
METHAMPHETAMINE (Desoxyn) Fact Sheet [G]

Bottom Line:

Methamphetamine is highly addictive when used in its crystal form (“crystal meth”), because it causes an immediate and intense high when snorted or smoked. Its use is generally not recommended. Watch the television show “Breaking Bad” if you’re not convinced!

FDA Indications:

ADHD (children ≥ 6 years); obesity (adults and adolescents ≥ 12 years).

Dosage Forms:

Tablets (G): 5 mg.

Dosage Guidance:

ADHD (adults and children ≥ 6 years): Start 5 mg QAM–BID, \uparrow by 5 mg/day at weekly intervals to max 20 mg/day, divided BID.

Monitoring: ECG if history of cardiac disease.

Cost: \$\$\$\$

Side Effects:

- Most common: Anorexia, tachycardia, dizziness, insomnia, tremor, tics, restlessness, headache, constipation (decreased GI motility). Dental complications, such as poor dental hygiene, diffuse cavities, bruxism, and tooth wear, may develop with abuse.
- Serious but rare: See class warnings in chapter introduction.
- Pregnancy/breastfeeding: Limited data in pregnancy; likely safe in breastfeeding.

Mechanism, Pharmacokinetics, and Drug Interactions:

- Stimulant that inhibits reuptake of dopamine and norepinephrine.
- Metabolized primarily through CYP2D6 to active metabolite (amphetamine); $t_{1/2}$: 4–5 hours.
- Avoid use with MAOIs and antacids. Caution with 2D6 inhibitors, which may increase stimulant effects.

Clinical Pearls:

- High risk of abuse.
- Not widely used (DEA reports that there were only 8,000 prescriptions written in 2021). When prescribed for obesity, the recommendation is for short-term use only (ie, a few weeks) and as an adjunct to caloric restriction due to its high addiction and diversion potential.
- Methamphetamine’s CNS-stimulating effect is approximately equal to or greater than that of amphetamine but less than that of dextroamphetamine; less blood pressure elevation than with amphetamine.

Fun Facts:

Methamphetamine was originally used in nasal decongestants and bronchial inhalers (the levo-isomer is still utilized for these indications, sold over the counter as Vicks VapoInhaler, Equaline, and generics).