INTENTIONAL EXPOSURES IN OLDER ADULTS

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Part of the Overdose Prevention, Harm Reduction, & Treatment Series
Content warning

We will be discussing self harm and suicide today.
Today’s discussion topics

- Washington Poison Center
- Exposures in older adults
- Substance misuse
- Self-harm/Suspected Suicide
- Substances, signs, & symptoms
- Harm reduction
Washington Poison Center
A poison is...

Any product or substance that can be harmful if it is used the wrong way, by the wrong person, or in the wrong amount.

Exposures to poisons:
- can be unintentional or intentional
- may or may not be harmful
The Washington Poison Center

Preventing & Reducing Harm for over 65 years

- Nonprofit organization
- Core services:
  - Poison Center Telephone Helpline
  - Public Health Education
  - Clinical/Professional Education

(800) 222 1222
Our staff

- Specialists in Poison Information (SPIs): expert-level nurses, pharmacists, physicians, and poison information providers
- Toxicology training and certification required
- On-call Board Certified Medical Toxicologists
- Help to ensure patients are where they need to be
Poison Center triaging

- When the Poison Center is called first, 91% of cases are managed on site (home)
- Give report to ED and provide treatment protocols and documents
- Follow up to ensure patient safety
- Collect information to assist with the next poisoned patient
Exposures in older adults
Age-related changes

- As people age, their body reacts to substances differently
- Bodily changes:
  - Kidney function
  - Water to body fat ratio
  - Metabolism
- These changes predispose older adults to:
  - Adverse reactions
  - Exacerbated health conditions
  - Increased risk of falls
Polypharmacy

- 89% of older adults take at least 1 prescription medication
  - 42% take 5 or more
- Multiple medications = greater risk of drug-drug interactions and adverse effects

The challenges of WA Poison Center data

- No mandate to contact the WA Poison Center = underrepresentation of exposures
- Consulted on patients who are alive (compared to medical examiner data)
- Our data tells many possible stories
  - Changing awareness
  - Changing accessibility
  - Societal changes/large scale traumas
- We don’t know how many of these cases are repeat patients
Calls to the Washington Poison Center (2021)

53,777 Washington patients with poison exposures

5,720 patients were ages 60+

11% of all patients in Washington

Source: WAPC
Top exposure reasons in adults ages 60+ (2021)

Source: WAPC
Top exposure reasons in adults ages 60+ (2021)

- **Medication Error**: 2466
- **Accident**: 1440
- **Suspected Suicide**: 390
- **Adverse Drug Reaction**: 329
- **Intentional substance misuse**: 257

Source: WAPC
Substance misuse
Call scenarios

- Intoxication-seeking behavior (trying to get “high” or “drunk”)
- “More is better”
- Self-medicating for depression
- Consuming stashes to avoid legal repercussions
Substance misuse in adults ages 60+

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>204</td>
</tr>
<tr>
<td>2020</td>
<td>225</td>
</tr>
<tr>
<td>2021</td>
<td>257</td>
</tr>
</tbody>
</table>

Source: WAPC
## Substance misuse risk factors in older adults

<table>
<thead>
<tr>
<th>Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-voluntary retirement</td>
</tr>
<tr>
<td>Loss of spouse, partner, or family member</td>
</tr>
<tr>
<td>Environment (example: relocation to assisted living)</td>
</tr>
<tr>
<td>Physical health</td>
</tr>
<tr>
<td>Previous traumatic events</td>
</tr>
<tr>
<td>Mental disorders</td>
</tr>
<tr>
<td>Cognitive decline</td>
</tr>
<tr>
<td>Social changes, social isolation</td>
</tr>
<tr>
<td>Economic stressors</td>
</tr>
</tbody>
</table>
Intentional substance misuse

- Our call volume is low... why?
  - Stigma
  - Lack of awareness

A growing concern:
- Illicit drug use is lower than among other adult age groups, but rates are increasing
  - Aging baby boomers
- COVID-19 pandemic
- Increase in co-occurring mental disorders and SUDs
  - 2019 NSDUH: 1.5% of ages 50+, or 1.7 million people
- Less likely to seek treatment
Barriers to seeking & receiving help

- Negative attitudes about addressing misuse
- Denial (self, family members, friends)
- Accepting attitudes towards substance misuse
- Lack of knowledge about physiological changes
- Misinformation about treatment
- Some DSM criteria may not fit older adults
Top substances involved in intentional substance misuse cases in adults ages 60+

