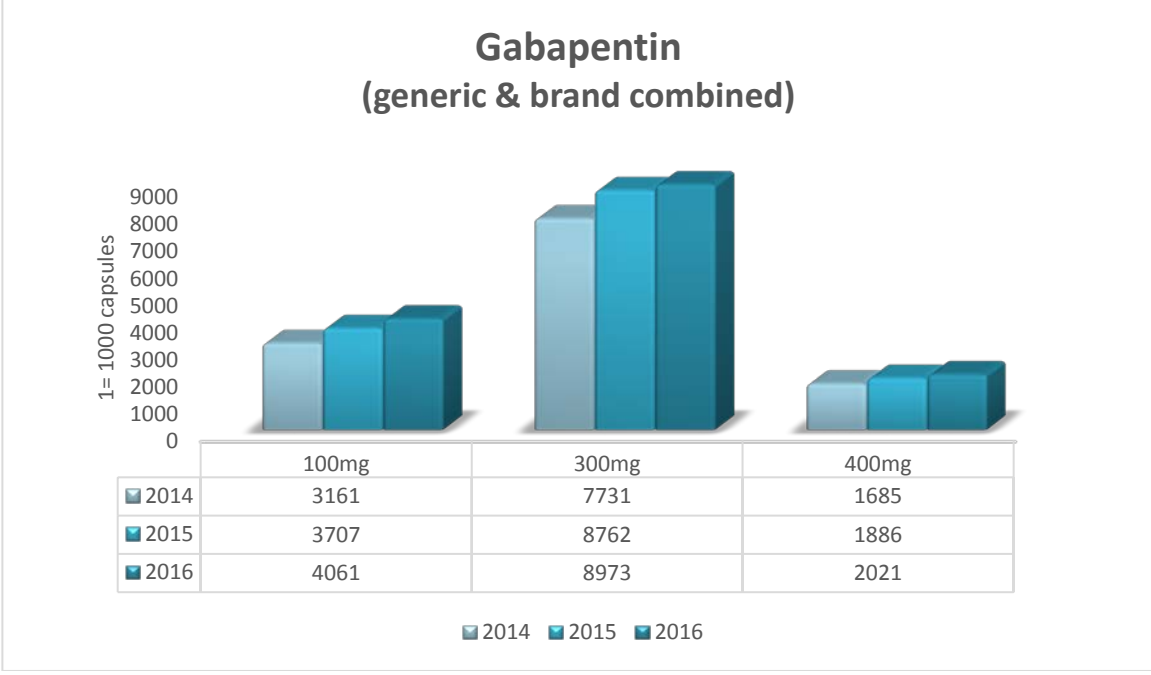

## Morphine equivalence – oxycodone specific

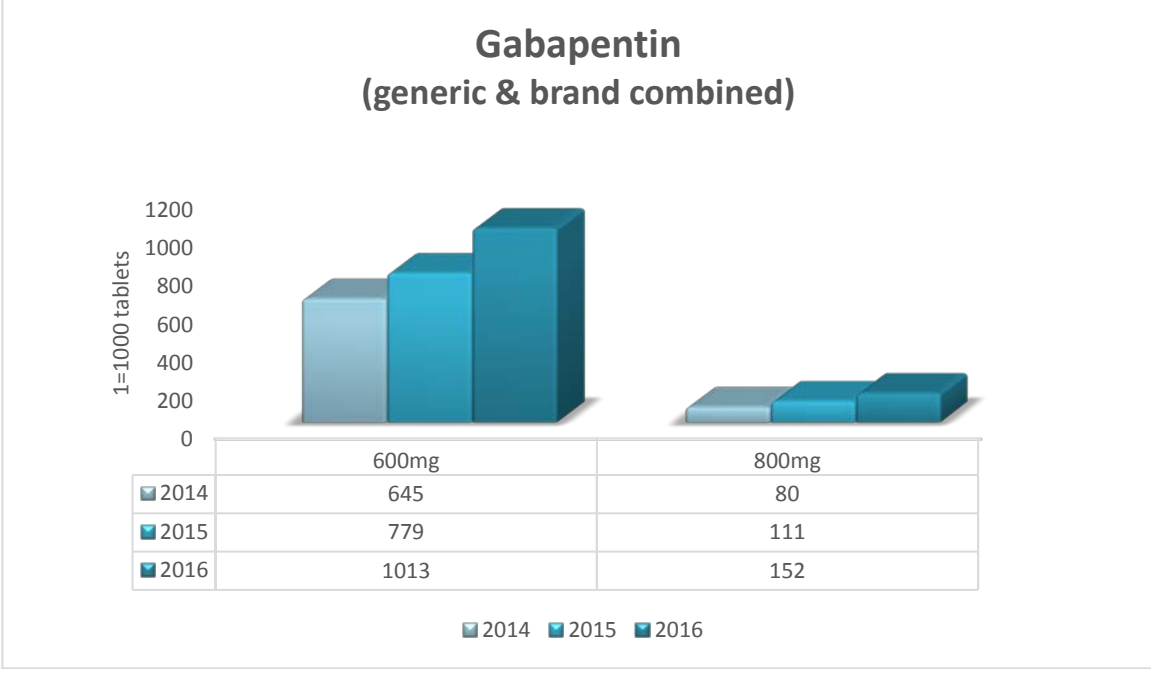
| 2014 | 2015 | 2016 |
|---|---|---|
| 48,840,000 | 47,355,000 | 47,332,500 |



