Work and Reproductive Health: What Employers Need to Know

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Photo credit: MotherToBaby
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Presentation Objectives

- List examples of important workplace hazards that may diminish a worker’s reproductive health or the health of a worker’s offspring
- Explore tools to identify workplace reproductive hazards
- Specify critical Federal and WA laws that protect pregnant and breastfeeding workers
- List useful occupational reproductive health resources
How do Workplace Reproductive Hazards Affect Health?

**Workplace reproductive hazards may**

- Alter a worker’s ability to become pregnant – infertility
  - Decreased sperm count, altered sperm morphology, menstrual disorders, decreased sex drive, germ cell changes

- Impact the health of offspring. Some changes become apparent later in life
  - Miscarriage (and increased risk for miscarriage in workers who have miscarried once)
  - Birth defects
  - Low birth weight, preterm birth
  - Developmental delays or disabilities, behavior issues
  - Cancer and/or other diseases later in life
How do Workplace Reproductive Hazards Affect Health?

Postpartum

• Breastfeeding – transfer of chemicals to baby via breast milk
  - Breastmilk is healthiest for baby

• Occupational take-home exposures
Family Formation and Pregnancy Problems are Common

In the general population

- Around 1 in 10 couples are infertile
- Around 15 of 100 recognized pregnancies are lost
  - Additional miscarriages occur before a woman knows she is pregnant
- Around 1 in 10 live births are preterm births
- Around 1 in 13 newborns have a low birth weight
- Around 3 in 100 newborns are born with birth defect
- Around 1 in 100 pregnancies end in fetal death (stillbirth)

It’s difficult to link most reproductive health problems to a specific cause or source
## Pregnancy Symptoms and Postpartum

### Early pregnancy symptoms or changes
- Nausea and vomiting
- Fatigue
- Dehydration

### Late pregnancy symptoms or changes
- Dehydration
- Back and joint pain
- Increased joint laxity
- Shifting center of gravity, balance issues
- Physical discomfort from enlarging uterus
- Varicose veins, hemorrhoids, heartburn
- Others

### Postpartum
- Giving birth can be traumatic on body. May require surgery and recovery period
- Time to bond and care for the child
Examples of Workplace Chemical Reproductive Hazards

- Heavy Metals: lead, mercury, cadmium, other metals
- Organic solvents/dgreasers: toluene, xylene, TCE
- Sterilants: ETO, formaldehyde, glutaraldehyde
- Hazardous drugs: nitrous oxide, chemotherapeutic agents
- Welding fumes
- Pesticides and herbicides: dibromochloropropane (DBCP), methoxychlor
- Many other chemicals

Occupational exposure limits DO NOT take into consideration effects on the developing fetus
Physical Agent Examples that Impact Reproductive Health

• Ionizing Radiation
  – 0.005 Gy (0.5 rad) maximum for worker with a declared pregnancy

• Loud noise
  – Hearing loss in offspring (> 110 dBA)
  – Pregnancy-related hypertensive disorders (80 – 85 dBA) and diabetes (>85 dBA) in full-time workers¹ (suggestive evidence)
  – Low birth weight² (> 85 dBA, suggestive evidence)

• Excessive heat
  – Infertility males: decreased sperm count³
  – Fetal effects: birth defects, preterm birth, still birth⁴

• Whole body vibration: preterm birth (suggestive evidence)⁵

²Sci Total Env’t 2019; V651, Part 1:1137-1143
⁴EHP 2019, 127(10)
⁵Sci Total Env’t 2021, V751, Article 141476
Infections that Impact Reproductive Health

- Cytomegalovirus, rubella virus, toxoplasmosis, Parvovirus, COVID-19 (SARS-CoV-2), Zika (for workers who travel outside WA to endemic areas) and many others

- COVID and pregnancy\(^1\)
  - Higher risk of severe COVID: pneumonia, admission to an ICU, death
  - Higher risk of stillbirth, preterm birth
  - CDC recommends vaccination for pregnant and breastfeeding women

