Hazardous Drug Program

What WHCA offers to help you comply

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Overview

During this training we will:

• Describe which drugs are considered hazardous and why
• Describe what the Hazardous Drug Rule requires of employers
• Describe the model policy and program being developed for WHCA members
Introduction

• Some of the medications we work with can be hazardous, especially to certain populations. Another way to look at this, is drugs are chemicals.

• Accidental exposure during receiving, compounding, administration, disposal, or spills create risks of harm to our employees.

• A comprehensive hazardous drug program, similar to a hazardous chemical program, will address these risks.
L & I Hazardous Drug Handling Program

Implementation required by 1/1/2015
Information search

Hazardous Drugs

Potentially harmful exposure can occur when you handle or work around hazardous drugs. These drugs include antineoplastic cytotoxic medications, anesthetics, anti-viral drugs, hormones, and others.

Hazardous drugs can cause serious acute and chronic health effects such as skin rashes, fertility problems, genetic damage, birth defects, organ toxicity, and possibly leukemia and other cancers.

Exposure occurs during manufacturing and packaging, receiving, preparation and administration, and cleaning and disposal activities.

Clinical and non-clinical workers with potential exposure include:

Workers handling hazardous drugs need protection to prevent potentially harmful exposure.
Annual Hazard Drug Exposures

Eight Million!
What is a Hazardous Drug?
Hazardous Drugs Defined

- Can Cause Cancer
- Can Cause Birth Defects
- Can Cause Organ Toxicity
- Can Cause Genotoxicity
- Can Cause Reproductive Toxicity
TABLE 1
Consequences of Hazardous Drug Exposure

- Fetal abnormalities and spontaneous abortions
- Spontaneous abortions
- Menstrual cycle changes
- Infertility
- Miscarriages
- Leukemia, lymphoma, skin cancer
- Infertility, premature labor, low birthweight, learning disabilities in offspring
- Chromosomal damage
NIOSH Hazardous Drug List

Includes common medications in LTC:

Carbamazepine, Paroxetine, Risperidone, Clonazepam, Tetracycline, Valproic Acid, Warfarin
Vulnerable Populations
The Genesis of a Safety Bill for Health Care Providers Working with Hazardous Drugs

Carol Smith, former journalist for the Seattle Times writes the Story of Sue Crump that ultimately changed how we protect health care workers from hazardous drugs.

Lifesaving Drugs, Deadly Consequences

‘Secondhand chemo’ puts healthcare workers at risk

Healthcare worker? Take our survey here.

Lifesaving drugs may be killing health workers

Nurses, pharmacists and others who handle chemo drugs have been getting sick. Despite multiple studies that indicate the drugs actually may cause cancers, the federal government doesn't require safeguards on the job.
Landmark Legislation: 2011
Adopted January: 2012

- Must follow the 2004 NIOSH guidelines.
- L&I - enforcing agency.

Presents a standard or universal precautions approach to handling drugs safely.
Hazardous Drug Control Program

- Written inventory of hazardous drugs in the workplace – NIOSH list is a starting point
- Written polices and procedures including
  - Engineering controls
  - Personal protective equipment (PPE)
  - Safe handling practices
  - Cleaning, housekeeping, and waste handling
  - Spill Control
  - Personnel issues
  - Training
- Requires employee involvement
Occupational Exposure

- Hazardous drug contact as a result of an employee’s duties
  - Inhalation
  - Skin
  - Ingestion
  - Injection contact

- Some drugs defined as hazardous may not pose a significant risk of occupational exposure because of their dosage formulation
  **Example:** coated tablets or capsules that are administered to patients without modifying the formulation. Once altered, exposure increases

- Risk from exposure also varies due to the relative toxicity of and absorptive properties of the drug, the amount, duration and frequency of contact & lack of proper precautions
Implementation Timeline

Jan 1 2015 - Implement hazardous drug program

July 1, 2015 – Implement employee training

January 1, 2016 Install appropriate ventilated cabinets
WHCA’s Model Program

- Program Responsibilities
- Employee Exposure Determination
- Methods of Implementation for the HDCP
- Employee Training
- Recordkeeping
- Physical Layout
- Polices
Drug Hazard Assessment Certification Form

*Name of work place: ____________________________

*Assessment conducted by: _________________________

*Work place address: ______________________________

*Date of assessment: ______________________________

*Hazardous Drug: ____________________________________________

**Volume and Form (e.g. pill, tablet, liquid, etc): __________________________

*Packaging: ____________________________________________

*Preparation Method (e.g. crushed, split, liquid, etc): __________________________

*Vulnerable Populations (e.g. pregnant workers): ____________________________________________

*Required for certifying the hazard assessment.