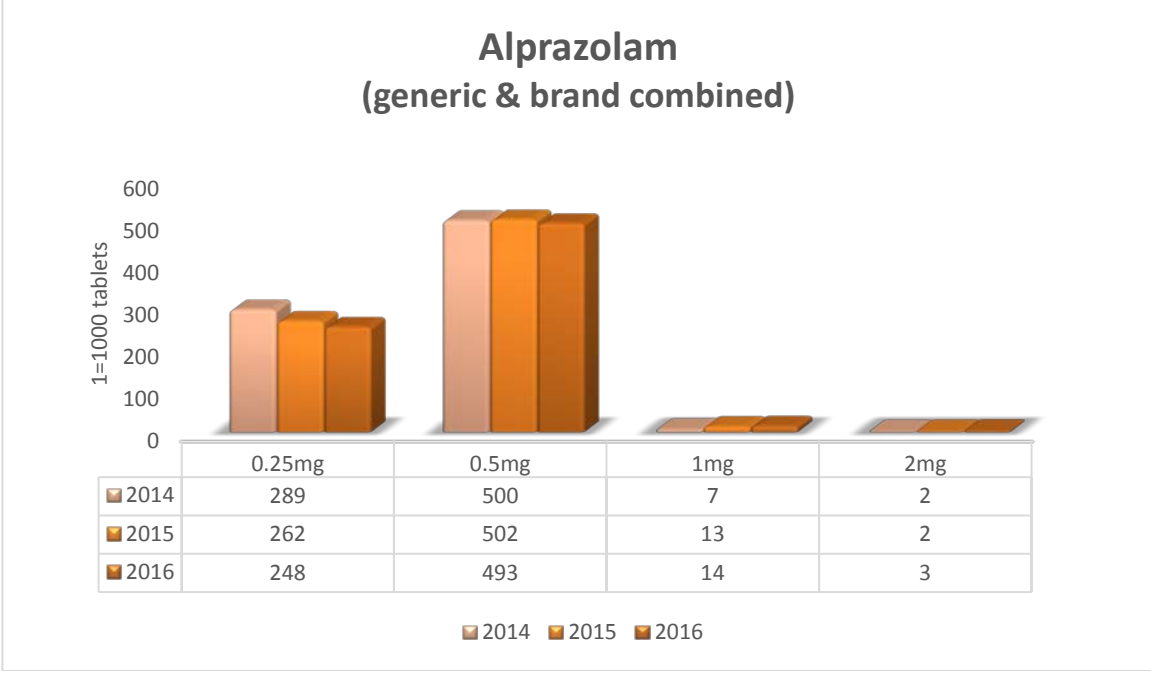

| | T#2 | T#3 | T#4 |
|---|---|---|---|
| 2014 | 401 | 8304 | 836 |
| 2015 | 424 | 8841 | 892 |
| 2016 | 418 | 8831 | 868 |

