




INTENTIONAL EXPOSURES IN OLDER ADULTS

SCOTT PHILLIPS, MD, FACP, FACMT, FAACT
EXECUTIVE/MEDICAL DIRECTOR

MEGHAN KING, MPH
PUBLIC HEALTH EDUCATOR

 WASHINGTON
POISON CENTER
(800) 222 1222

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

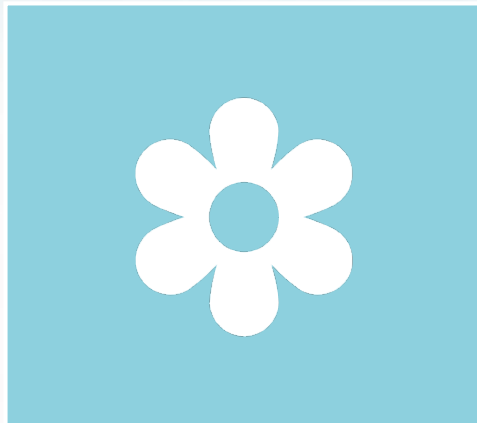
Harm reduction



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

24/7/365

Free

HIPAA Compliant

260+ Languages

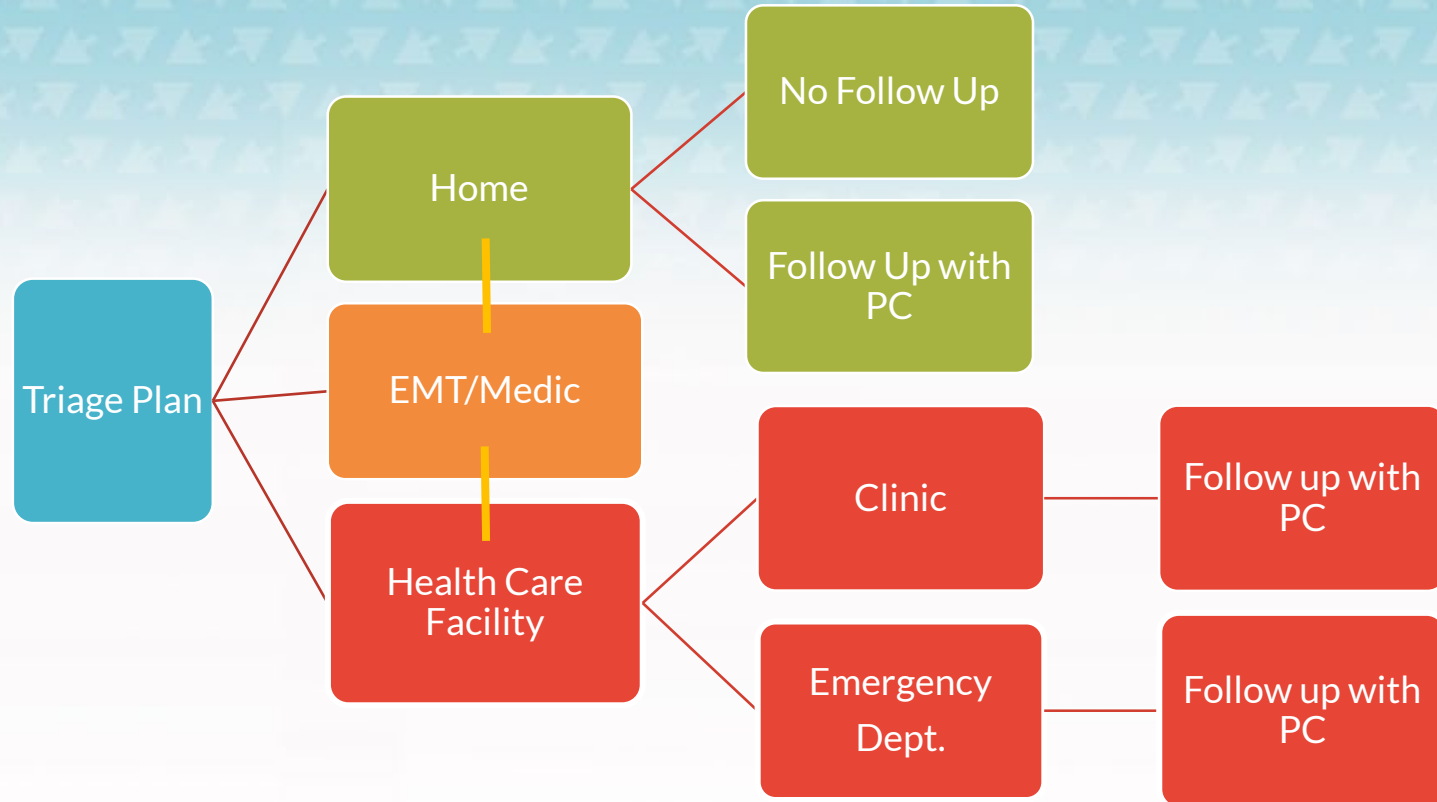
Our staff

- 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

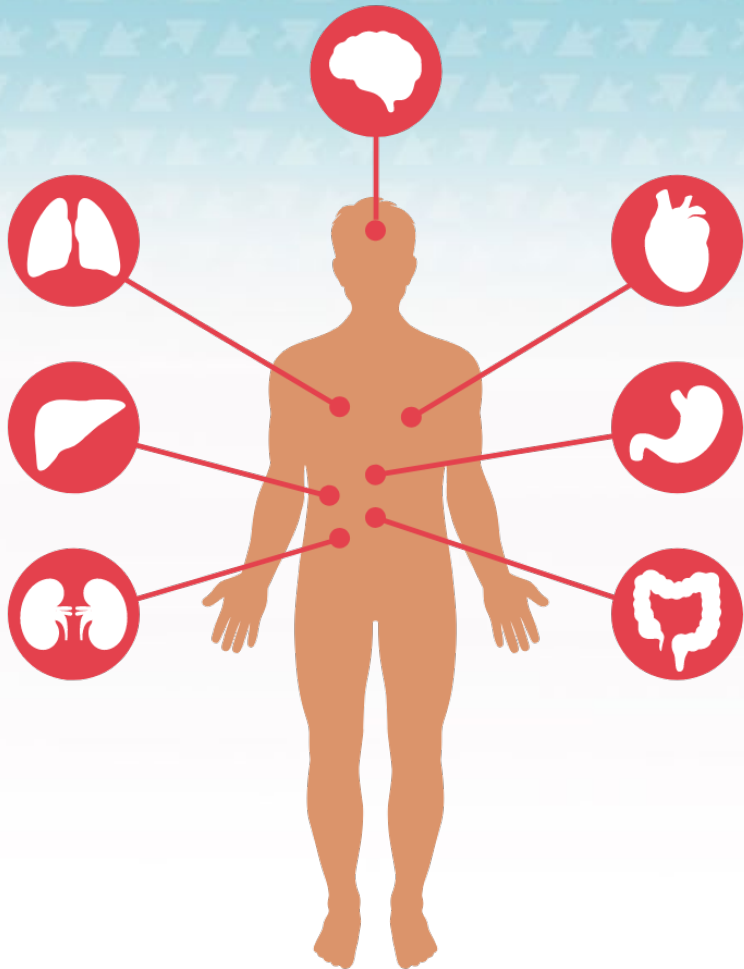
- When the Poison Center is called first, 91% of cases are managed on site (home)
- Give report to ED and provide treatment protocols and documents
- Follow up to ensure patient safety
- Collect information to assist with the next poisoned patient