Use a separate sheet for each hazardous drug
<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Genotoxicity</th>
<th>Teratogenicity or developmental toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity in humans</td>
<td>Organ toxicity at low doses in humans or animals</td>
<td></td>
</tr>
<tr>
<td>New drugs that mimic existing hazardous drugs in structure and toxicity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RECEIVING AND STORAGE**

<table>
<thead>
<tr>
<th>Work-related exposure to:</th>
<th>Engineering Controls:</th>
<th>Administrative Controls:</th>
<th>Additional PPE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No-Touch Receiving</td>
<td>Dedicated Receiving/Storage</td>
<td>Goggles</td>
</tr>
<tr>
<td>Skin</td>
<td>Locked</td>
<td>Space:</td>
<td>Face Shield</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Cabinet:__________</td>
<td>Immediate Disposal of PPE</td>
<td>Apron</td>
</tr>
<tr>
<td>Injection</td>
<td>Other:_________________________</td>
<td>Other:______________________________________</td>
<td>Chemotherapy Gloves</td>
</tr>
<tr>
<td>No Exposure</td>
<td></td>
<td>Other:______________________________________</td>
<td>Respirator</td>
</tr>
</tbody>
</table>

**PREPARATION**

<table>
<thead>
<tr>
<th>Work-related exposure to:</th>
<th>Engineering Controls:</th>
<th>Administrative Controls:</th>
<th>Additional PPE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Self-Retracting Needle</td>
<td>Dedicated Administration</td>
<td>Goggles</td>
</tr>
<tr>
<td>Skin</td>
<td>Binding</td>
<td>Space:</td>
<td>Face Shield</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Solution:__________</td>
<td>Immediate Disposal of PPE</td>
<td>Apron</td>
</tr>
<tr>
<td>Injection</td>
<td>Other:_________________________</td>
<td>Other:______________________________________</td>
<td>Chemotherapy Gloves</td>
</tr>
<tr>
<td>No Exposure</td>
<td></td>
<td>Other:______________________________________</td>
<td>Respirator</td>
</tr>
</tbody>
</table>

**ADMINISTRATION**

<table>
<thead>
<tr>
<th>Work-related exposure to:</th>
<th>Engineering Controls:</th>
<th>Administrative Controls:</th>
<th>Additional PPE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Closed Disposal Unit</td>
<td>Dedicated Clean-Up Tools</td>
<td>Goggles</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td>Isolating Disposal (e.g. separate bagging)</td>
<td>Face Shield</td>
</tr>
<tr>
<td>Ingestion</td>
<td></td>
<td>Special Cleaning</td>
<td>Apron</td>
</tr>
<tr>
<td>Injection</td>
<td></td>
<td>Formula:____________________________________</td>
<td>Chemotherapy Gloves</td>
</tr>
<tr>
<td>No Exposure</td>
<td></td>
<td>Immediate Disposal of PPE</td>
<td>Respirator</td>
</tr>
</tbody>
</table>
<pre><code>                                                                 |                                                                               | Other:______________________________________ |____________________________________________________|
</code></pre>
<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
<th>Formulation</th>
<th>Route</th>
<th>Packaging</th>
<th>Manipulation</th>
<th>Other Exposure Risk</th>
<th>Precaution Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>abiraterone</td>
<td>Zytiga</td>
<td>Tablet</td>
<td>PO</td>
<td>UD/Bottle/Card</td>
<td>Do not crush/split/swallow whole</td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>altretamine</td>
<td>Hexalen</td>
<td>Capsule</td>
<td>PO</td>
<td>UD/Bottle/card</td>
<td>none</td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capsule</td>
<td>PO</td>
<td></td>
<td>open capsule</td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>anastrozole</td>
<td>Arimidex</td>
<td>Tablet</td>
<td>PO</td>
<td>UD/Bottle/Card</td>
<td>none</td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tablet</td>
<td>PO</td>
<td></td>
<td>contained cut/crushed</td>
<td></td>
<td>Moderate</td>
</tr>
</tbody>
</table>
What The Pharmacy Will Do

• Lincoln and Payless will use alert marking
  – Will notify you that the drug is on the list, not to its hazards.
  – Does not apply to retail pharmacies.
  – Whoever receives meds must still check them against the list.
What You Need To Do

• Once a med is received, mark the appropriate hazard level somewhere – on the med or the MAR.
• Employees must refer to the key (kept on the med cart) to determine appropriate precautions.
• All employees must follow appropriate precautions when handling meds.
Precaution Levels

• *Green/No Label/Universal Precaution* – these drugs will be received, transported, handled, administered, and disposed of following normal precautions.

• *Yellow/Low* – these drugs will be received, transported, handled, administered, and disposed of wearing gloves and using appropriate engineering controls.

• *Orange/Moderate* – these drugs require gloves and a gown, eye and face protection (with liquid splash potential) when received, transported, handled, administered and disposed of, in addition to any necessary engineering controls.

• *Red/High* – these drugs require double gloves, gown, eye and face protection when received, transported, handled, administered and disposed of, in addition to any necessary engineering controls.
Engineering Controls

Any physical control that removes exposure:

• Closed crush/split system – the Silent Knight
Affected Employees

Any employee with reasonable potential occupational exposure needs to know about this program:

• Nurses
• Med-Aides
• Housekeeping
• Maintenance
Occupational Exposure

Reasonably expected:

• Ingestion
• Injection
• Inhalation
• Absorbtion
Pilot Program

• 30 day pilot at Bridgeport Place and University Place.
• Test out recommendations.
• Track costs.
• Discover and remove barriers to implementation.
• Amend program as necessary.
Questions?