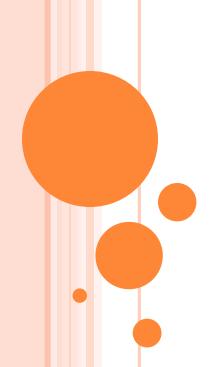# LIFE-CRITICAL AND ESSENTIAL PSYCHOTROPIC MEDICATIONS FOR EMERGENCY PHARMACEUTICAL PREPAREDNESS IN COOS COUNTY

Nicole Bowman – Former AmeriCorps VISTA (2014-15)

Don Marr – Public Health Emergency Preparedness Coordinator for Coos County

EMERGENCY PHARMACEUTICAL PREPAREDNESS PROJECT GENESIS

- Coos County At Risk committee discussions

- Public Health Emergency Preparedness Coordinator Research

- AmeriCorps VISTA Project

- Selection of the project coordinator

WHY A NEED FOR THIS PROJECT?

- Cascadia Subduction Zone (inevitable disaster)

- Other disasters that could stop the normal pharmaceutical supply chain

- Outside sources do not know quantities of needed life-critical and psychotropic medications

Cascadia Subduction Zone

- Current considerations are to inform people to stockpile medications (which can't be done in many people's situations)

- Learned from Hurricane Katrina

Offered for disaster medical intervention: The Strategic National Stockpile

"CDC's Strategic National Stockpile (SNS) has large quantities of medicine and medical supplies to protect the American public if there is a public health emergency (terrorist attack, flu outbreak, earthquake) severe enough to cause local supplies to run out." (CDC, 2015)

The following are included in the SNS stockpile:

- Antibiotics
- Chemical antidotes
- Antitoxins
- Life-support medications
- IV administration
- Airway maintenance supplies
- Medical/surgical items

Centers for Disease Control (CDC) Strategic National Stockpile "Push Pack"

WHAT QUALIFIES AS LIFE-CRITICAL MEDICATIONS

Life-critical medications are medications that may cause morbidity or mortality if discontinued. The following is a list of serious repercussions that could be considered to cause morbidity/mortality:
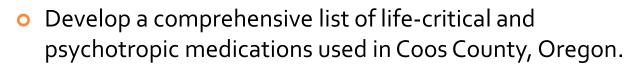
- Significant difference and changes in mental state (this includes becoming confused, irritable, dizzy, panicked, anxious, suicidal, delusional, dangerous to others, etc.)
- Organ failure
- Loss of eyesight or hearing
- Severe infections
- Difficulty breathing and respiratory failure
- Heart failure
- Seizures
- Severe pain leading to loss of mobility and/or ability to function
- Death

Why include psychotropic medications?

Individuals experiencing mental disorders have a chemical imbalance, and often need medical intervention through pharmaceuticals. By abruptly disrupting treatment, moderate to severe side effects can occur.

ABSTRACT

- Develop a comprehensive list of life-critical and psychotropic medications used in Coos County, Oregon.

- Establish an initial request for medication supply after a major event that interrupts the normal pharmaceutical supply chain for greater than 72 hours in Coos County.

- Prescription data was obtained

- Consolidated into a list that shows the average doses per month of each medication (separated by form, doses, and routes).

- Through a team of health providers, various prescriptions were eliminated due to not being life-critical or essential psychotropic medications.

DIFFERENT ROUTES EXPLORED

- Obtaining individual data from pharmacies, clinics, hospitals in Coos County area

- Create an educated guess based off of Medicaid/Medicare insurance claims or health statistics (WOAH records)

- Oregon Prescription Drug Monitoring Program (scheduled medications) and Bay Area Hospital Pharmacy provided us with data

- Registry databases

- Public policy route – work with insurance providers in order to allow for personal emergency medications

- Public outreach/awareness: work with pharmacies to get the word out about stockpiling 10-14 days worth of personal medications if possible

… But finally, the All Payer All Claims Program was found!

ALL PAYER ALL CLAIMS REPORTING PROGRAM

- A program within the Oregon Health Authority
- All-Payer Claims Database throughout nation

- ✓ Data from fully-insured, self-insured, Medicare, and Medicaid data.

- ✓ Claims information will come from all commercial health insurance carriers, licensed third party administrators, pharmacy benefit managers, Medicaid managed care organizations, Medicaid fee-for-service and Medicare parts C and D.
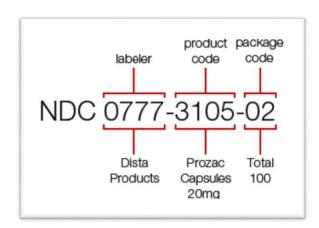
WHAT DOES THE FILE INCLUDE?

