Disposal of Controlled Substances & Preventing Prescription Drug Abuse

- Snap Shot: Ingham County Disposal Data on Prescription Drug Use & Abuse
  - Definitions & Authority
  - Health & Safety Risks
  - Community Awareness
  - Community Action
- Models for Prescription Drug Disposal
  - The Future on this Topic
Prescription Drug Abuse

“The use of a medication without a prescription, use in a way other than as prescribed, or use for the experience or feelings elicited”

- Drinking over-the-counter cough syrup containing DXM also Dextroamphetamine

- Taking attention-deficit hyperactivity disorder (ADHD) medications to study for finals Adderall/Ritalin/Concentra

- Taking medications to seek euphoric effects Amytal, Phenobarbital, Codeine, Oxycontin, Percodan, Tylox, Vicodin, Demerol, Dilaudid, Darvocet, Dextromethorphan
The Problem

- Prescription Drug Abuse is on the rise

- Misinformation leads teens to believe that abuse of FDA approved medication is “safe”

- Prescription medications are obtained from a friend or relative (70% of users)

- The result is increased addiction and death
Solutions

- Raise Awareness of this new Trend
- Education Community members on Safe Use and Storage of Medications
- Increase Training in Pain Management Alternatives and Brief Interventions
- Increase awareness on the systems that Monitor & Report Physicians and Pharmacies for Over-Providing Addictive Prescription Drugs
- Reduce Availability of Prescription Drugs through proper disposal
Snap-Shot of Take-Back Events

- Household Hazardous Waste – On-Going
- Medical Collection – One Time Events
- Recycle-Rama – Large Community Event
- Law Enforcement Drop-Box
Household Hazardous Waste

Benefits

- Permanent Location
- One-Stop Recycling
- Sorting/Disposing of various polluting materials
- Grant Covers Staff-Time and Disposal Costs

Costs

- No Controlled Substances
- High Staff Commitment
- No Winter Hours
Medical Collection – One Time

Benefits

- Controlled and Non-Controlled Collected
- Intimate Event

Costs

- High Promotion
- Recycling of Bottles
- Other Products: lotions, patches, sprays, sharps
Recycle-Rama

Benefits

- Large-Scale
- Volunteers (200)
- Stations
- Many Partners
- Ease of Promotion

Costs

- Long-Range Plan
- Periodic
Law-Enforcement Drop-Box

Benefits
- Permanent
- Consistent 24/7
- Expands Partnership
- Disposed of with Evidence
- Community Message

Costs
- Not Supervised
- Disposal Expense to Law Enforcement Agency
Teen Use Data

After Cannabis, Nonmedical use of Prescription and Over-the-Counter Medications Account for Most of the Commonly Abused Drugs in 12th Graders (*in the past year*)

![Bar chart showing percent of use for different substances](chart.png)

Categories are not mutually exclusive
SOURCE: University of Michigan, 2011 Monitoring the Future Study
Drug Overdose Deaths Increase

Unintentional Drug Overdose Deaths by Major Type of Drug, United States, 1999-2008

- Opioid Analgesic
- Cocaine
- Heroin

Number of Deaths

Social Trends in Drug Use
Substances by Category

- Depressants – depresses the Central Nervous System. Alcohol. Reduced anxiety, lower inhibitions, feelings of well-being
- Opioids and Morphine Derivatives – increases dopamine/serotonin levels. Euphoria, drowsiness high risk of death with combined with CNS depressants
- Stimulants – Caffeine. Exhilaration, energy, alert. Weight loss, reduced appetite.
Federal and U.S. Drug Classifications

Schedule I Controlled Substances - Banned

- Substances in this schedule have a high potential for abuse, have no currently accepted medical use in treatment in the United States, and there is a lack of accepted safety for use of the drug or other substance under medical supervision. Some examples of substances listed in schedule I are: heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), peyote, methaqualone, and 3,4-methylenedioxymethamphetamine ("ecstasy")
Federal and U.S. Drug Classifications