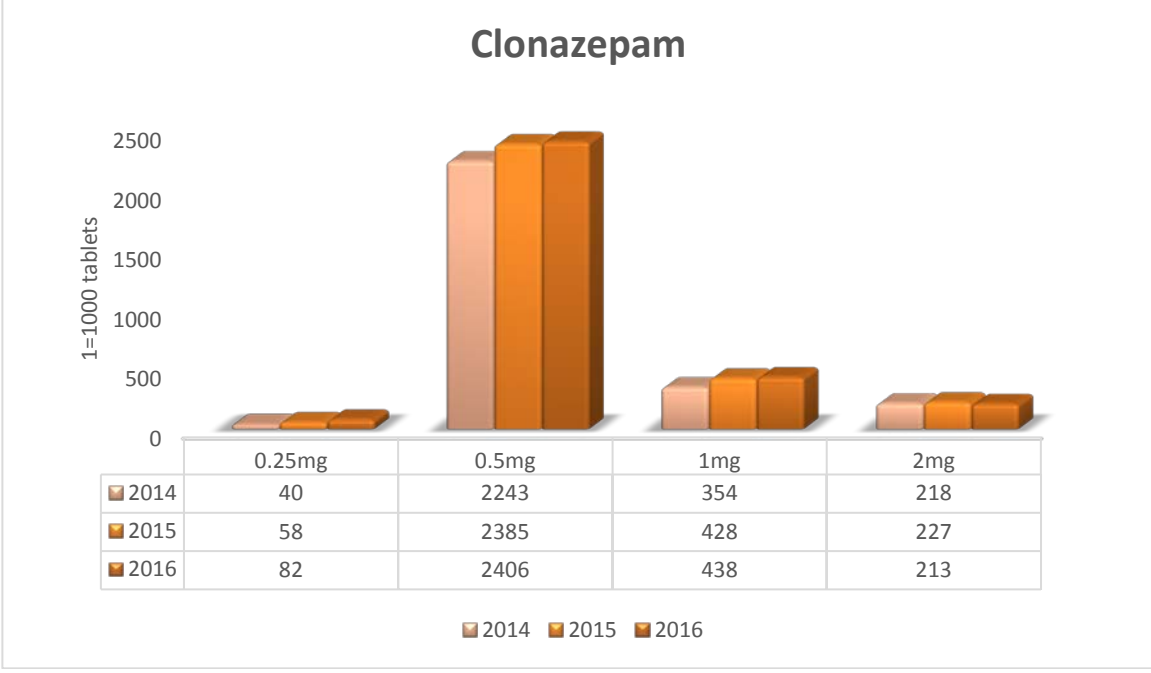
# Appendix E: Gabapentin



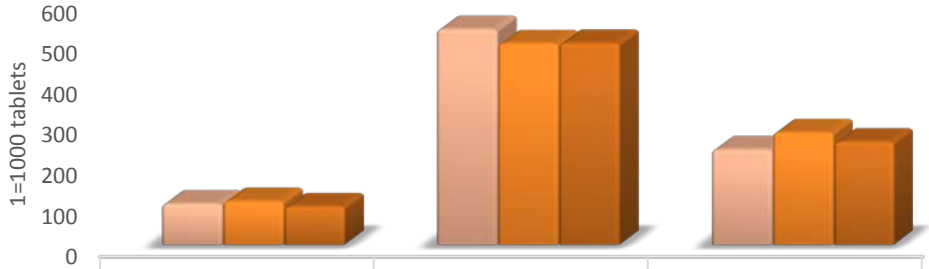



# Appendix F: Benzodiazepines



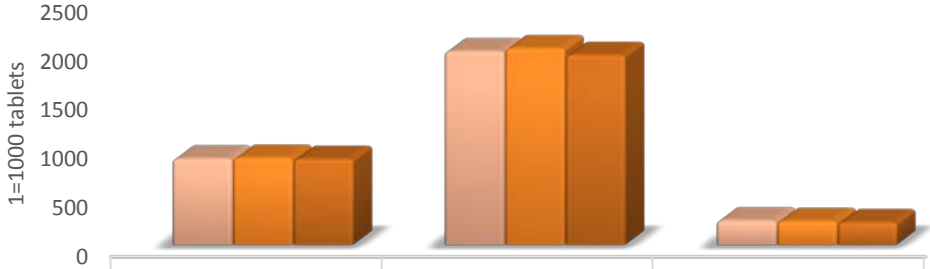
## Diazepam
## (generic & brand combined)




| | 2mg | 5mg | 10mg |
|---|---|---|---|
| 2014 | 101 | 528 | 234 |
| 2015 | 107 | 493 | 276 |
| 2016 | 94 | 494 | 253 |

