

Medication Errors

What you should know if someone takes the wrong medication.

If someone accidentally takes the wrong medication or too much of a medication that is normally taken, it can have serious consequences, including death, depending on the medication and dose. DSPs must know how to respond immediately without needing to call a supervisor. At the very least, they should know to notify the medical provider, pharmacist or Poison Control to get advice. Most of the time, having the person evaluated at the emergency department is the best course of action.

Even if the person is seen at the emergency department, for many medications, it is recommended that the person be monitored for ill effects longer than the usual 6 hours that is commonly used as a guide. If the person is discharged from the emergency department, then staff should have a protocol in place to guide them on how to monitor that person. Depending on the medication taken, if it was mixed with other medications, and the person's rate of metabolism, it may take much longer than 6 hours for adverse reactions to be seen. In general, a safer practice would be for the person to be monitored closely for at least 12 to 24 hours after ingesting the medication.

Staff also need to know just what they should be monitoring. Simply looking at the person who is lying in bed through an open door is not adequate. Staff should monitor:

- ✓ Vital signs: is the oxygen saturation, blood pressure and heart rate at normal levels? Are they running a temperature? Staff should take appropriate vital signs as indicated by the symptoms the individual is showing as well as at least every 4 to 6 hours for the first day.
- ✓ Breathing – is it fast, slow, shallow? Does it appear the person is struggling with breathing or short of breath? An oxygen saturation level should be checked at least every few hours and any time the person appears to be having difficulty breathing.
- ✓ Does the person appear dizzy or unsteady or complain of dizziness? Is the gait normal or unsteady? Are they vomiting?
- ✓ Is the person confused, lethargic, agitated? Do they respond when someone talks 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?

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?

There are certain classes of medications that should be monitored more closely.

Antipsychotic medications:	
Olanzapine, quetiapine, risperidone, etc.	All antipsychotics can cause problems depending on dose and the combination with other medications. Problems associated with antipsychotics include: <ul style="list-style-type: none"> • Agitation, alterations in consciousness • Seizures • Heart rhythm disturbances • Respiratory depression, aspiration, pneumonia
Clozaril (clozapine)	Clozaril (clozapine) is often said to be the most toxic drug in this class. <ul style="list-style-type: none"> • Since clozapine lasts a long time in the system, problems can surface, and death can occur well after 6-hours.
Recommendation:	Monitor hourly for at least 24 hours
Anticonvulsants (anti-seizure medications):	
Dilantin, Depakote, Phenobarbital, etc.	All anticonvulsants can cause drowsiness, dizziness, heart rhythm disturbances.
Carbamazepine	Carbamazepine is known to interact with other drugs, which can increase its toxicity.
Lamictal (lamotrigine)	Lamictal can cause a severe, life threatening rash especially if a high dose is taken.
Recommendation:	Monitor hourly for at least 24 hours.
Mood stabilizers:	
Lithium	Lithium can be very toxic. Since it may take up to 24 hours to distribute into brain tissue, acute toxicity symptoms may be delayed. Symptoms include: <ul style="list-style-type: none"> • Tremor, unstable gait, confusion • Sedation, abnormal heart rhythms • GI symptoms of vomiting and diarrhea • Coma and death
Recommendation:	Monitor hourly for at least 24 hours.
Benzodiazepines:	
Especially long-acting benzodiazepines such as clonazepam, temazepam	Depending on dose and if mixed with other medications can cause drowsiness, dizziness, unsteadiness that can lead to falls, and respiratory depression.
Recommendation:	Monitor hourly for a minimum of 12 hours.

Opioids:	
fentanyl, Dilaudid, morphine, oxycodone, methadone	High risk for respiratory depression, sedation, increased fall risk especially long-acting drugs and higher potency ones. Higher risk if mixed with other medications such as benzodiazepines.
Recommendation:	Monitor hourly for at least 24 hours. Consider obtaining a prescription for Narcan nasal spray for anyone on chronic opioids.
Antihypertensives:	
Especially long-acting medications Beta blockers amlodipine (Norvasc) Some like Clonidine, Inderal, Tenex, and Prazosin are used for impulsivity and aggression and not for blood pressure	Most are taken only once daily thus stay in the system longer. Toxic symptoms include: <ul style="list-style-type: none"> • Irregular heartbeat • Low blood pressure with lightheadedness or fainting • Shortness of breath • Changes in heart rate 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:	
Coumadin (warfarin), Xarelto, Eliquis, etc.	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.
Recommendation:	Monitor for falls, other bleeding risks for 12 hours.

Most of the time, the name of the medication will be enough to know what recommendations to follow. However, at times, medications are prescribed for a different indication than usual. For example, some anti-hypertensive medications are prescribed for psychiatric symptoms such as impulsivity and aggression, not for blood pressure control. The recommendation for monitoring in such a case would still be that as listed under antihypertensives.

Make sure you communicate the incident, symptoms, etc. to the person's medical provider for additional orders which should be followed in addition to the above.