Schedule II Controlled Substances

- Substances in this schedule have a high potential for abuse which may lead to severe psychological or physical dependence. Examples of single entity schedule II narcotics include morphine and opium. Other schedule II narcotic substances and their common name brand products include: hydromorphone (Dilaudid®), methadone (Dolophine®), meperidine (Demerol®), oxycodone (OxyContin®), and fentanyl (Sublimaze® or Duragesic®). Examples of schedule II stimulants include: amphetamine (Dexedrine®, Adderall®), methamphetamine (Desoxyn®), and methylphenidate (Ritalin®). Other schedule II substances include: cocaine, amobarbital, glutethimide, and pentobarbital.
Federal and U.S. Drug Classifications

Schedule III Controlled Substances
- Substances in this schedule have a potential for abuse less than substances in schedules I or II and abuse may lead to moderate or low physical dependence or high psychological dependence. Examples of schedule III narcotics include combination products containing less than 15 milligrams of hydrocodone per dosage unit (Vicodin®) and products containing not more than 90 milligrams of codeine per dosage unit (Tylenol with codeine®). Also included are buprenorphine products (Suboxone® and Subutex®) used to treat opioid addiction.
- Examples of schedule III non-narcotics include benzphetamine (Didrex®), phendimetrazine, ketamine, and anabolic steroids such as oxandrolone (Oxandrin®).
Federal and U.S. Drug Classifications

- **Schedule IV Controlled Substances**
- Substances in this schedule have a low potential for abuse relative to substances in schedule III. An example of a schedule IV narcotic is propoxyphene (Darvon® and Darvocet-N 100®). Other schedule IV substances include: alprazolam (Xanax®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®), lorazepam (Ativan®), midazolam (Versed®), temazepam (Restoril®), and triazolam (Halcion®).
Federal and U.S. Drug Classifications

Schedule V Controlled Substances

- Substances in this schedule have a low potential for abuse relative to substances listed in schedule IV and consist primarily of preparations containing limited quantities of certain narcotics. These are generally used for antitussive, antidiarrheal, and analgesic purposes. Examples include cough preparations containing not more than 200 milligrams of codeine per 100 milliliters or per 100 grams (Robitussin AC® and Phenergan with Codeine®).
Health and Safety Risks

- Central Nervous System Depressants - Addiction, tolerance, death, impaired coordination, low blood pressure, tolerance, withdrawal, respiratory distress. Death if taken with alcohol

- Opioids - Addiction, tolerance, slowed breathing, low pulse, lower blood pressure, dry mouth, confusion, sweating. Death if taken with alcohol

- Stimulants - Seizures, heat attack, stroke, insomnia, reduced appetite, panic, paranoia, hallucinations, aggressiveness
Community Awareness - Education

Patient Education: Re-Use Pill Bottles, Do not share medication, lock controlled substances, proper disposal techniques

Physician Education: Screening, Brief Intervention and Referral to Treatment (SBIRT), samples at Pharmacy, Alternatives to Pain Medication, Pain Medication Management Education, Patient-Provider Agreement, Intervene with Emergency Departments
Tracking and Monitoring

Include Prescription Drug Abuse rates in data sets that address community use related to alcohol, tobacco and marijuana.

Raise awareness about the MAPS Michigan Automated Prescription System (MAPS) a form of PDMP. Verify that users are trained and checking.

Work with local insurance providers in an open dialogue regarding their role in reducing Prescription Drug Abuse.

Use the Drug Abuse Warning Network (DAWN) to become aware of community drug use trends.