- **#1 substance: alcohol**
  - Alcoholic beverages
  - Mouthwash
  - Hand sanitizers
  - Rubbing alcohol

- **2019 NSDUH:**
  - 10.7% of adults 65+ engaged in past-month binge alcohol use
  - 2.8% engaged in past-month heavy alcohol use

- **Other studies in healthcare settings:**
  - Up to 15% of older patients meet criteria for at-risk drinking

Source: WAPC, 2019-2021
Top substances, continued: Cannabis

Washington data from NSDUH (adults ≥50):

- Past 12-month cannabis use
  - 2014: 15.1%
  - 2016: 23.6%
- Simultaneous use of cannabis & alcohol
  - 2014: 6.1%
  - 2016: 10.7%

Analysis of Washington population survey (adults ≥65):

- Among those who use cannabis, 17.9% of women and 41.9% of men report daily/near daily use
- Oral preparations most prevalent
Top substances, continued: OTC & prescription medications

- Acetaminophen
- Muscle relaxants
- Ibuprofen
- Opioids
- Insulin

National data:
- 2019 NSDUH: most commonly misused meds = pain relievers
  - 1.7% of adults 65+ misused them
- Many older adults with SUDs develop from misusing prescription medications to address sleep problems, chronic pain, or anxiety
Self-harm/Suspected Suicide
Risk factors/Reasons for suicide among older adults

<table>
<thead>
<tr>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
</tr>
<tr>
<td>Grief over lost loved ones</td>
</tr>
<tr>
<td>Loss of self-sufficiency</td>
</tr>
<tr>
<td>Chronic illness and pain</td>
</tr>
<tr>
<td>Cognitive impairment</td>
</tr>
<tr>
<td>Financial troubles</td>
</tr>
<tr>
<td>Substance use problems</td>
</tr>
</tbody>
</table>
Suicide among older adults in Washington

- Suicide rate among older adults (65+) in WA has been higher than the national rate since 2010
- 2020: 1,212 deaths reported
  - 217 (18%) in adults ages 60+
  - 79% were male
- Suicide death rates are likely underestimated
  - Deliberate vs. accidental
  - Stopping to eat or drink

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of deaths</th>
<th>Crude Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>54</td>
<td>12.07</td>
</tr>
<tr>
<td>20-24</td>
<td>100</td>
<td>20.67</td>
</tr>
<tr>
<td>25-29</td>
<td>119</td>
<td>20.18</td>
</tr>
<tr>
<td>30-34</td>
<td>97</td>
<td>16.17</td>
</tr>
<tr>
<td>35-39</td>
<td>105</td>
<td>18.66</td>
</tr>
<tr>
<td>40-44</td>
<td>95</td>
<td>19.21</td>
</tr>
<tr>
<td>45-49</td>
<td>99</td>
<td>21.53</td>
</tr>
<tr>
<td>50-54</td>
<td>100</td>
<td>21.67</td>
</tr>
<tr>
<td>55-59</td>
<td>103</td>
<td>21.44</td>
</tr>
<tr>
<td>60-64</td>
<td>105</td>
<td>22.16</td>
</tr>
<tr>
<td>65-69</td>
<td>64</td>
<td>15.24</td>
</tr>
<tr>
<td>70-74</td>
<td>41</td>
<td>12.11</td>
</tr>
<tr>
<td>75-79</td>
<td>44</td>
<td>19.91</td>
</tr>
<tr>
<td>80-84</td>
<td>37</td>
<td>27.83</td>
</tr>
<tr>
<td>85+</td>
<td>31</td>
<td>22.9</td>
</tr>
</tbody>
</table>

Source: CDC WISQARS, 2020, Washington
Self-poisoning among older adults

- Older adults are more likely to plan & to use more lethal means
  - Among people who attempt suicide: 1 in 4 older adults will die by suicide vs. 1 in 200 youths
  - Even if the older adult survives the attempt, they are less likely to recover from the effects

- Self-poisoning is more common among female older adults
  - Between 2014-2018, 40% of older adult females who died by suicide used did so by self-poisoning

- Incidences of self-poisoning are likely underestimated
  - Not mandatory to call us
  - Deliberate vs. accidental
Self harm/suspected suicide in adult ages 60+