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Demanding Workplace Activities and Pregnancy Outcomes

• Physically demanding work (moderate evidence)
  – Heavy lifting, repetitive heavy lifting: Preterm birth, miscarriage

• Other demanding activities (suggestive to mixed evidence)
  – Excessive standing and walking: preterm birth, small for gestational age
  – Significant bending: preterm birth
  – Shift work, night shift, long hours: preterm birth
Low-income and Pregnancy Outcomes – Moderate, limited evidence

- Occupational stress combined with low-income and life stressors, such as housing insecurity, food insecurity, no health insurance, no financial safety net: preterm birth\(^1\)

- Working conditions and class differences. Low-income women: preterm birth or low-birth weight offspring\(^2\)

\(^1\)J.-B. Henrotin et al. Occupational Medicine 2017;67:44–51
\(^2\)Marit Dahle´n Gisselmann*, O¨rjan Hemstro¨m. Social Science & Medicine 66 (2008) 1297-1309
Low Wage Jobs in US

• 20 million US workers employed in low-wage jobs\(^2\), defined as $\leq 10.10/hr ($20,200/yr.)
  – 67% or 13.2 million of these workers are women
  – WA State minimum wage is $14.49/hr. ($30,139/yr.)

• *Around 25% of women return to work within two weeks of giving birth*\(^1\)
  – Access to a longer leave is a luxury in US except in WA State – WA Paid FMLA

• Jobs often held by low-wage women
  – Home health aides
  – Childcare workers
  – Fast food workers and restaurant servers
  – Hotel housekeepers, maids
  – Cashiers

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\(^1\)Hastings School of Law Work Life Center
\(^2\)National Woman’s Law Center, 2014
Important Benefits of Work

• Benefits that flow from work include income, career development, health insurance, sick leave, postpartum leave, and others
• 66% of working women are the sole, primary, or co-breadwinner for the family
• 75% of workers entering the workforce will be pregnant and employed at some point in their lives
• 53% of pregnant workers report a need to change their job duties\(^1\)
  – 37% never request changes
• Modest physical activity during pregnancy has a positive benefit on the health of female worker and the developing child, and is beneficial for good health outcomes at birth\(^2\)

\(^1\)ACOG, Obstetrics and Gynecology, V131, N4, Apr 2018, e115 – e123
\(^2\)UpToDate. Working During Pregnancy, 2021
Examples of Occupational Chemicals in Human Milk\textsuperscript{1,2}

- Metals: lead, mercury, cadmium, other heavy metals
- Organic solvents and volatile organic chemicals: dioxane, perchloroethylene, bromochloroethane
- Chemicals from smoke and fires (and personal tobacco use)
- Some radioactive chemicals used in hospitals for radiation therapy (i.e., Iodine-131)

**Health benefits of breast milk are extraordinary, and well documented**
- Decreased risks of infection, allergy, asthma, arthritis, diabetes, obesity, cardiovascular disease, various cancers, and other adverse outcomes
- Support breastfeeding workers when possible

\textsuperscript{1}NIOSH https://www.cdc.gov/niosh/topics/repro/breastfeeding.html
\textsuperscript{2}EHP, VOLUME 116, NUMBER 10, October 2008
Some Important Pediatric Environmental Exposures

- Lead: peeling lead paint, lead in spices, ceremonial products, cosmetics, etc.
- Chemicals that disrupt hormones: estrogen, testosterone, others
  - Plastics: bisphenol A, phthalates (kid’s toys, consumer products)
- Persistent pollutants: PBDEs (flame retardants in furniture foams), PCBs
- Pesticides: chlorpyrifos, glyphosate, DDT, some home bug bombs
- Air Pollution: wildfire smoke, transportation emissions (diesel trucks, trains)
- Secondhand smoke
- Mercury: fish consumption
- Arsenic: well drinking water, high rice diet
- PFAS in drinking water: emerging issue
- Others

In the below scenarios the worker is pregnant. For each scenario, place the worker in high, moderate, or low risk categories of reproductive health harm.