Utilize electronic medical records to monitor prescription drug use and reduce potential for abuse.
Proper Medication Disposal

Conduct public education on appropriate drug take-back activities

Coordinate Prescription Drug Take-Back Activities

Address community awareness on controlled substances and their proper disposal
Enforcement

Increase reporting of physicians and pharmacies suspected of over-prescribing addictive pain medication to Michigan Department of Licensing And Regulatory Affairs
Reach-out to local law enforcement to advocate for local enforcement and increased training on prescription drug abuse action
Support a “Model Pain Clinic Regulation Law”
Use MAPS to identify “Doctor Shoppers” and encourage treatment and education
Addiction

- Compulsive drug seeking and using even when faced with adverse consequences
- Tracking and Intervention: SBIRT
- Counseling, Cognitive-Behavior Therapy (Seeking Safety), and medication such as Naltrexone (antagonist)
- Addiction occurs when medications are not used as prescribed
What Drives Addiction?

- Belief System; “A Pill for Every Ill”
- Direct to Consumer Marketing
- Non-adherence and Non-compliance
- Hoarding Medication in the Home
- Lack of Medical Access
- Intolerance of Discomfort
- Easy Availability for the Insured
- “Green” thinking: How to Properly Dispose…
How Opioid Medication Works
Goals of Safe Opioid Use
American Academy of Pain Management

Prescribers will:

- Build on the knowledge gained related to safe opioid prescribing practices and be able to demonstrate competence in implementing evidence-based clinical tools and protocols in their practice.

- Understand the prevalence of pill shopping the significant risk it presents to prescribers and will have improved competence in the authorization process of State PMP’s database.

- Improved comprehensive knowledge of urine drug tests for diagnosis and ongoing treatment, which includes the ability to implement uniform treatment protocols in the PCP setting. This will include uniform interpretation, understanding of when to enact follow-up tests, effective tools for communicating results with patients, and documenting results in the patient medical records.

- Demonstrate improved knowledge of extended release opioid pharmacology including dosage forms, intervals, key instructions, drug interactions, adverse events, relative potency to oral morphine and relative use in opioid tolerant patients.
Perceptions of Pain

- The International Association for the Study of Pain (IASP) states that pain is “an unpleasant sensory or emotional experience associated with actual or potential tissue damage, or described in terms of such damage.” (Merskey and Bogduk 1994) This describes pain as a subjective experience; therefore, unlike hypertension or diabetes, there is no objective measurement for pain intensity.

- Analysis of the objective data (psychosocial assessment, physical exam findings, imaging results, lab tests) is needed to evaluate the patient’s subjective report of pain.
“Pain Management Alternatives”
Dr. John A Baker III MD – 5/6/11

- “Quality of Life Score”
- Perception of Pain drives Increased Use
- Longer Life with Chronic Disease: MS, RA, Cancer
- Innovative Pain Medications since 1980
- Controlled Substances best for Acute Episodes of Strong Pain
- Rotate Medication: patches/pills/tolerance
- Screen for current meds and past addictions
“Pain Management Alternatives”
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Decreases in Tension = Lower Pain
Breathing, Yoga, Pilates, breathe-tighten-release, Meditate, Re-Frame the Pain

Strategies to Reduce Addiction
Drug Use Contract, Drug Screening, Rate Pain, Assess for Quality of Life, MAPS on patient, Review Laws and Regulations, Training, Education, Innovative Medicine
Imprudent prescribing & patient use

Stockpiling & improper storage

Leftover Drugs

Imprudent disposal

Wasted healthcare resources

Poisonings

Residues recycled from environment
Models for Prescription Drug Disposal

- Establishing a Program
- Type of Event
- What Material is Accepted
- Stakeholders
- Funding
- Staffing
- Equipment
- Publicity/Promotion
Type of Event

- One-Day Stand-Alone
- One-Day Combined with other Events
- HHW/Clean Sweep: Seasonal
- Permanent/Ongoing
  - West Michigan
  - Kent County
- Lock Box
- Yellow Jug
- One-Time Events: DEA/Pharmacist Assn
What Material is Accepted

- Prescription Drugs
  - Veterinary Medication
  - Controlled
  - Non-Controlled
- Over-the-Counter (OTC)
- Sharps/EPI pens
- Mercury fever thermometers
Stakeholders