Exposures in older adults

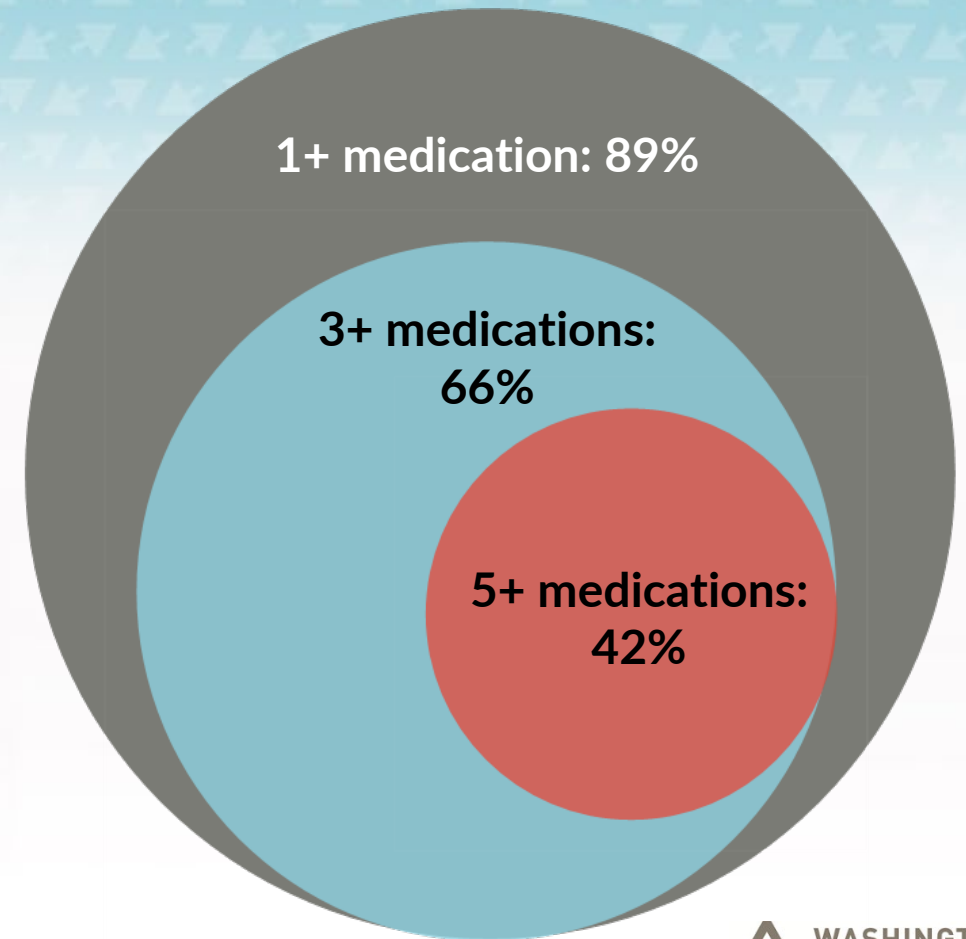
Age-related changes



- 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



Source: <https://www.cdc.gov/nchs/data/hus/2019/039-508.pdf>

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

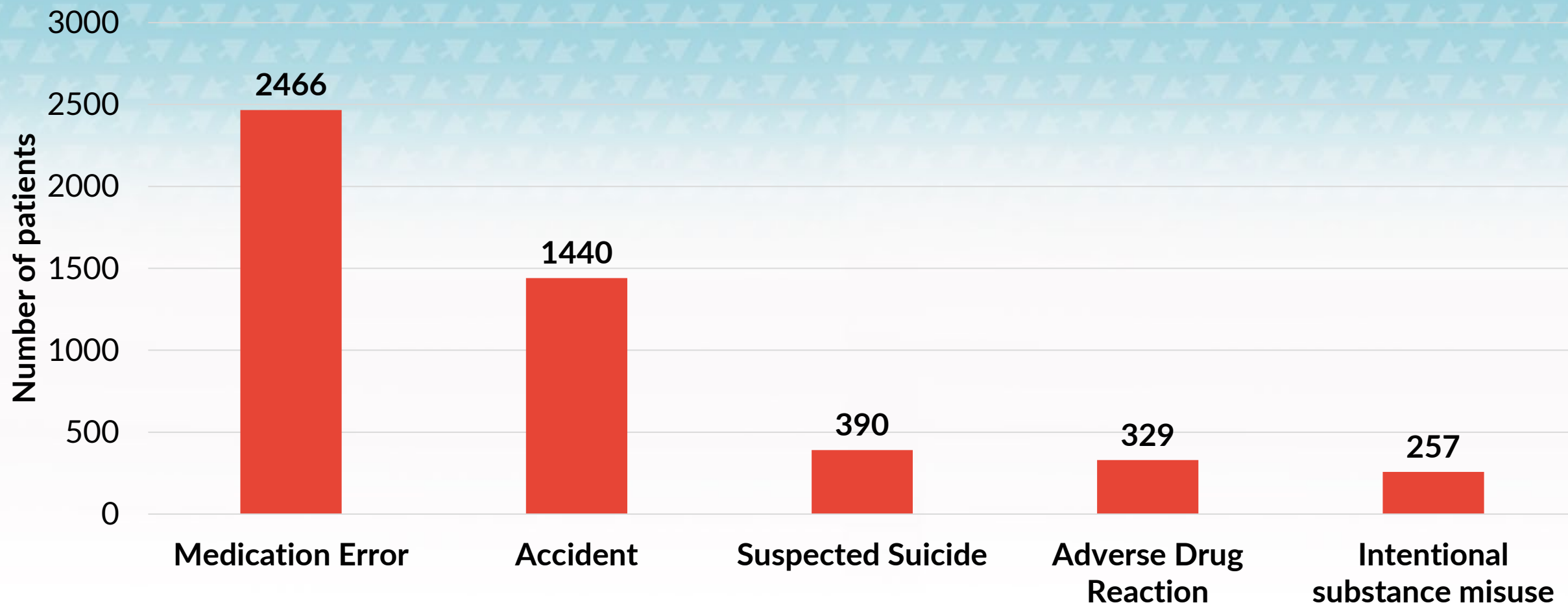
Washington patients with poison exposures

