<table>
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<th>Subtopic</th>
<th>Benchmarks (You Should Be Able To)</th>
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| Symptom Presentation and Assessment | Differentiate pathological anxiety from normal anxiety  
Identify and describe symptoms of each anxiety disorder  
Identify symptoms that overlap among the different anxiety disorders  
Identify the unique symptoms that distinguish the different anxiety disorders | Additional Resources**  
| Neurobiology of Symptoms      | Associate each symptom of anxiety disorders with hypothesized brain regions and circuits  
Identify major neurotransmitters associated with fear and with worry  
Explain the steps involved in the normal stress response  
Explain deviations in the normal stress response under pathological conditions  
Explain the process of stress sensitization  
Explain the concepts of fear conditioning and fear extinction  
Identify genetic markers under investigation for their relevance to anxiety  
Recognize the environmental and genetic factors that can contribute to the development of anxiety disorders | Learning Activities*  
Fear Conditioning and Fear Extinction (CME animation)  
Early Life Adversity and Risk of Mental Illness (CME animation)  
Molecular and Neurobiological Aspects of Resilience (CME animation)  
Additional Resources**  
Stahl SM, Grady MM. Stahl's illustrated anxiety, stress, and PTSD. New York, NY: Cambridge University Press; 2010. (Chapter 1)  
The Neurobiology of Child Abuse and Neglect: Implications for the Pathophysiology and Treatment of Mood and Anxiety Disorders (CME video) |
### NEI's Master Psychopharmacology Program
**Study Guide: Anxiety Disorders†**

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| **Mechanisms of GABA-ergic Anxiolytics**     | Identify the four GABA receptor subtypes and explain GABA’s effects at each of them  
Differentiate between the GABA receptors involved in anxiety and those involved in sleep  
Explain the effects of benzodiazepines at GABA receptors  
Identify other mechanisms for modulating GABA neurotransmission to target anxiety symptoms | Additional Resources**  
| **Clinical Characteristics of GABA-ergic Anxiolytics** | Identify currently available GABA-ergic agents with evidence of efficacy in anxiety disorders  
Identify the effective dose range and general titration requirements for each GABA-ergic anxiolytic  
Identify notable side effects for each GABA-ergic anxiolytic  
Identify any contraindications or major drug interactions for each GABA-ergic anxiolytic  
Identify risks and benefits of long-term use of each GABA-ergic anxiolytic | Additional Resources**  
Stahl SM, Grady MM. Stahl's illustrated anxiety, stress, and PTSD. New York, NY: Cambridge University Press; 2010. (Chapter 4)  
Anxiolytic medication prescribing information/package inserts. |  

†The Anxiety Disorders component of the Master Psychopharmacology Program includes content on stressor-related disorders and obsessive-compulsive disorders.

*You may choose any 24 non-expired Learning Activities to complete the requirements of the Master Psychopharmacology Program. For the full list of Master Psychopharmacology Program requirements, please visit [http://www.neiglobal.com/Members/MPP/MPPOverview/tabid/307/Default.aspx](http://www.neiglobal.com/Members/MPP/MPPOverview/tabid/307/Default.aspx).

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http://cdn.neiglobal.com/content/mpp/studyguide/studyguide_anxiety.pdf
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| **Mechanisms of Serotonergic Anxiolytics** | Identify pre- and postsynaptic serotonin receptor subtypes and explain serotonin's effects at each of them  
Explain the consequences of antagonism at serotonin 2A and 2C receptors  
Explain the consequences of inhibition of the serotonin transporter  
Explain how serotonin 1A partial agonists have anxiolytic effects  
Identify the underlying mechanisms behind common side effects of serotonergic anxiolytics  
Describe how serotonergic agents can modulate BDNF and what relevance this may have to treatment | Additional Resources**  
| **Clinical Characteristics of Serotonergic Anxiolytics** | Identify currently available serotonergic agents with evidence of efficacy in anxiety disorders  
Explain the time course of therapeutic versus side effects  
Describe the clinically relevant receptor binding profiles and hypothesized corresponding clinical effects for each serotonergic anxiolytic  
Identify the effective dose range and general titration requirements for each serotonergic anxiolytic  
Differentiate among serotonergic anxiolytics in terms of risk of different side effects  
Identify any contraindications or major drug interactions for each serotonergic anxiolytic  
Identify risks and benefits of long-term use of each serotonergic anxiolytic | Additional Resources**  
Stahl SM, Grady MM. Stahl's illustrated anxiety, stress, and PTSD. New York, NY: Cambridge University Press; 2010. (Chapter 4)  
Anxiolytic medication prescribing information/package inserts. |

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http://cdn.neiglobal.com/content/mpp/studyguide/studyguide_anxiety.pdf
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<tr>
<td>Treatment Strategies</td>
<td>Identify appropriate monotherapies for each anxiety disorder</td>
<td>Additional Resources**&lt;br&gt;Stahl SM. Stahl's essential psychopharmacology, fourth edition. New York, NY: Cambridge University Press; 2013. (Chapter 9)</td>
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<td></td>
<td>Identify treatment methods for difficult cases of each anxiety disorder</td>
<td>Stahl SM, Grady MM. Stahl's illustrated anxiety, stress, and PTSD. New York, NY: Cambridge University Press; 2010. (Chapters 4–8)</td>
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<td></td>
<td>Rationalize preemptive treatment approaches for fear conditioning</td>
<td>This Month in Psychopharmacology, Anxiety Articles</td>
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<tr>
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<td>Rationalize treatment approaches for facilitating fear extinction</td>
<td>40-Year-Old Woman With High-Dose Benzodiazepine Use and Facial Flushing Triggered by Anxiety</td>
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<td>Identify novel mechanisms and strategies being investigated for potential application to anxiety treatment</td>
<td>44-Year-Old Single Mother With Debilitating Social Anxiety Disorder</td>
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<td>33-Year-Old With Anxiety and Phobia of Medications</td>
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<td>57-Year-Old Man With a &quot;Major Case of OCD&quot;</td>
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<td>Self-Assessment 2: Treatment-Resistant Mood and Anxiety Disorders (CME video)</td>
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</tr>
<tr>
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<td>Identify anxiolytic agents for which dosing recommendations are different for children and/or adolescents than they are for adults</td>
<td>77-Year-Old Woman With Treatment-Resistant Anxiety and History of Stroke (CME case)</td>
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<td>Explain recommendations for anxiolytic selection/maintenance in pregnant women</td>
<td>Additional Resources**</td>
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<tr>
<td></td>
<td>Identify anxiolytic agents for which dosing recommendations are different for the elderly than they are for younger adults</td>
<td>Stahl SM. Essential psychopharmacology, the prescriber's guide, fifth edition. New York, NY: Cambridge University Press; 2014.</td>
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<td>Identify anxiolytic agents for which dosing recommendations are different for individuals with medical complications</td>
<td>Anxiolytic medication prescribing information/package inserts.</td>
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<td>This Month in Psychopharmacology, Anxiety Articles</td>
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<td>12-Year-Old With OCD, Generalized Anxiety, and Depression</td>
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