a. The worker prints and packages manuals in a copy center. The worker lifts 25-pound boxes many times an hour.
   Is the worker at high, moderate, or low risk for reproductive health harm?

b. The worker creates high-end, stained-glass artwork. Lead solder is used for many hours a day without respiratory protection, and the worksite is contaminated with lead. Lead can cause infertility in men, can alter the fetus, can cause developmental and behavioral changes in children, and can pass via breastmilk to the baby.
   Is the worker at high, moderate, or low risk for reproductive health harm?
In the below scenarios the worker is pregnant. For each scenario, place the worker in high, medium, or low risk categories of reproductive health harm.

a. The worker prints and packages manuals in a copy center. The worker lifts 25-pound boxes many times an hour. Is the worker at high, moderate or low risk for reproductive health harm? **Increased risk for preterm birth, miscarriage**

b. The worker creates high-end stained-glass artwork. Lead solder is used for many hours a day without respiratory protection, and the worksite is contaminated with lead. **Is the worker at high, moderate or low risk for reproductive health harm?** Lead can cause infertility in men, can alter the fetus, can cause developmental and behavioral changes in children, and can pass via breastmilk to the baby. There is no safe level of exposure to lead for the fetus or children.
Average cost of the birth and care of a premature baby, $55,393\textsuperscript{1}, is more than 10 times the cost of medical care for a healthy, full-term baby, $5,085, from birth through the first year.

An employer’s health insurance premium is partially based on the health care utilization costs of the covered workforce.

\textsuperscript{1}March of Dimes, 2014
Strategies to Identify Workplace Reproductive Hazards
Strategies to Identify Reproductive Hazards in the Workplace

- Use checklists to identify physical and biological agents, hazardous activities
- Review SDSs for chemical products as required under the Hazard Communication Standard
  - Obtain current SDSs which identify reproductive hazards (since 2015)
  - Substitute safer chemical products: ChemHat
- Use guidance documents, fact sheets and other resources for employers and workers
- Use an occupational reproductive health Accident Prevention Program template to guide your work
- Contact experts for assistance: WA Labor and Industries consultants, UW Field Research and Consultation Group, private sector consultants
Reproductive Hazard Identification Checklist

This checklist is to be completed by the employer for each job assignment in the workplace. In the case of temporary workers, the checklist should be completed by the host employer, or collaboratively with the staffing agency, and included in the agency contract prior to placement of employees in the position. The completed checklist should also be shared with employees assigned to the job as part of their health and safety training. Employees should share the checklist with their healthcare provider, who can use the information to evaluate the need for any work restrictions or accommodations.

Employer Facility: __________________________  Staffing Agency: __________________________

Job Title: __________________________  Person Completing the Checklist: __________________________

CHEMICAL REPRODUCTIVE TOXICANTS

Are any of the following hazardous chemicals that are known to be reproductive toxicants used or produced in the workplace? Check all that apply. Note that this list includes reproductive toxicants most commonly found in the workplace, but is not a comprehensive list of all reproductive toxicants. All chemicals in use in the facility should be evaluated for their potential reproductive toxicity.

| Acetaldehyde | Dinitro-octyl phenol | 2-Methoxy-ethyl acetate |
Checklist Developed by SHIP Grant Team

Can be used by employers and workers (who may want to keep their family planning plans private)

### WORKING CONDITIONS (Check Yes or No)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the worker expected to work long hours/overtime?</td>
<td></td>
</tr>
<tr>
<td>Does this job require irregular hours or shift work?</td>
<td></td>
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<tr>
<td>Is there strenuous or awkward lifting involved (e.g. twisting, stooping or stretching)?</td>
<td></td>
</tr>
<tr>
<td>Is the job one which is perceived to have a high risk of violence (e.g. security work, single staffing)?</td>
<td></td>
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<tr>
<td>Is it necessary to stand or sit for long periods without a break?</td>
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<tr>
<td>Does the work involve climbing up and down steps or ladders?</td>
<td></td>
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<tr>
<td>Are there any tasks involving whole body vibration (e.g. driving or riding in trucks or off-road vehicles)?</td>
<td></td>
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<tr>
<td>Are workers given easy access to toilets with associated hygiene facilities?</td>
<td></td>
</tr>
<tr>
<td>Are workers protected from exposure to tobacco smoke in the workplace?</td>
<td></td>
</tr>
<tr>
<td>Is there a clean, private area for breastfeeding workers to express breast milk?</td>
<td></td>
</tr>
</tbody>
</table>