5,720

patients were ages 60+

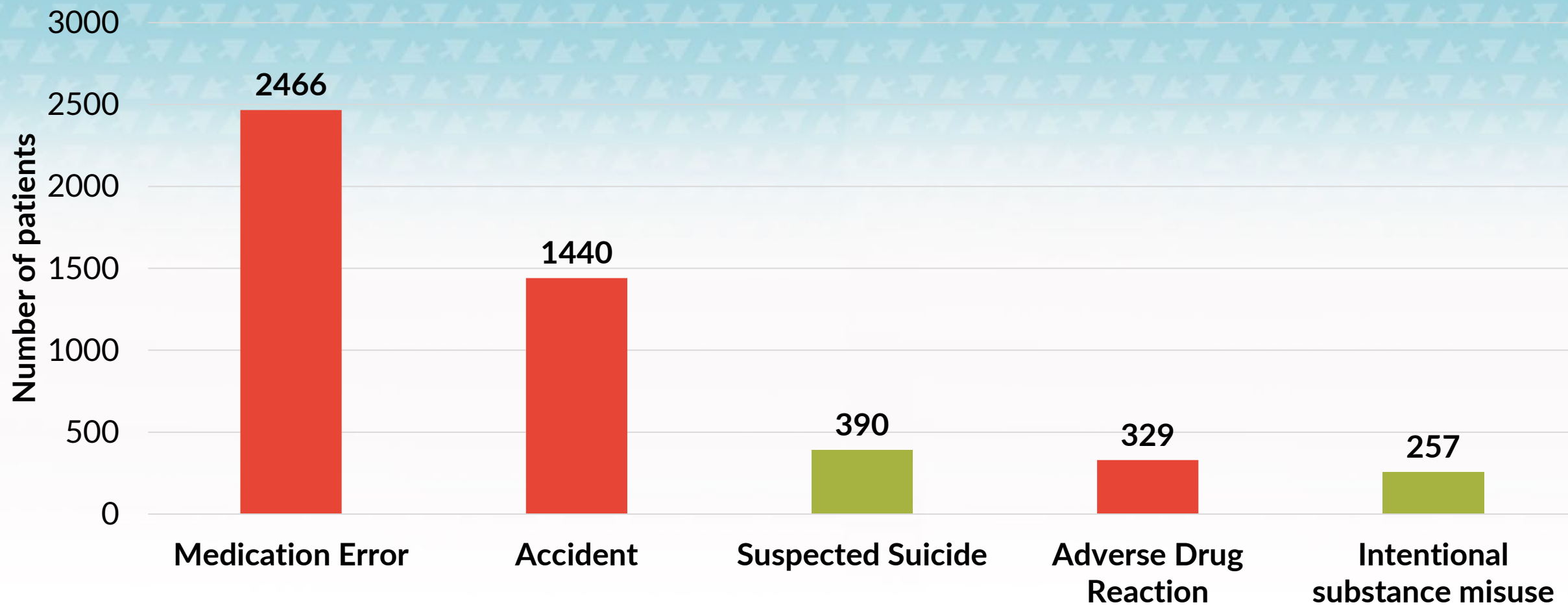
11% of all patients in Washington

Top exposure reasons in adults ages 60+ (2021)



Source: WAPC

Top exposure reasons in adults ages 60+ (2021)



