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## Watching for a Mental Health Side Effect

- Keep a journal and log changes in your mood, sleep, and appetite
- Update all medication lists with the date you started taking your medications
- Tell family or friends if you have started a medication that may cause mood or behavior change

## What is a Mental Health Side Effect (MHSE)?<sup>1-2</sup>

Medications, including those not for mental health, can have mental health side-effects (MHSEs). Persons living with mental illness may be at higher risk for these side effects. When starting or increasing the dose of a medication, watch for changes from your usual mood. Signs of MHSE can look like mental health disorders and can make it hard for your doctor to diagnose. It is important to tell your doctor or pharmacist if you're having any of the following symptoms and have made recent changes to your medications:

- Feelings of sadness or guilt; loss of interest in things you usually enjoy; changes in sleep, hunger, and weight; thoughts of death or suicide
- Feeling nervous, restless, or tense; extreme worry and trouble focusing; decreased sleep and hunger; increased blood pressure and heart rate; shaking and sweating
- Confusion and decreased focus; difficulty remembering and connecting thoughts; slowed movement and speech
- Seeing and hearing things that no one else can; racing thoughts; feeling restless, overly talkative, and active

## Risk Factors for Developing MHSEs with Medications<sup>1,3</sup>

- Young children and elderly persons
- Liver or kidney disease
- Women after giving birth
- People on many medications
- People living with mental illness
- Use of alcohol or street drugs
- High doses or long courses of medications

Table 1. Common Causes of MHSE<sup>3-5</sup>

Examples	Common Uses	Mental Health Side Effects	Things to Consider
Prednisone ( <i>Deltasone</i> ) Methylprednisone ( <i>Medrol</i> ) Dexamethasone ( <i>Decadron</i> )	Asthma, infection	Hearing voices, confusion, mood changes, depression	Seen in high doses or suddenly stopping
Testosterone ( <i>Testim, AndroGel, Androderm</i> ), Oxymetholone ( <i>Anadrol</i> )	Hormone replacement	Aggression, hearing voices, anger	More common in misuse
Estrogen ( <i>Estrace, Premarin</i> )	Hormone replacement	Anxiety, depression, mood changes	Higher risk in menopause
Levetiracetam ( <i>Keppra</i> ), Zonisamide ( <i>Zonegran</i> ), Phenobarbital ( <i>Luminal</i> )	Seizures	Aggression, anger, confusion, mood changes, hearing voices	Seen in high doses; may be more common in children
Cyclobenzaprine ( <i>Flexeril</i> ), Tizanidine ( <i>Zanaflex</i> )	Muscle spasms	Hearing voices	More common in elderly
Levofloxacin ( <i>Levaquin</i> ), Ciprofloxacin ( <i>Cipro</i> ), Metronidazole ( <i>Flagyl</i> ), Clarithromycin ( <i>Biaxin</i> ), Cefepime ( <i>Maxipime</i> )	Infections in lungs, ears, skin, etc.	Hearing voices, paranoia, confusion	More common in elderly
Levodopa-carbidopa ( <i>Sinemet</i> ), Amantadine ( <i>Symmetrel</i> ), Benzotropine ( <i>Cogentin</i> ), Bromocriptine ( <i>Parlodel</i> )	Parkinson's disease	Delirium, confusion, hearing voices, sleep problems	Higher risk in elderly and those with schizophrenia
Famotidine ( <i>Pepcid</i> ), Diphenhydramine ( <i>Benadryl</i> ), Cyproheptadine ( <i>Periactin</i> )	Heartburn, stomach upset, sleep, allergies	Delirium, confusion, depression	Higher risk in elderly and decreased kidney function
Cyclosporine ( <i>Sandimmune</i> ), Tacrolimus ( <i>Prograf</i> )	After an organ transplant	Hearing voices, confusion	Higher risk in kidney disease and with high doses
Efavirenz ( <i>Sustiva, Atrypa</i> ), Dolutegravir ( <i>Tivicay, Triumeq, Dovato</i> ), Rilpivirine ( <i>Edurant, Odefsey</i> )	HIV	Mood changes, anger, sleep problems, confusion, hearing voices	Less common with protease inhibitors like <i>Reyataz</i> and <i>Prezista</i>
Isotretinoin ( <i>Accutane</i> )	Acne	Depression, thoughts of suicide	Needs depression screening at start
Pseudoephedrine ( <i>Sudafed</i> )	Congestion	Hearing voices, mania, paranoia, sleep problems	Higher risk in children or high doses in adults
Caffeine ( <i>Vivarin</i> )	Sleepiness, headaches	Anxiety, sleep problems, anger	Seen in high doses and regular use, anxiety and anger if suddenly stopped

### When to Talk to Your Doctor

- If you or your family notice any major changes to your mood or behavior
- If you feel any severe symptoms of depression, are having thoughts of suicide, or harm to yourself or others
  - National Suicide Prevention Lifeline: 1-800-273-TALK (8255) or call 911



Go online to find more information and to view the references for this toolkit.

[aapp.org/515484](http://aapp.org/515484)

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