- Police/Sheriff
- Pharmacist: Michigan Pharmacist Association
- Substance Abuse Prevention/Treatment
- Health Department
- Department of Public Works/Waste Water Treatment
- Department of Environmental Quality
- Michigan Recycling Coalition
- Conservation Districts/Environmental Advocacy
- Health Agencies – unexpired/unopened 3rd World
Funding

- Expenses
  - Yellow Jug ($30/month per pharmacy)
  - Mail-back ($5 per envelope) (non-controlled)
- Disposal price per pound
- Destination
- Signs
- Law Enforcement
- Pharmacist
- Sources
  - Environmental: Clean Sweep/HHW/DEQ Grant/Water Treatment
  - Substance Prevention: Community Foundation/Substance Abuse Coordinating Agencies/Hospitals
  - Community: PA128/business/retail/pharmacy
Staffing

- Site/Collection Manager
- Law Enforcement: custody of controlled
- Pharmacists: sorts out controlled
- Pharmacist Aid
- Greeter/Survey
- Traffic Control
Equipment

- Table
- Scale
- Barrels/Boxes
- Trash Bags
- Traffic Cones
- Directional Signs
- Clipboards/pens/tape/makers/surveys
- Cart/Dolly
Publicity/Promotion

- Newsletters
- Community Calendar
- Pharmacies
- PSA/TV/Radio
- Website and Social Media: Event Page
- Paid Advertising
- Partner Cooperative Promotion
Other Issues

- Survey Collection Information
- Weighing Everything: Then Reporting
  - Packaging
  - Recyclables
  - Trash
- Caution – Emergency Plan
- Addiction/Items of Value
- You Will Get: hearing aids, bridges, jewelry
Positive Changes for Public Health

- Pain Management Contract – patients consent and understand that they are going to be on Opioids
- Pain Management Training of Medical Staff
- Increase in MAPS standard of use
- Increase in Reporting
- Increase in Assessment and Awareness
Health Care Guidelines Include

- Evaluation/Risk Assessment
- History and physical examination
- Assessment of risk of substance abuse, misuse, or addiction
- Diagnostic testing
- Management/Treatment
- Informed consent
- Comprehensive health care by a clinician
- Therapeutic trial of opioids
- Methadone
- Reassess patients periodically (urine drug screens or other information to confirm adherence)
- Refer high-risk patients to a mental health or addiction specialist
- Opioid rotation
- Psychotherapeutic cointerventions
- Counseling on driving and work safety
- As-needed approach for patients with breakthrough pain
- Counseling for pregnant women on opioids
- Pain relief or pain intensity
- Physical functioning
- Emotional functioning
- Participant ratings of global improvement and satisfaction with treatment
- Adverse events
- Participant disposition (including withdrawals and patients lost to follow-up)
- Work measures
High-Risk Medications

- Nasal passages are the most direct route to the brain – opiate nasal sprays are being developed
- Stronger judgment is needed as mouth swab containing opiates were promoted as “ER on a stick”
The Future of Prescription Drug Disposal and Abuse

- Restrict Direct-to-Consumer Marketing
- Oversight on 90-day supplier re-fills
- e-prescribing
- Samples from Pharmacy
- Medication Compliance – technology/EMR
- Federal Guidelines for Controlled Disposal Events
- Investment/Reimbursement in SBIRT
- Reduce Waste/Resist Large Supplies
- Medications to 3rd World Countries
The Future of Prescription Drug Disposal and Abuse

- Drugs In-Active when crushed
- Insurance Cost-Saving (3rd party payer)
- Medical Identity Theft: update packaging
- Re-Use Pill Bottles: Green packaging options
- Increased awareness of Medical Interactions
- Track personal medications
- Co-Pay Adjustments
- Unit Dosing – ex Z-pack
- Trend of “Reverse Distribution”
- Extended/Revised Expiration
Thank you for attending!

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