Available at: deohs.washington.edu/pehsu/occrepro
SDSs Must Identify Reproductive Hazards

- Ensure SDSs are current
- Look for the required Health Hazard Pictogram for Reproductive Toxicity

Required Hazard Statements for Reproductive Hazards

- May cause genetic defects or Germ Cell Mutagenicity (H340, H341)
- May damage fertility or the unborn child or Reproductive Toxicity (H360, H361 or H360/H361 followed by a letter, such as H361d)
- May cause harm to breastfed children or effects via Lactation (H362)
Section 2. Hazards identification

Classification of the substance or mixture:
- RESPIRATORY SENSITIZATION - Category 1
- SKIN SENSITIZATION - Category 1
- CARCINOGENICITY - Category 1B
- TOXIC TO REPRODUCTION - Category 1B
- TOXIC TO REPRODUCTION - Category 1B

GHS label elements

Hazard pictograms:

Signal word
- Danger

Hazard statements:
- H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317  May cause an allergic skin reaction.
- H350  May cause cancer.
- H360F May damage fertility.
- H360  May damage the unborn child.
<table>
<thead>
<tr>
<th>Abbreviation and Name</th>
<th>Scope (Chemical, Physical &amp; Infection Hazards) and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ChemHat</td>
<td>Chemicals: for workers and families</td>
</tr>
<tr>
<td>Chemical Hazards and Alternatives Toolbox</td>
<td></td>
</tr>
<tr>
<td>Chemhat.org</td>
<td></td>
</tr>
<tr>
<td>EU ECHA European Chemicals Agency</td>
<td>Chemicals, Physical and Infectious agents</td>
</tr>
<tr>
<td><a href="https://echa.europa.eu/information-on-chemicals">https://echa.europa.eu/information-on-chemicals</a></td>
<td>A comprehensive source of information</td>
</tr>
<tr>
<td></td>
<td>Search by: EU ECHA “chemical name” BP</td>
</tr>
<tr>
<td>OEHHA Cal Prop 65 List</td>
<td>Chemicals: wide range of naturally occurring and synthetic chemicals</td>
</tr>
<tr>
<td><a href="https://oehha.ca.gov/proposition-65/proposition-65-list">https://oehha.ca.gov/proposition-65/proposition-65-list</a></td>
<td></td>
</tr>
<tr>
<td>NIOSH Health Hazard Evaluations (HHE)</td>
<td>Various exposures</td>
</tr>
<tr>
<td>PubCHEM US National Library of Medicine</td>
<td>Chemicals: NIH open chemistry database</td>
</tr>
<tr>
<td><a href="https://pubchem.ncbi.nlm.nih.gov/">https://pubchem.ncbi.nlm.nih.gov/</a></td>
<td>Scientists can add their data so others benefit</td>
</tr>
</tbody>
</table>
Reproductive Health Database Example

Protecting Ourselves from COVID-19 at Work

Three great resources:

1. The BlueGreen Alliance's Safe Job Checklist to help you rate if your workplace is providing you with the six things every worker needs to be as safe as they can be from COVID-19.
2. The National Council for Occupational Safety and Health (NCOSH) with a webinar full of great slides and resources by occupation at the end.
3. The NIH NIEHS Worker Training Program with a slideshow in English and Spanish and additional resources from the program's grantees.

Database also identifies chemical substitutes
Lead

CAS: 7439-92-1

How can this chemical affect my health?