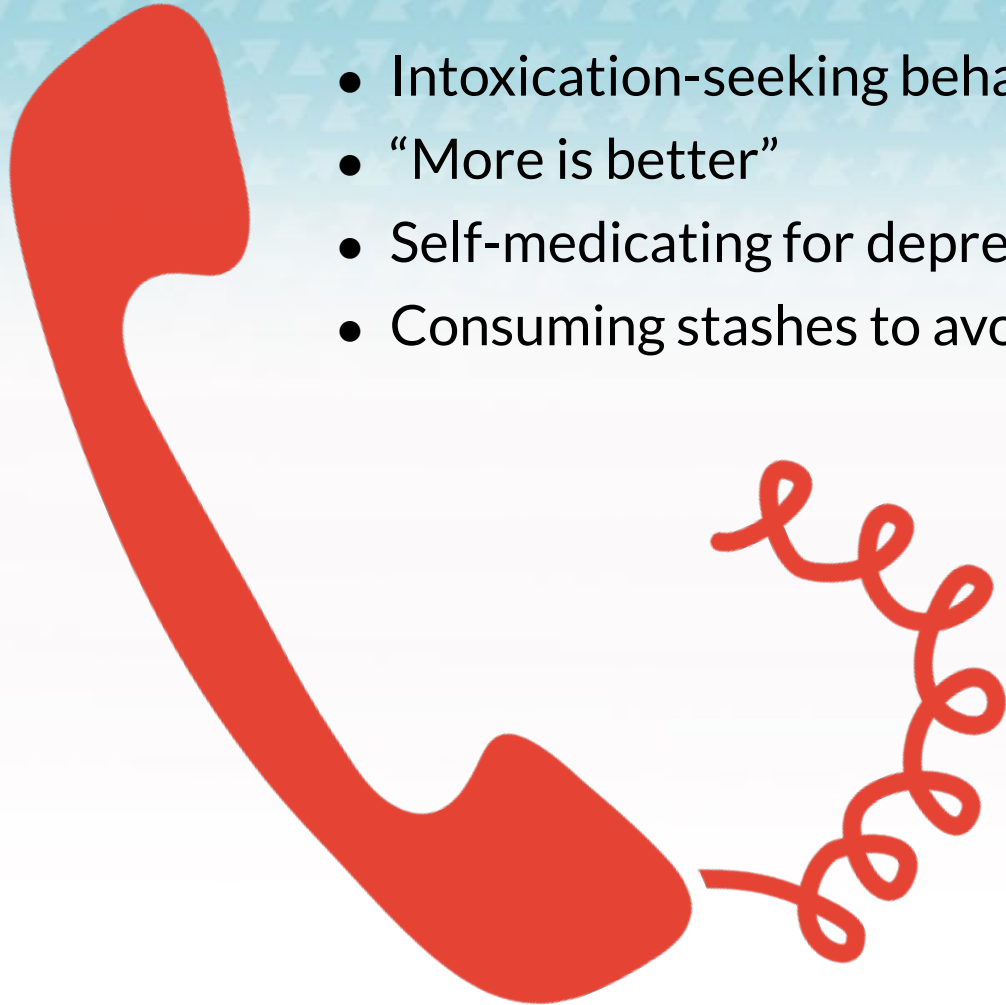
Source: WAPC



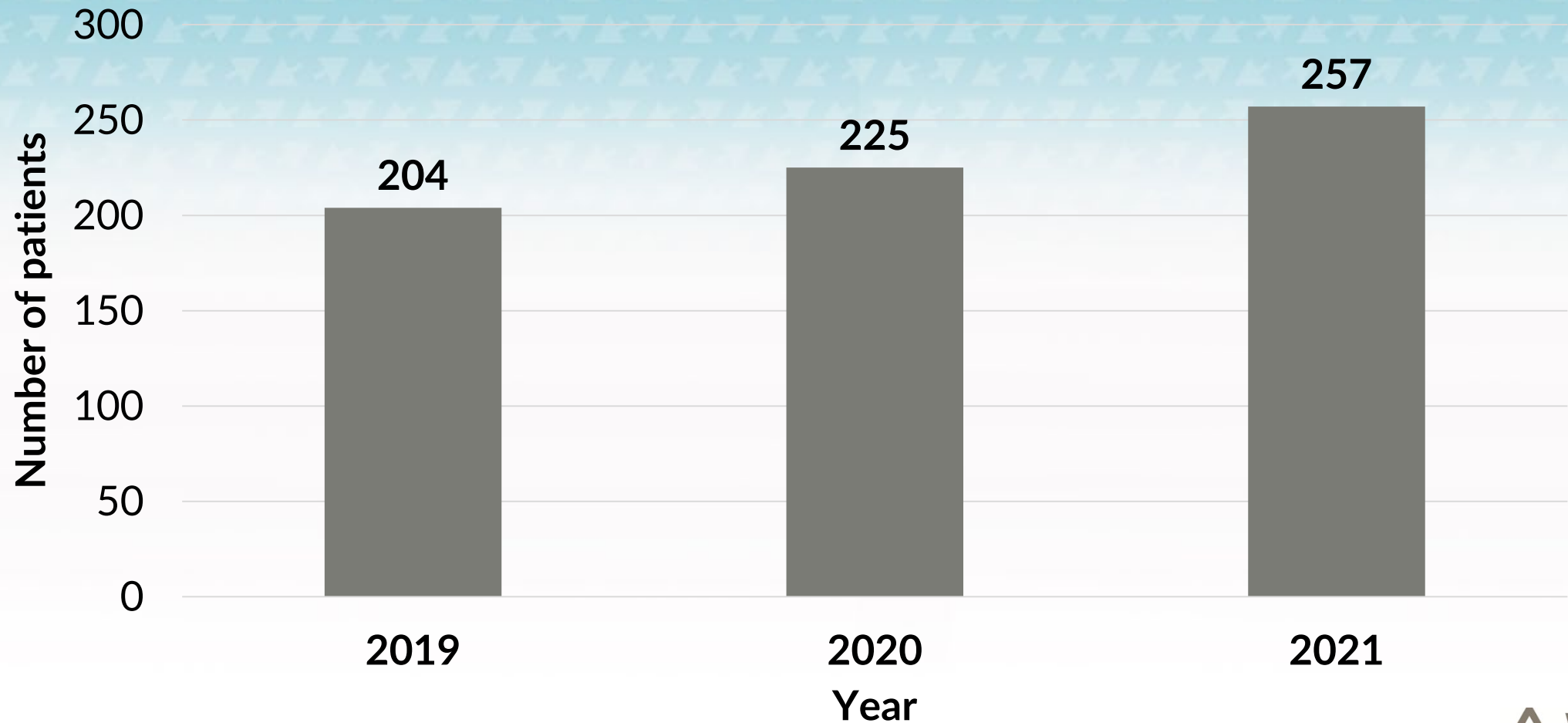
Substance misuse

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+



Source: WAPC

Substance misuse risk factors in older adults

Non-voluntary retirement
Loss of spouse, partner, or family member
Environment (example: relocation to assisted living)
Physical health
Previous traumatic events
Mental disorders
Cognitive decline
Social changes, social isolation
Economic stressors

Intentional substance misuse

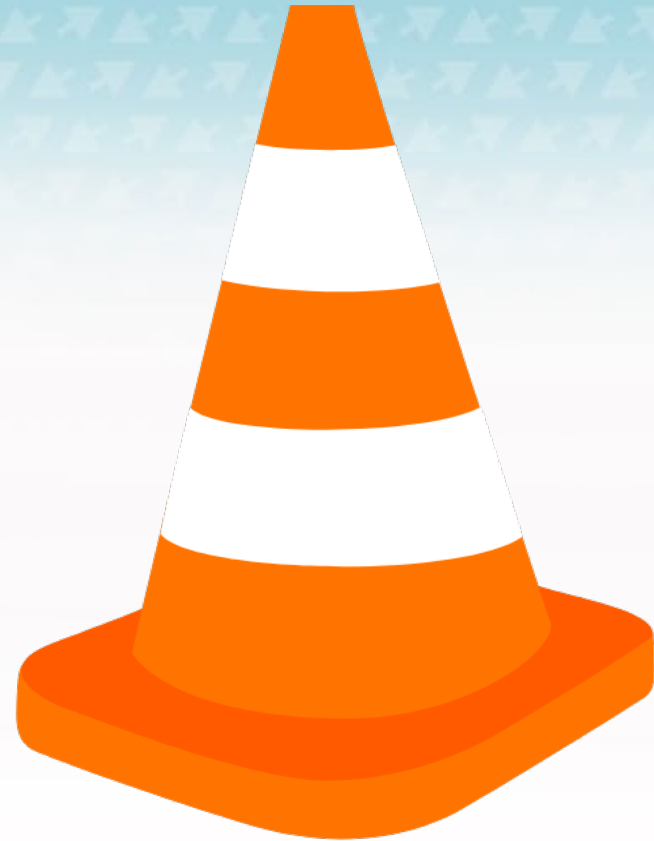
- Our call volume is low... why?
 - Stigma
 - Lack of awareness