Number of patients

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>374</td>
</tr>
<tr>
<td>2020</td>
<td>373</td>
</tr>
<tr>
<td>2021</td>
<td>390</td>
</tr>
</tbody>
</table>

Source: WAPC
Older adult exposures by age (2019-2021)

Source: WAPC
Self-harm/suspected suicide by gender and year (ages 60+)

1 patient in 2020 and 1 patient in 2021 did not share their gender

Source: WAPC
Caller site for self-harm/suspected suicide patients ages 60+ (2019 - 2021)

- **81%** (n=922) were already in a healthcare facility when WAPC was contacted.

- **4%** (n=42) were in their own residence when WAPC was contacted.

  Reminder: when the Poison Center is called first, 91% of cases are managed on site (home).

Source: WAPC
Top substances in self-harm/suspected suicide patients ages 60+ (2019-2021)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholic beverage</td>
<td>219</td>
</tr>
<tr>
<td>Anti-anxiety drugs</td>
<td>185</td>
</tr>
<tr>
<td>Trazodone</td>
<td>129</td>
</tr>
<tr>
<td>Mood stabilizing drugs**</td>
<td>113</td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>105</td>
</tr>
</tbody>
</table>

*Patients may be exposed to more than one substance*
*Mostly benzodiazepines*
**Atypical antipsychotics**

Source: WAPC
Medical outcome for self-harm/suspected suicide patients ages 60+ (2019-2021)

N= 1,137

This graph does not include all medical outcomes
Source: WAPC
Substances, Signs, & Symptoms
Know the baseline

Signs and symptoms often resemble those of other health issues

- Know the baseline
  - Normal behavior
  - Normal reactions

- Deviations:
  - Medication error?
  - Drug interaction?
  - Side effects?
  - Substance use?
  - Self-harm?
General red flags

- Big or small pupils
- Sweating
- Restlessness, fidgety
- Confused
- Agitated
- Drowsy, slowed response
- Dizzy, unsteady, uncoordinated
Alcohol

- Aging bodies become more sensitive to alcohol’s effects
  - Drowsiness, dizziness, confusion
- Alcohol interacts with many medications
  - Increased side effects of dizziness, drowsiness, impaired coordination, loss of balance
  - Can make medications less effective in treating health conditions
- Withdrawal

*Image source: SAMHSA Treating Substance Use Disorder in Older Adults*
Cannabis

- Cannabis impairs:
  - Coordination and motor function
  - Concentration/attention
  - Reaction time
- Interactions with other drugs can cause:
  - Drowsiness
  - Altered blood sugar levels
  - Blood pressure effects

Image Source: https://www.drugabuse.gov/drug-topics/marijuana/marijuana-potency
Opioids

May cause:
- Drowsiness/lethargy
- Problems with attention, concentration
- Confusion
- Impaired vision
- Altered gait & balance
- Respiratory depression leading to cardiac arrest

**Encourage anyone who uses opioids (prescription or illicit) to have naloxone on hand**

Benzodiazepines

May cause:
- Drowsiness/lethargy
- Problems with attention, concentration
- Confusion
- Impaired vision
- Altered gait & balance
- Benzodiazepine withdrawal is similar to alcohol

Image Source: https://wordpress.viu.ca/biol427blogpost/2020/03/25/benzodiazepines-the-silent-drug-problem/
Acetaminophen

- Silent but deadly
  - Often no symptoms initially – symptoms may not show for several days
- Primary effect is damage to the liver
  - This may lead to injury to other organs
- Blood concentrations assist in determining risk to the patient
- Antidote available
- Reason to send all self-harm attempts to hospital
Mood stabilizers (antidepressants & antipsychotics)

- May seem lethargic or anxious
- Pupil size normal or large
- Heart effects (arrhythmias & conduction abnormalities)
  - Only detected on an electrocardiogram (EKG)
- Increased body temperature
- Tremors often precede seizures
Other substances

- Antihistamines
- Muscle relaxants
- Cough medicine (DM)
- Hypnotics
Warning signs of suicide among older adults

- Loss of interest in activities they used to enjoy
- Giving away beloved items or changing their will
- Avoiding social activities
- Neglecting self-care, medical regimens, and grooming
- Talks about death
- Appears sad or depressed most of the time
- Seems anxious or agitated
- Unable to sleep or sleeps all the time
- Lacking concern for personal safety
Strategies for providers
Know who to call

911: If the patient needs immediate assistance or life support
- Breathing issues, unresponsive, seizures

WAPC: If there is suspicion of exposure
- Medication errors
- Overdoses
- Exposure to household products or chemical
- Information on medications, bite/stings, chemicals, household products, food poisoning
Why call us?