- **Acute (Short Term) Effects**
  - Toxic to Humans & Animals - Can be fatal on contact, ingestion or inhalation for humans and other mammals.

- **Chronic (Long Term) Effects**
  - Birth Defects - Can cause harm to the developing child including birth defects, low birth weight and biological or behavioral problems that appear as the child grows.
  - Cancer - Can cause or increase the risk of cancer.
  - Reproductive Harm - Can disrupt the male or female reproductive systems, changing sexual development, behavior or functions, decreasing fertility, or resulting in loss of the fetus during pregnancy.
  - Endocrine Disruption - Can interfere with hormone communication between cells which controls metabolism, development, growth, reproduction and behavior (the endocrine system).
  - Other Health Effects - Can cause serious damage on contact or ingestion.
  - Gene Damage - Can cause or increase the rate of mutations, which are changes in genetic material in cells.
  - PBT (Persistent Bioaccumulative Toxicant) - Does not break down readily from natural processes, accumulates in organisms concentrating as it moves up the food chain, and is harmful in small quantities.
  - Sensitizes the Skin - Can lead to allergic reactions on the skin.
  - Brain/Nervous System Harm - Can cause damage to the nervous system including the brain.
ChemHat Data Sources for Lead

- Developmental Neurotoxicant
  - *G&L - Neurotoxic Chemicals*
  - Lancet: authors Philippe Grandjean & Phil Landrigan

- Developmental toxicity
  - *CA EPA - Prop 65*
    - California Environmental Protection Agency (CA EPA)

- Clear Evidence of Adverse Effects - Developmental Toxicity
  - *US NIH - Reproductive & Developmental Monographs*
    - US Department of Health & Human Services - National Institutes of Health

- **H362** - May cause harm to breast-fed children
  - *EU - GHS (H-Statements)* European Union / European Commission (EU EC)

- **H360Df** - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
  - *GHS – Australia* Safe Work Australia
Resources for Employers and Workers to Identify and Control Hazards

- Protecting Workers from Occupational Reproductive Hazards: A Guide for Employers and Staffing Agencies (includes a Job Hazard Analysis)
- Reproductive Hazards Identification Checklist
- Accident Prevention Program Template for Occupational Reproductive Health Hazards
- Reproductive Hazards in the Workplace: A Factsheet for Workers
- Reproductive Hazards in the Workplace: A Factsheet for Warehouse Workers
- Reproductive Hazards in the Workplace: A Factsheet for Healthcare Workers
- Occupational Reproductive Health Databases by Scientists
- On-Demand Training for Clinicians

Resources available at: https://deohs.washington.edu/pehsu/occrepro
Other Resources for Employers and Workers

- NIOSH Reproductive Health and the Workplace website
  https://www.cdc.gov/niosh/topics/repro/default.html

  https://www.safety.duke.edu/sites/default/files/B-ReproductiveTox.pdf

- UCSF Program on Reproductive Health and the Environment, Work Matters website
  https://prhe.ucsf.edu/work-matters-resources

- Kentucky Pregnant Workers Health Impact Assessment
Purpose of APP template: To help prevent adverse occupational reproductive health outcomes

APP steps to address reproductive health hazards
- Identify reproductive hazards in your workplace
- Identify the work groups covered by job or job task
- Describe strategies to control exposures to reproductive health hazards
- Ensure workers are trained on the reproductive hazards, and exposure control procedures
  - For workers exposed to hazards that pose first trimester effects, education and prevention are especially important, as pregnancy may be unrecognized.
  - Clinicians receive little to no training on workplace hazards and reproductive hazards
  - Include chemicals in your hazard communication training
- Monitor manual labor and other work conditions to ensure workers are protected
Experts to Provide Assistance: Free and For Pay Consultation Services

- L&I consultation services:  DOSHconsultation@lni.wa.gov or call 360.870.2269
  
  Or complete L&I’s fillable form at this link:  https://lni.wa.gov/safety-health/preventing-injuries-illnesses/request-consultation/onsite-consultation