2014 2015 2016

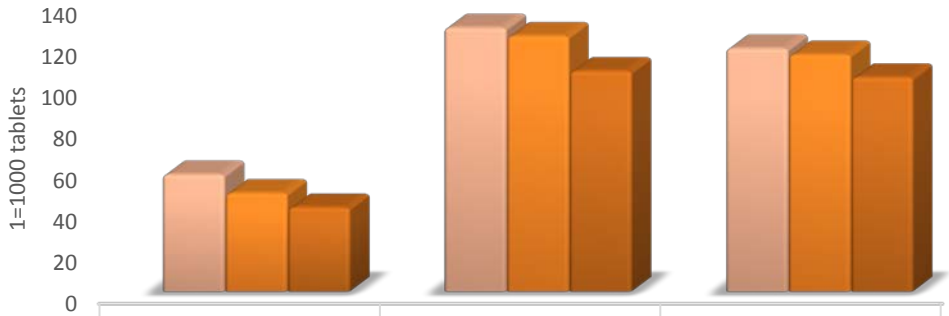
## Lorazepam - regular & SL
## (generic & brand combined)




| | 0.5mg | 1mg | 2mg |
|---|---|---|---|
| 2014 | 881 | 1972 | 250 |
| 2015 | 889 | 2002 | 243 |
| 2016 | 877 | 1932 | 230 |

2014 2015 2016

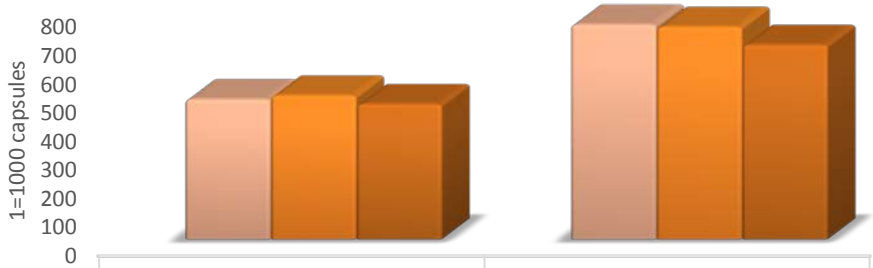
## Oxazepam




| | 10mg | 15mg | 30mg |
|---|---|---|---|
| 2014 | 57 | 128 | 118 |
| 2015 | 48 | 124 | 115 |
| 2016 | 41 | 107 | 104 |

2014 2015 2016

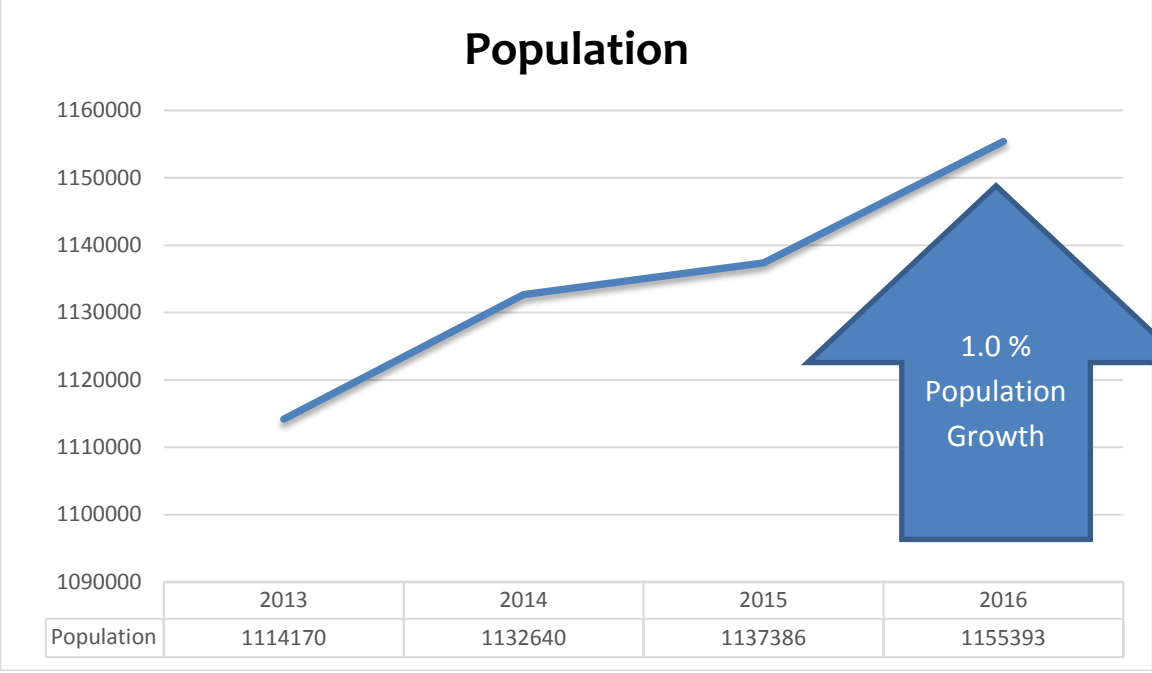
## Temazepam
## (generic & brand combined)




| | 15mg | 30mg |
|---|---|---|
| 2014 | 487 | 748 |
| 2015 | 500 | 740 |
| 2016 | 470 | 677 |