- Individual prescriptions in the form of National Drug Codes

- Prescription Class

- Quantity dispensed (amount of doses in Rx)

- Prescription days (how many days those doses are designated for)

- Other demographic information included that was not used in this project: gender, age group, ethnicity, language, etc.

```
year,patid,gender,age_grp,race,ethn,lang,metro,paid,patpaid,payer,pos,urban,ndc,rxclass,qtydisp,rxdays,daw
2012,       F,65-69,9 ,3 ,9 ,41999,5.48,0,OTH,01,0,00143147310,CORTICOSTEROIDS                ,90.00,90,0
2012,       F,65-69,9 ,3 ,9 ,41999,10.21,0,OTH,01,0,51991060401,VITAMINS                       ,8.00,28,0
2012,       F,65-69,9 ,3 ,9 ,41999,20.26,0,OTH,01,0,00603499021,ANALGESICS - OPIOID            ,120.00,30,0
2012,       F,65-69,9 ,3 ,9 ,41999,11.44,0,OTH,01,0,55111015810,ULCER DRUGS                    ,30.00,30,0
2012,       F,65-69,9 ,3 ,9 ,41999,20.26,0,OTH,01,0,00603499021,ANALGESICS - OPIOID            ,120.00,30,0
2012,       F,65-69,9 ,3 ,9 ,41999,-20.26,0,OTH,01,0,00603499021,ANALGESICS - OPIOID           ,120.00,30,0
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Example of file: redacted information includes identifying patient ID numbers
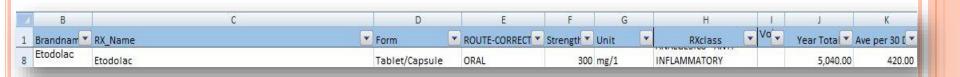
National Drug Codes

- A unique 3-segment number signifying the medications labeler, product code, and package code

1. *First Segment* (Labeler Code): manufacturer of the drug

2. *Second Segment:* Medication name, form, strength, and unit of a specific drug

3. *Third Segment:* Package code (size/type of package)

OVERVIEW OF DATA CONSOLIDATION AND DECODING

1. 40 million prescriptions sent in raw data CSV file

2. Grouped all identical NDC's together, resulting in 10,000 rows of data

3. Translating NDCs

4. May have to search some NDC's individually

	B	C	D	E	F	G	H	I	J	K
1	Brandnam	RX_Name	Form	ROUTE-CORRECT	Strength	Unit	RXclass	Vo	Year Total	Ave per 30 D
8	Etodolac	Etodolac	Tablet/Capsule	ORAL	300	mg/1	INFLAMMATORY		5,040.00	420.00

Example of finished product after translating NDC

Eliminating medications

o Eliminate certain prescription classes

- o ALTERNATIVE MEDICINES
- o AMINOGLYCOSIDES
- o ANDROGENS-ANABOLIC
- o ANORECTAL AGENTS
- o ANTACIDS
- o ANTHELMINTICS
- o ANTIDOTES
- o ANTIFUNGALS
- o ANTIHYPERLIPIDEMICS
- o ANTI-INFECTIVE AGENTS - MISC.
- o ANTIMALARIALS
- o ANTIMYASTHENIC/CHOLINERGIC AGENTS
- o ANTISEPTICS & DISINFECTANTS
- o ASSORTED CLASSES

- o CHEMICALS
- o CONTRACEPTIVES
- o COUGH/COLD/ALLERGY
- o DIETARY PRODUCTS/DIETARY MANAGEMENT PRODUCTS
- o DIGESTIVE AIDS
- o DIURETICS
- o ENDOCRINE/METABOLIC AGENTS - MISC.
- o ESTROGENS
- o HEMOSTATICS
- o MINERALS & ELECTROLYTES
- o MOUTH/THROAT/DENTAL AGENTS
- o NASAL AGENTS - SYSTEMIC/TOPICAL

- o NEUROMUSCULAR AGENTS
- o NUTRIENTS
- o OXYTOCICS
- o PASSIVE IMMUNIZING AGENTS
- o PENICILLINS
- o PHARMACEUTICAL ADJUVANTS
- o PROGESTINS
- o RESPIRATORY AGENTS - MISC.
- o TOXOIDS
- o URINARY ANTISPASMODICS
- o VACCINES
- o VAGINAL PRODUCTS
- o VITAMINS

o Eliminate individual prescriptions

Discussion Points

Some medications easily kept in, some easily kept out, others needed more discussion

- Pain management medications

- Medications for temporary conditions

- HIV antiretroviral medications

- Contraceptives

Future Recommendations

- Medical ethics committee
  - Determine highest priority and lower priority on list
  - Standard medication list creation
- Correlate population statistics of chronic disease with Rx data

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  Coos Health & Wellness

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  Oregon Health Authority, Public Health Division

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  Oregon Health & Science University

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THANK YOU

ANY QUESTIONS?

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