- University of Washington Field Research and Consultation Group: 206.543.9711

- Private sector industrial hygienists, occupational health nurses, and other safety professionals (fee for service)
Free Telephone Medical Consultation for Workers and their Clinicians on Workplace Reproductive Health Concerns

- Encourage workers to communicate with their doctor or midwife about their workplace reproductive health hazards

- Specialized reproductive health medical consultants are available, at no charge, to discuss reproductive health concerns with workers (infertility, pregnancy, breastfeeding)
  - NW PEHSU at University of Washington  **1.877.KID.CHEM**
    - pehsu@uw.edu  https://deohs.washington.edu/pehsu/
  - MotherToBaby  **1.866.626.6847**
    - https://mothertobaby.org
Strategies to Reduce Exposure: Hierarchy of Control

**Elimination:** Modify the work process to eliminate the hazard

**Substitution:** Select a safer chemical that is equally effective

**Engineering Controls:** Local exhaust ventilation, enclosure of noise source, mechanical lifting device, other engineering control

**Administrative Controls:** Rotate workers to reduce exposures. Accommodation for pregnant and breastfeeding workers if requested.

**Personal Protective Equipment:** Respirator, gloves, etc.
Federal Pregnancy Rights

- **Pregnancy Discrimination Act (Federal EEOC):** Employment discrimination
  - Treating a woman (applicant or employee) unfavorably because of pregnancy, childbirth, or related medical condition
    - Includes hiring, firing, pay, job assignments, promotions, layoff, health insurance
    - Applies to employers with more than 15 workers

- **Pregnancy and FMLA:** Up to 12 weeks of unpaid, **job-protected leave** per year
  - For birth and care of the newborn or adopted child, or medical leave for health conditions from pregnancy
  - Requires employer to protect/hold job for employee to return to at the end of the leave
  - FMLA applies to all public agencies, all public and private elementary and secondary schools, and companies with 50 or more employees
WA Family Medical Leave Act (benefit started Jan 2020)

• Provides paid family and medical leave to eligible employees working for small and large employers

• Up to 12 weeks per year of **PAID LEAVE**

• Full-time, part-time, temporary and seasonal workers eligible
  - Need at least 820 hours (around 16 weeks) in previous year to qualify
  - Federal employees and some self-employed workers are ineligible

Learn more at: https://paidleave.wa.gov
WA employers must provide the following reasonable accommodations for a pregnant employee upon request:

- Frequent, longer, or additional restroom breaks
- Modified food or drink policies
- The ability to sit more frequently
- Not to lift objects over 17 pounds
- Applies to employers with 15 or more employees
Other accommodations **can be requested by worker’s health care provider** such as

- Job restructuring, such as a part-time schedule, reassignment, changing equipment, or temporary transfer to a less active or less dangerous position
- Schedule flexibility for prenatal visits
- Breastfeeding: provide reasonable break time, in a private location if feasible
- And other accommodations as needed

As long as there is no significant difficulty or expense to the employer

Some employers have established workstations or jobs to accommodate pregnant and other workers with reproductive health concerns

https://www.atg.wa.gov/pregnancy-and-breastfeeding-accommodations
https://lni.wa.gov/workers-rights/workplace-policies/pregnancy-accommodations
The pregnant worker asked her manager for a specific, legally required accommodation during the initial stage of her pregnancy.

Her manager denied her request and immediately fired her via text message.

Office of the Attorney General, Civil Rights Division investigates complaints. In most cases, a call from the AG’s office motivates employers to comply.
## Example Workplace Accommodation Requests by Workers and Health Benefits

<table>
<thead>
<tr>
<th>Worker’s Request</th>
<th>Medical Aim</th>
<th>Health Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase access to water</td>
<td>Increase hydration</td>
<td>Maintenance of amniotic fluid, reduced preterm delivery, maintenance of blood pressure, ensures capacity to cool the baby, formulation of breast milk</td>
</tr>
<tr>
<td>Change in requirements to repetitively lift heavy objects</td>
<td>Reduce excessive stress to the body Reduce joint pain</td>
<td>Reduce risk of preterm births and miscarriages Decrease joint pain</td>
</tr>
<tr>
<td>Change in standing requirements</td>
<td>Reduce pressure on feet and back</td>
<td>Reduce pain and risk of preterm birth</td>
</tr>
</tbody>
</table>