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**

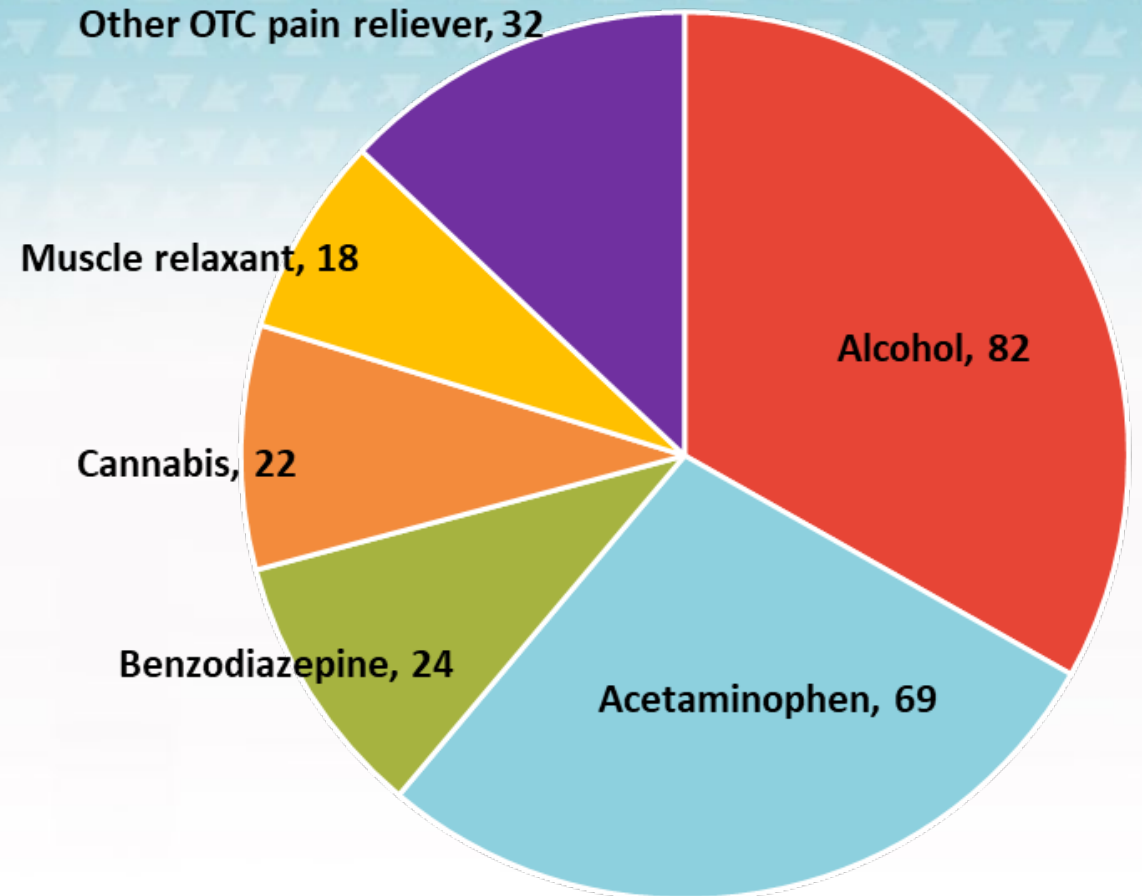
- Alcoholic beverages
- Mouthwash
- Hand sanitizers
- Rubbing alcohol

- **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

Loneliness
Grief over lost loved ones
Loss of self-sufficiency
Chronic illness and pain
Cognitive impairment
Financial troubles
Substance use problems

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

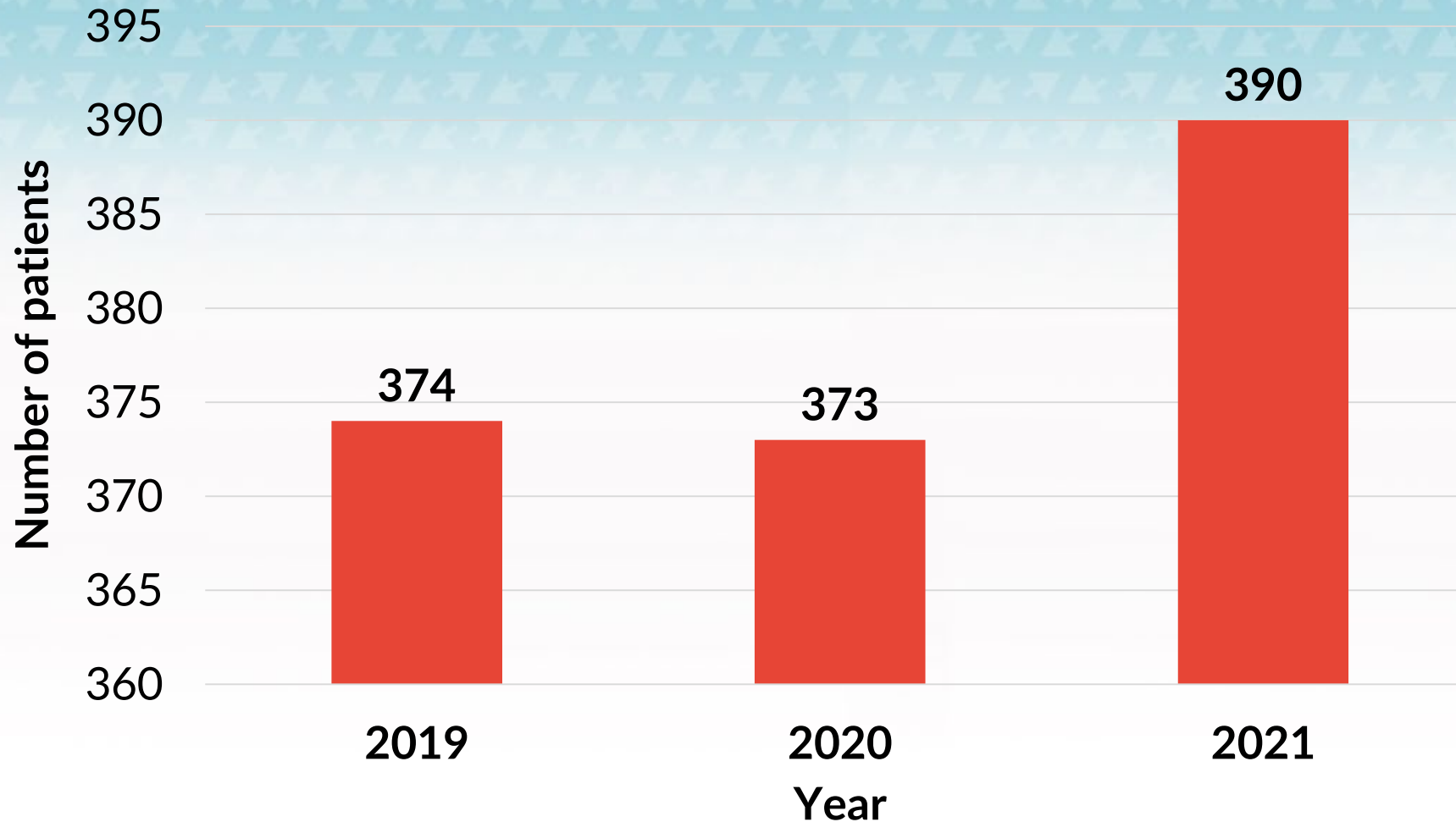
Age Group	Number of deaths	Crude Rate
15-19	54	12.07
20-24	100	20.67
25-29	119	20.18
30-34	97	16.17
35-39	105	18.66
40-44	95	19.21
45-49	99	21.53
50-54	100	21.67
55-59	103	21.44
60-64	105	22.16
65-69	64	15.24
70-74	41	12.11
75-79	44	19.91
80-84	37	27.83
85+	31	22.9