- We help determine the most appropriate level of patient care
- When a patient is referred to a HCF the Poison Center will contact the HCF to give report
  - Call the HCF with patient demographics
  - Provide summary of situation and patient status
  - Alert of symptoms which may be associated with the product and amounts reported
  - Provide recommendations on monitoring parameters and labs to obtain
  - Send treatment algorithms with indications and dosing for therapies and antidotes
- We can help provide drug interaction info

It does not have to be an emergency to call the Poison Center
# The caller experience – what to expect & what we need

## Who, What, Where, When, Why?

<table>
<thead>
<tr>
<th>Patient</th>
<th>Substance</th>
<th>Scenario</th>
<th>Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Product Name</td>
<td>Why</td>
<td>Patient Name</td>
</tr>
<tr>
<td>Gender</td>
<td>Formulation</td>
<td>How</td>
<td>Patient DOB</td>
</tr>
<tr>
<td>Weight</td>
<td>Strength</td>
<td>Time</td>
<td>Caller Name</td>
</tr>
<tr>
<td>Medical History</td>
<td>Amount</td>
<td>Symptoms</td>
<td>Phone Number</td>
</tr>
<tr>
<td>Medication List</td>
<td>Duration</td>
<td>Treatments</td>
<td>Zip Code</td>
</tr>
</tbody>
</table>
Care Coordination

**Help bridge the care gap**

- Too often there is a disconnect in patient care when managing an acute overdose to resuming therapeutic regimen
- Often in overdose the primary prescriber is not made aware their patient took the medication inappropriately
- Prescriber may choose to switch to a safer alternative
- Medication may not be working for the patient and different therapy may be needed
- Patient may need early refill if out of the medication
Substance use safety

● Talk about it!
  ○ Encourage older adults to discuss risks with healthcare providers & pharmacists

● Recommend the use of an organizational system

● Include the substance on medication lists
Strategies for
older adults & their caregivers
Safe storage & disposal are essential

- For prescriptions *and* OTCs
- Recommendations for lock boxes:
  - Use a combination lock over a key lock
  - Avoid external facing latches
- Too challenging? Keep out a small quantity (ex: 7 days) & lock up the rest
- Important as it helps others (grandchildren, older adults with dementia, etc.)
Don’t hang on to meds

Multiple languages available:
- Spanish
- Mandarin
- Cantonese
- Vietnamese

takebackyourmeds.org
Remember the Good Samaritan Law

- Overdose victims and responders have legal protections in WA
- The key to saving a life from overdose is to get professional medical help as fast as possible
- If you are witnessing a drug overdose, don’t be afraid to call 911
- Remind yourself & others!
Naloxone

- Everyone in Washington can be mailed naloxone for free
- King County residents
  - Kelley-Ross Pharmacy Group
- Residents outside of King County
  - People’s Harm Reduction Alliance
Call 988

The National Suicide Prevention Lifeline is now: 988 Suicide and Crisis Lifeline

NATIONAL
SUICIDE
PREVENTION
LIFELINE
1-800-273-TALK (8255)
suicidepreventionlifeline.org

988 SUICIDE & CRISIS LIFELINE
Public Health Education services

- Order free materials from our website: wapc.org
- Join our mailing list for Seasonal Health Alerts, alerts on emerging public health hazards, upcoming education opportunities, etc.
- Follow us on social media for poison prevention & harm reduction tips
- Promote & use Take Back Your Meds (takebackyourmeds.org)
Resources

- Washington Poison Center
- Partnership to End Addiction
- University of Washington Alcohol & Drug Abuse Institute (ADAI) and Clearinghouse
- National Institute on Drug Abuse (NIDA)
- Take Back Your Meds
- Washington Recovery Healthline
- SAMHSA Treating Substance Use Disorder in Older Adults
- Suicide Prevention Resource Center
- University of Washington Forefront Suicide Prevention
(800) 222-1222

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