From: Kentucky *Pregnant Workers Health Impact Assessment*  
## Example Workplace Accommodation Requests by Clinicians and Health Benefits

<table>
<thead>
<tr>
<th>Clinician’s Request</th>
<th>Medical Aim</th>
<th>Health Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce exposure to chemicals</td>
<td>Decreases in absorption of chemicals into the body</td>
<td>Reduces risk of miscarriage, risk for changes in fetal development, and risk for health problems later in life</td>
</tr>
<tr>
<td>Change in pumping environment for lactation</td>
<td>Change of infant’s exposure to fecal/oral disease</td>
<td>Reduce risk of breast infection in workers Reduce risk of diarrhea, vomiting, hepatitis A, E. coli, rotavirus in infants</td>
</tr>
<tr>
<td>Reduce exposure to noise exceeding 90 dBA</td>
<td>Reduce exposure to noise energy</td>
<td>Reduce risk of hypertensive disorders and diabetes in full-time pregnant workers Reduce risk of low birth weight and hearing loss in newborns.</td>
</tr>
</tbody>
</table>
A pregnant worker has asked for more frequent short breaks to drink water, eat snacks, and use the restroom.

A. You ask the worker to obtain a request letter from a health care professional?
B. You disallow the request because the decreased productivity will reduce profits?
C. You allow these accommodations as they are required by the WA Healthy Starts Act?
D. Another worker is also pregnant and has not requested accommodation. You understand the importance of these specific accommodations, and offer accommodation to other pregnant workers?
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B. You disallow the request because the decreased productivity will reduce profits?
C. You allow these accommodations as they are required by the WA Healthy Starts Act? Correct
D. Another worker is also pregnant and has not requested accommodation. You understand the importance of these specific accommodations, and offer accommodation to other pregnant workers? Correct. An employer can offer accommodation, but can not require the worker to agree to the work change. Some companies have safer positions for pregnant workers and for workers trying to conceive.
What do you think? More than one answer may be correct.

A pregnant worker has asked for a change in standing requirements.

A. You disallow the request because you can’t think of a work around?
B. You make a chair available for this worker?
C. You offer to periodically rotate this worker daily to a different work station that does not require standing for the duration of their pregnancy?
D. You offer to temporary assign this worker to a different work station that is less physically demanding for the duration of their pregnancy?
A pregnant worker has asked for a change in standing requirements.

A. You disallow the request because you can’t think of a work around? Incorrect
B. You make a chair available for this worker? Correct
C. You offer to periodically rotate this worker daily to a different work station that does not require standing for the duration of their pregnancy? Correct
D. You offer to temporary assign this worker to a different work station that is less physically demanding for the duration of their pregnancy? Correct
A pregnant worker has asked for a change in having to repetitively lift 20-pound items.

A. You offer modifications since compensation and health insurance flow from work, and these benefits support the wellbeing of the worker and the worker’s family?
B. You offer to rearrange the work and eliminate the repetitive lifting for the duration of the pregnancy, and postpartum if needed?
C. You implement the use of lift-assist devices to eliminate the lifting task?
D. All of the above?
What do you think? More than one answer may be correct.

A pregnant worker has asked for a change in having to repetitively lift 20-pound items.

A. You offer modifications since compensation and health insurance flow from work, and these benefits support the wellbeing of the worker and the worker’s family?
B. You offer to rearrange the work and eliminate the repetitive lifting for the duration of the pregnancy, and postpartum if needed?
C. You implement the use of lift-assist devices to eliminate the lifting task?
D. All of the above? Correct
A worker is exposed to lead, and a clinician has requested the worker’s exposure to lead be reduced.

