

**Master Psychopharmacology Program
Study Guide: Substance Use Disorders**

Subtopic	Benchmarks (You Should Be Able To)	Recommended Resources
Symptom Presentation and Assessment	<p>Define key terms related to abuse and reward</p> <p>Identify screening and diagnostic tools for evaluating presence of a substance use disorder</p> <p>List drugs of abuse in order of their abuse potential</p> <p>Identify common psychiatric comorbidities associated with substance use disorders</p>	<p>Stahl SM. Stahl's essential psychopharmacology, third edition. New York, NY: Cambridge University Press; 2008. (Chapter 19)</p> <p>National Institute on Alcohol Abuse and Alcoholism (NIAAA) Professional Education Materials</p>
Neurobiology of Reward	<p>Link naturally occurring brain substances to corresponding drugs of abuse</p> <p>Identify the final common pathway of reward</p> <p>Describe the hypothesized brain regions, circuits, and neurotransmitters implicated in the reactive reward system</p> <p>Describe the hypothesized brain regions, circuits, and neurotransmitters implicated in the reflective reward system</p> <p>Explain the interaction between the reactive and reflective reward systems and how this relates to goal-directed behavior and impulse control</p> <p>Explain the neurobiology of conditioning and compulsive use</p> <p>Compare and contrast the neurobiology underlying temptation and will power</p> <p>Explain the relevance of tonic versus phasic neurotransmission to risk of addiction</p>	<p>Schatzberg AF, Nemeroff CB. Textbook of psychopharmacology, fourth edition. Washington, DC: American Psychiatric Publishing, Inc.; 2009. (Chapter 49)</p> <p>Stahl SM. Stahl's essential psychopharmacology, third edition. New York, NY: Cambridge University Press; 2008. (Chapter 19)</p> <p>NEI's MOAs: Reward Conditioning</p>
Mechanisms of Drugs of Abuse	<p>Explain the short- and long-term effects of each drug of abuse on reward circuitry and receptors</p> <p>Explain the differential effects of mode of delivery on abuse potential</p> <p>Differentiate the mechanisms of action of methylphenidate, amphetamine, cocaine, and methamphetamine</p>	<p>Stahl SM. Stahl's essential psychopharmacology, third edition. New York, NY: Cambridge University Press; 2008. (Chapter 19)</p>



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Mechanisms of Treatments for SUD	<p>Differentiate the molecular actions of agonists, partial agonists, and antagonists at nicotinic receptors</p> <p>Identify and differentiate mechanisms to reduce craving and withdrawal for nicotine</p> <p>Identify and differentiate mechanisms to increase abstinence and/or reduce craving and withdrawal for alcohol</p> <p>Identify and differentiate mechanisms to reduce craving and withdrawal for opiates</p>	<p>Stahl SM. Stahl's essential psychopharmacology, third edition. New York, NY: Cambridge University Press; 2008. (Chapter 19)</p> <p>SUD medication prescribing information/package inserts.</p>
Clinical Characteristics of Treatments for SUD	<p>Identify currently available agents with evidence of efficacy in treating nicotine dependence</p> <p>Identify currently available agents with evidence of efficacy in treating alcohol abuse/dependence</p> <p>Identify currently available agents with evidence of efficacy in treating opiate dependence</p> <p>Explain the concept of reduced-risk drinking</p> <p>Identify the effective dose range and general titration requirements for each used to treat substance use disorders</p> <p>Identify notable side effects for each agent used to treat substance use disorders</p> <p>Identify any contraindications or major drug interactions for each agent used to treat substance use disorders</p> <p>Prioritize treatment order when substance abuse/dependence presents with comorbid psychiatric disorders</p> <p>Identify novel mechanisms and strategies being investigated for potential application to treatment of substance use disorders</p>	<p>Schatzberg AF, Nemeroff CB. Textbook of psychopharmacology, fourth edition. Washington, DC: American Psychiatric Publishing, Inc.; 2009. (Chapter 58)</p> <p>Stahl SM. Stahl's essential psychopharmacology, third edition. New York, NY: Cambridge University Press; 2008. (Chapter 19)</p> <p>Stahl SM. Essential psychopharmacology, the prescriber's guide, fourth edition. New York, NY: Cambridge University Press; 2011. (SUD medication chapters)</p> <p>Grady MM. Treatment options for patients with alcohol use disorder. PsychEd Up April 2011.</p> <p>SUD medication prescribing information/package inserts.</p> <p>NEI's Drills: The Case: 30-Year-Old With Bipolar Disorder, Alcohol Abuse and Eating Disorder</p> <p>The Case: 21-Year-Old Woman With Unstable Mood and Social Anxiety, and Substance Abuse</p> <p>NEI's Encore Presentations: A Common Comorbidity: Treating Psychiatric Disorders in the Face of Substance Use</p>



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Special Considerations	Identify SUD treatments for which dosing recommendations differ depending on age Explain recommendations for SUD treatment selection/maintenance in pregnant women Explain recommendations for SUD treatment selection/maintenance in women who are breastfeeding Identify SUD treatments for which dosing recommendations are different for individuals with medical complications	Stahl SM. Essential psychopharmacology, the prescriber's guide, fourth edition. New York, NY: Cambridge University Press; 2011. (SUD medication chapters) SUD medication prescribing information/package inserts.