Source: CDC WISQARS, 2020, Washington

Self-poisoning among older adults

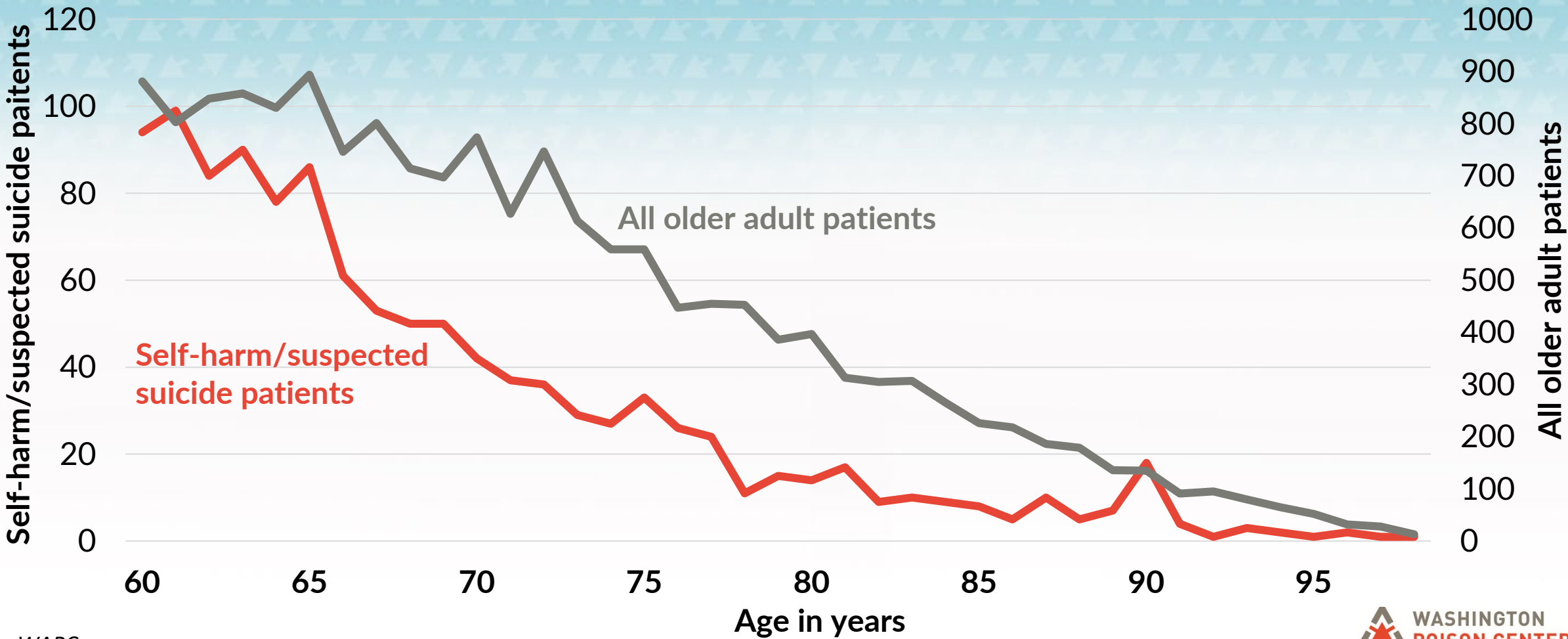
- Older adults are more likely to plan & to use more lethal means
 - Among people who attempt suicide: 1 in 4 older adults will die by suicide vs. 1 in 200 youths
 - Even if the older adult survives the attempt, they are less likely to recover from the effects
- Self-poisoning is more common among **female**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