2014 2015 2016

# Appendix G: Saskatchewan Population Growth




| | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|
| Population | 1114170 | 1132640 | 1137386 | 1155393 |

# Appendix H: Coroner Report – Opioid Related Deaths

Government of Saskatchewan

Office of the Chief Coroner

**DRUG OVERDOSE DEATHS**
**Saskatchewan, 2010 to 2016**
**(Updated – January 12, 2017)**

The data in the following tables include all death investigations concluded by the Office of the Chief Coroner (OCC) **between January 1, 2010 and December 31, 2016** where the cause of death was due to a **Drug Overdose (Single or Combined Drug Overdose)**. The statistics shown are subject to change as new investigations are undertaken and/or on-going investigations are concluded.

For the following tables please note:

- 'Undetermined' indicates that after completing an investigation, there is equal evidence, or a significant contest between one or more classifications.
- 2015 and 2016 data consists of concluded death investigations from January 1, 2015 to December 31, 2016; the data does not include deaths that are still under investigation.

**Drug Overdose Deaths by Manner of Death, 2010 – 2016**

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|
| Accident | 52 | 56 | 60 | 62 | 67 | 86 | 29 |
| Suicide | 21 | 24 | 17 | 21 | 13 | 23 | 1 |
| Homicide | – | – | – | – | – | – | – |
| Undetermined | 5 | 6 | 9 | 5 | 5 | 7 | 1 |
| Total | 78 | 86 | 86 | 88 | 85 | 116 | 31 |

**Breakdown of Opioid Drugs Identified in Drug Overdose Deaths by Manner of Death, 2010 – 2016**

| | | Codeine | Fentanyl | Heroin | Hydromorphone | Methadone | Morphine | Oxycodone | Opioid (Unknown) | W-18* |
|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | Accident | 4 | 2 | – | 12 | 11 | 12 | 10 | – | |
| | Suicide | 2 | – | – | 2 | – | 3 | – | – | |
| | Homicide | – | – | – | – | – | – | – | – | |
| | Undetermined | – | – | – | – | 3 | 1 | 1 | – | |
| 2011 | Accident | 7 | 2 | – | 19 | 20 | 12 | 5 | – | |
| | Suicide | 2 | – | – | 1 | 3 | 3 | 4 | – | |
| | Homicide | – | – | – | – | – | – | – | – | |
| | Undetermined | – | 1 | – | 3 | 1 | – | | – | |
| 2012 | Accident | 12 | 6 | 1 | 16 | 14 | 19 | 3 | – | |
| | Suicide | 4 | – | – | 1 | 1 | – | 2 | – | |
| | Homicide | – | – | – | – | – | – | – | – | |
| | Undetermined | 2 | 1 | – | – | 2 | 2 | 2 | – | |
| 2013 | Accident | 3 | 9 | – | 17 | 21 | 10 | 7 | 1 | |
| | Suicide | 2 | 1 | – | 4 | 2 | 4 | 1 | – | |
| | Homicide | – | – | – | – | – | – | – | – | |
| | Undetermined | – | – | – | 2 | 2 | – | 1 | – | |
| 2014 | Accident | 5 | 9 | – | 22 | 20 | 15 | 4 | – | |
| | Suicide | – | 2 | – | 1 | 4 | 2 | 1 | – | |
| | Homicide | – | – | – | – | – | – | – | – | |
| | Undetermined | – | – | – | 1 | – | 1 | 2 | – | |
| 2015 | Accident | 9 | 21 | – | 29 | 25 | 19 | 5 | – | 1* |
| | Suicide | 1 | 1 | – | 4 | 2 | 3 | 2 | – | |
| | Homicide | – | – | – | – | – | – | – | – | |
| | Undetermined | 1 | – | – | 3 | – | 3 | – | – | |

Source: Office of the Chief Coroner 1 Updated: January 12, 2017

# Appendix I: Budget and Actuals

# Appendix J: Audited Financial Statements 2016