

Medication Errors

What should be done if someone takes the wrong medication.

Wrong medication – response by DSPs.

When someone takes the wrong medication(s) it can have serious consequences, including death, depending on the medication and the dose.

It is recommended that a policy/procedure be in place to help guide staff's response should this occur.

At the very least, a medical provider, pharmacist, or Poison Control should be notified.

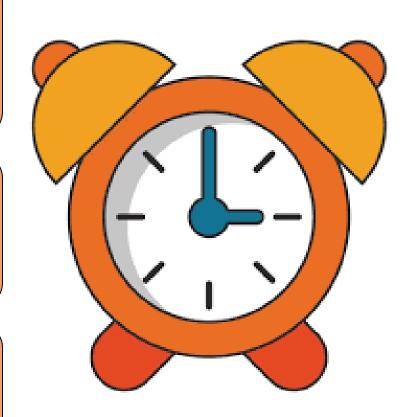
Usually, the best response is to have the person evaluated at the Emergency Department.

How long to monitor?

For most medications, it is recommended that a person be monitored for adverse effects for a minimum of 6 hours. The Emergency Department may send the person home at this point.

However, this may not be an adequate amount of time to monitor someone depending on the medication, other medications being taken by the individual, and how the individual metabolizes medications.

A safer practice would be to monitor the individual closely (every hour) for at least 12 to 24 hours depending on the medication that was ingested.



What to monitor?

Vital signs – is the oxygen saturation, blood pressure and heart rate at normal levels? Are they running a temperature? Take appropriate vital signs as indicated.

Breathing – is it fast, slow, shallow? Does it appear the person is struggling with breathing or short of breath? Make sure to check an oxygen saturation level.

Does the person appear dizzy or unsteady or complain of dizziness? Is the gait normal or unsteady? Are they vomiting?

What else to monitor?

Is the person confused, lethargic, agitated? Do they respond to you when you talk to them? Are they having any fluctuation in how alert they are, i.e. going from asleep to agitated and back again?

Is the person sweating or shaking? Do they have a tremor or appear very stiff in their movements?



Then what?

If new symptoms appear or symptoms worsen, the person should be reevaluated by medical personnel. This would usually be done at the Emergency Department.

Which medications require closer monitoring?

The following slides show broad categories of medications that are frequently prescribed and may cause problems if taken incorrectly. This list is not intended to be inclusive of all medications that may increase risk. New medications are released every year.

Noting or posting a list of the medications that are of concern in the med room or on the MAR will help guide staff's response should a mistake occur.



Antipsychotic medications

All antipsychotics can cause problems depending on dose and the combination with other medications.

Clozaril (clozapine) is often said to be the most toxic drug in this class.

 Since clozapine lasts a long time in the system, problems can surface, and death can occur well after 6 hours.

Problems associated with antipsychotics include:

- Agitation, alterations in consciousness
- Seizures
- Heart rhythm disturbances
- Respiratory depression, aspiration, pneumonia

Recommendation: monitor hourly for at least 24 hours.



Anticonvulsants

Anticonvulsant (anti-seizure) medications taken accidentally or in higher-than-normal doses can cause toxicity and death.

Common signs of toxicity are lethargy, dizziness, abnormal gait, and heart rhythm disturbances.

- Lamictal can cause a severe, life-threatening rash especially if a high dose is taken.
- Carbamazepine is known to interact with other drugs, which can increase its toxicity.
- Dilantin, Depakote, and phenobarbital also cause concern.

Recommendation: monitor hourly for at least 24 hours

Lithium can be a very toxic medication if taken accidentally or a higher-than-normal dose is taken by someone who regularly takes the medication.

Mood stabilizers -Lithium

Because lithium may take up to 24 hours to distribute into brain tissue, occurrence of acute toxicity symptoms may be delayed.

Symptoms include:

Tremor, unstable gait

Confusion, sedation

GI symptoms of vomiting and diarrhea

Abnormal heart rhythms

Coma and death

Recommendation: monitor hourly for at least 24 hours

Benzodiazepines

These medications, especially the longer acting ones like temazepam and clonazepam, can cause toxicity especially if taken with other medications.

Symptoms include:

Drowsiness

Dizziness, unsteadiness that can lead to falls

Respiratory depression

Recommendation: monitor hourly for a minimum of 12 hours

Opioids

Especially fentanyl, Dilaudid, morphine, oxycodone, methadone

All have a high risk for causing:

- Respiratory depression
- Sedation
- Falls

Worse symptoms can be expected if mixed with other medications especially benzodiazepines.

Recommendation: monitor hourly for 24 hours. Consider obtaining prescription for Narcan nasal spray for those on chronic opioids.





Antihypertensives

Especially long-acting medications, Beta blockers, amlodipine (Norvasc)

Most are taken only once daily thus stay in the system longer.

Toxic symptoms include:

- Irregular heartbeat
- Low blood pressure with lightheadedness or fainting
- Shortness of breath
- Changes in heartrate

These are especially concerning if the person taking it by mistake is already taking other heart medications.

Recommendation: monitor hourly for at least 24 hours.

Anticoagulants

Include: Coumadin (warfarin), Xarelto, Eliquis

Could increase bleeding risk.

Notify medical provider if the person is already taking Coumadin and gets the wrong dose as blood tests may be needed.

Monitor for falls, other bleeding risks for 12 hours.



What about medications that are prescribed for different reasons than their usual indication?



The name of the medication usually suggests the reason they are taking them. An example is an antipsychotic, a medication a person may be taking if they hear voices or have thoughts and beliefs that are not based in reality.

However, at times, medications are prescribed for symptoms that are different from what their name suggests. An important example is that of some antihypertensives (Clonidine, Inderal, Tenex, and Prazosin) which are sometimes used for impulsivity and aggression but not needed for blood pressure control. This will not be reflected on the prescription.

Regardless of the reason a medication is ordered, staff would follow the recommendations for medications in that category.



MEDICATION ERRORS AND MONITORING



Thank you. This power point is meant to give general guidance but any advice or orders from the medical provider must be followed.





Jean Justad, MD Medical Director DDP Michelle McCall, MD, Psychiatry 2024