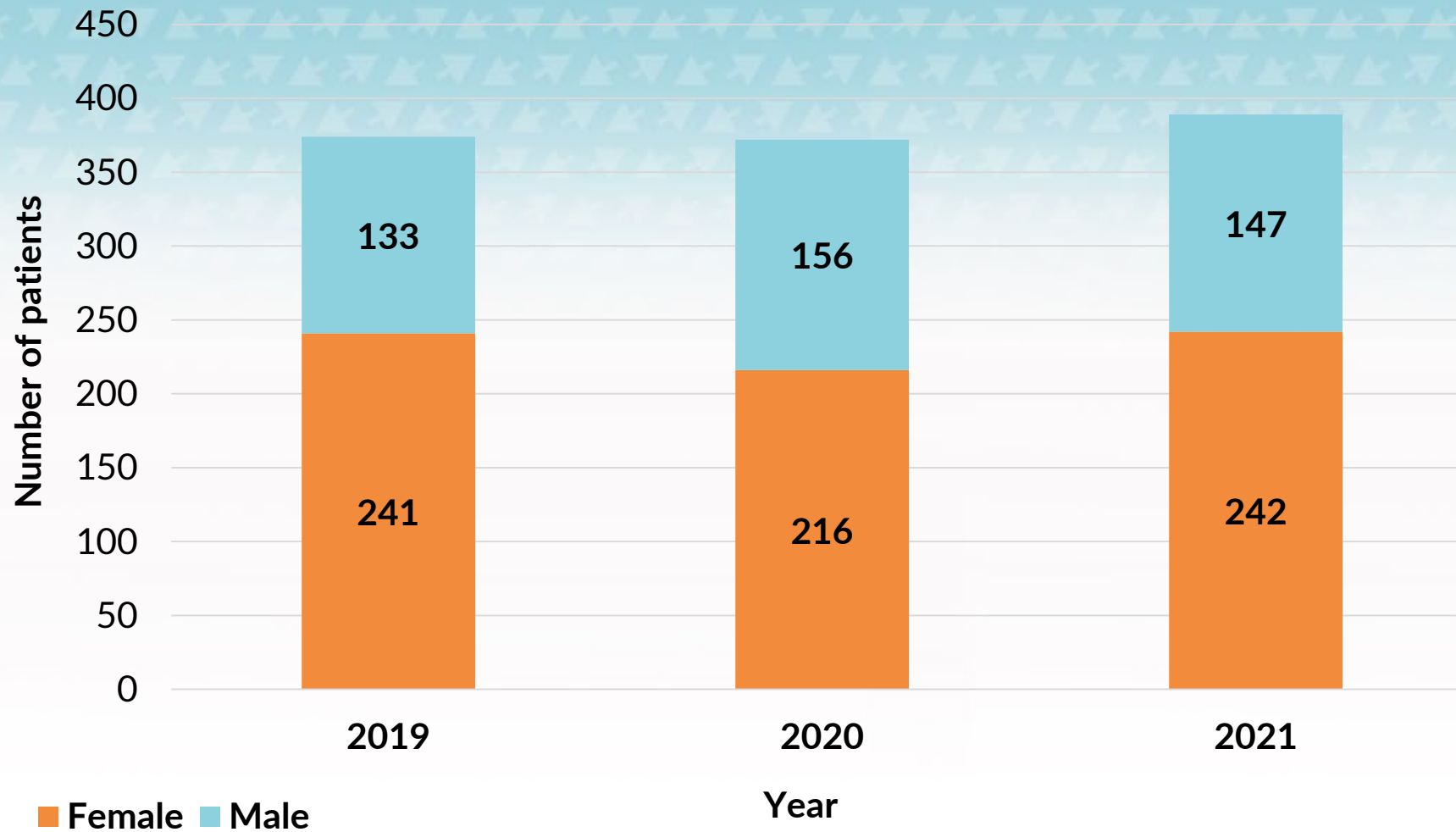
Source: WAPC

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)

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

Substance	Number of patients
Alcoholic beverage	219
Anti-anxiety drugs	185
Trazodone	129
Mood stabilizing drugs**	113
Acetaminophen	105

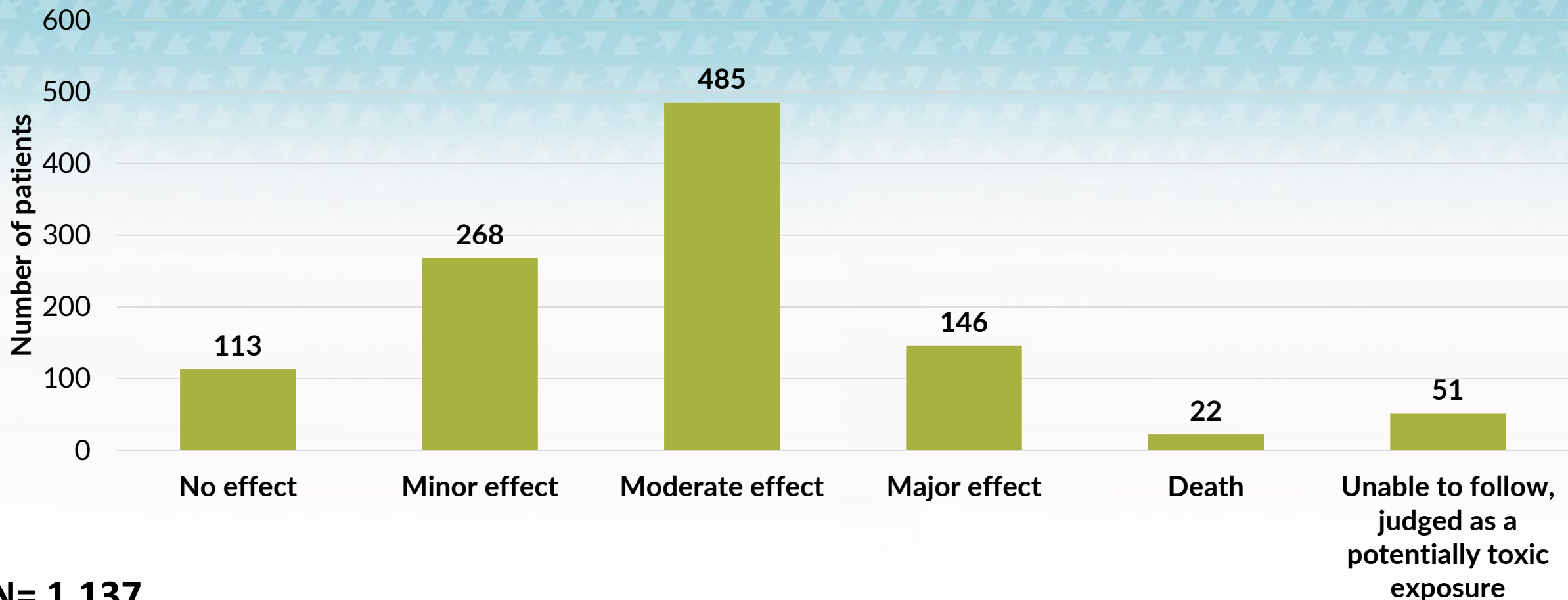
Source: WAPC

Patients may be exposed to more than one substance

**Mostly benzodiazepines*

***Atypical antipsychotics*

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



Brain: Becomes more sensitive to alcohol

Liver: Doesn't process alcohol as well

Stomach: Doesn't process alcohol as well

Kidneys: Don't filter alcohol as well

Body: Has less lean body mass to absorb alcohol. Has less water (in cells and elsewhere) to dilute alcohol.

Because of these and other physical changes, more alcohol stays in your system for a longer time. Your body is also more affected by alcohol now than it was when you were younger.