A. You offer to temporarily assign this pregnant worker to a different work station with no or very low exposure to lead during the pregnancy and when breastfeeding?
B. You provide protective gear including a respirator, and training, to minimize the worker’s exposure to lead during pregnancy and breastfeeding.
C. You are motivated to accommodate this worker because a call from a lawyer with the WA State Office of the Attorney General could spoil your day?
D. You understand the worker may have a diagnosis of infertility, which is private health information and does not require disclosure?
E. All of the above?
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A. You offer to temporarily assign this pregnant worker to a different work station with no or very low exposure to lead during the pregnancy and when breastfeeding?

B. You provide protective gear including a respirator, and training, to minimize the worker’s exposure to lead during pregnancy and breastfeeding.

C. You are motivated to accommodate this worker because a call from a lawyer with the WA State Office of the Attorney General could spoil your day?

D. You understand the worker may have a diagnosis of infertility, which is private health information and does not require disclosure?

E. All of the above? Correct
Conclusions

- Certain chemicals, infectious agents, physical agents, and physically demanding activities may cause reproductive health harm
  - Infertility, miscarriage, birth defects, cognitive delays and other harm in offspring
- Costs associated with the birth and care of a premature baby are much higher than for a healthy baby
  - Children with birth defects, brain damage and other serious health problems may require expensive safety net services for years, decades or throughout their lives
- Identify reproductive health hazards in your workplace
  - Use checklists and other resources
  - Request and review current SDSs from manufacturers to identify chemicals that can cause reproductive harm
- Use the hierarchy of controls to reduce/eliminate hazardous exposures/activities
• Ensure workers are trained on the chemicals, physical and infectious agents, and workplace activities that can cause reproductive harm
  – Prevention is key, especially for first trimester reproductive hazards as pregnancy is initially unrecognized
  – Clinicians receive little to no training on workplace hazards and reproductive hazards
• Use an APP template for occupational reproductive hazards to guide your work
• Seek assistance from experts as needed
• Proactively plan to accommodate pregnant and breastfeeding workers, and workers diagnosed with infertility
SHIP Occupational Reproductive Health Grant Team

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References and Resources

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- J.-B. Henrotin et al. Deprivation, occupational hazards and perinatal outcomes in pregnant workers, Occupational Medicine 2017;67:44–51
- Johnson Controls Supreme Court Decision: https://www.lexisnexis.com/community/casebrief/p/casebrief-int-l-union-v-johnson-controls
- National Woman’s Law Center, 2014
- Hastings School of Law Work Life Center
- NW PEHSU 1-877-KID-CHEM, pehsu@uw.edu https://deohs.washington.edu/pehsu/
- MotherToBaby 866.626.6847 https://mothertobaby.org
- L&I consultation services: DOSHconsultation@lni.wa.gov or call 360-870-2269
- WA Office of the Attorney General  https://www.atg.wa.gov/pregnancy-and-breastfeeding-accommodations or pregnancy@atg.wa.gov or leave a message (833) 660-4877
- WA Paid Family Leave  https://paidleave.wa.gov


Questions? Reactions?

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http://depts.washington.edu/pehsu/

Photo credit: PEHSU team
## Haz Com SDS Cut-off Values/Concentrations for Health Hazard Classification

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Cut-off value/concentration limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>&gt; 1.0%</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>&gt; 1.0%</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>&gt; 1.0%</td>
</tr>
<tr>
<td>Respiratory/Skin sensitization</td>
<td>&gt; 0.1%</td>
</tr>
<tr>
<td>Germ cell mutagenicity (Category 1)</td>
<td>&gt; 0.1%</td>
</tr>
<tr>
<td>Germ cell mutagenicity (Category 2)</td>
<td>&gt; 1.0%</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>&gt; 0.1%</td>
</tr>
<tr>
<td>Reproductive toxicity (includes lactation)</td>
<td>&gt; 0.1%</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>&gt; 1.0%</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>&gt; 1.0%</td>
</tr>
</tbody>
</table>

From GHS 2019 United Nations identification