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

Percentage of THC and CBD in cannabis samples seized by the DEA from 1995-2019

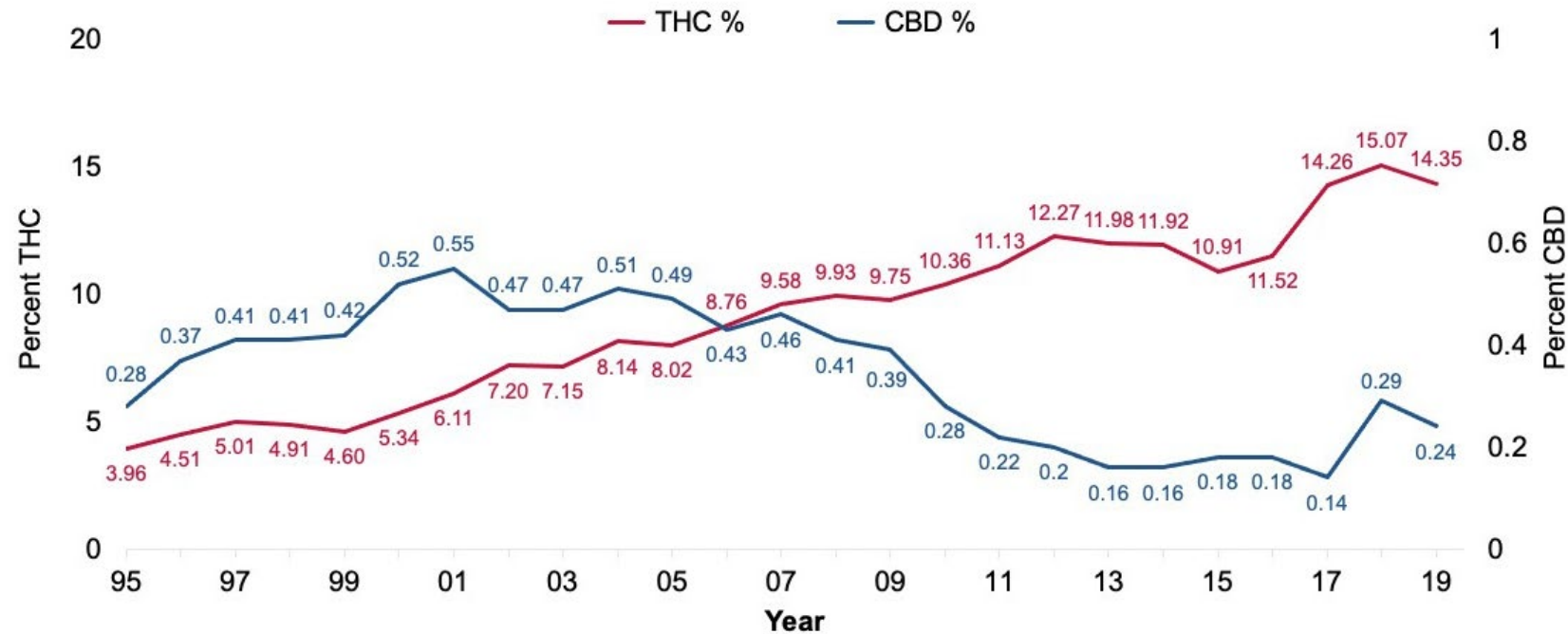


Image Source: <https://www.drugabuse.gov/drug-topics/marijuana/marijuana-potency>

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**

GENERIC NAMES OF POPULAR OPIOIDS



Image Source:

<https://www.springboardrecovery.com/opioid-prescription-addiction-generic-opioid-prescriptions/>

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?

Patient	Substance	Scenario	Demographics
<ul style="list-style-type: none">• Age• Gender• Weight• Medical History• Medication List	<ul style="list-style-type: none">• Product Name• Formulation• Strength• Amount• Duration	<ul style="list-style-type: none">• Why• How• Time• Symptoms• Treatments	<ul style="list-style-type: none">• Patient Name• Patient DOB• Caller Name• Phone Number• Zip Code

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



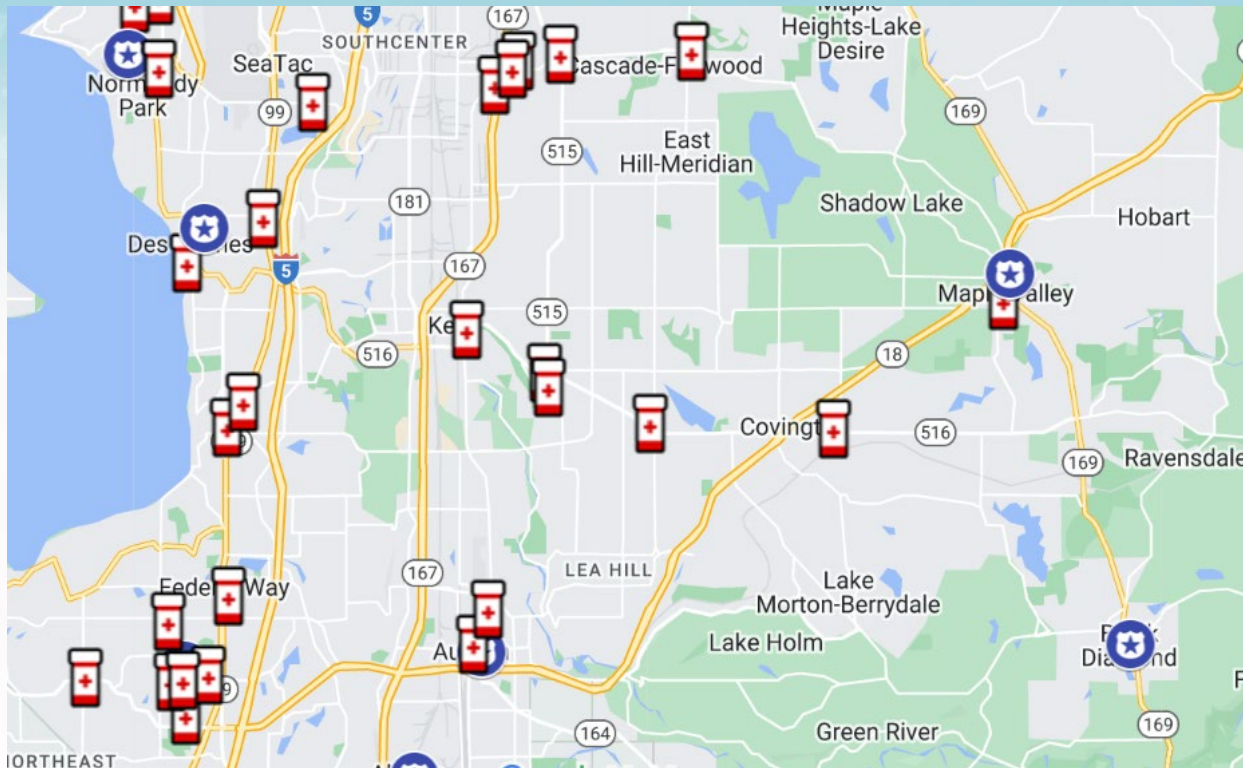
Strategies for older adults & their caregivers

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**



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

24/7/365

Free

HIPAA Compliant

260+ Languages

**THANK
YOU**

Scott Phillips, MD
sphillips@wapc.org

Meghan King, MPH
mking@wapc.org