

Sex and Gender Differences		AMWA		XX	
DEPRESSION					
Depression is a common but serious mood disorder causing severe symptoms that affect how a person feels, thinks, and handles daily activities.					
	FEMALE	ALL	MALE		
Prevalence	<ul style="list-style-type: none">Menses, pregnancy, and menopause-related hormonal changesPremenstrual Dysphoric Disorder (PMDD)Lower socio-economic statusMore likely to have experienced abuseGreater genetic vulnerability	<ul style="list-style-type: none">Adverse childhood eventsFamily historySubstance usePoor diet			
	<ul style="list-style-type: none">2x more common in women than men starting at 12 years old	<ul style="list-style-type: none">1 in 3 adults in AmericaMost common in ages 18-29	<ul style="list-style-type: none">Likely underdiagnosed		
Presentation	<ul style="list-style-type: none">Greater symptom severityMore likely to present with<ul style="list-style-type: none">increased appetite, weight gain, hypersomniasomatic symptoms (e.g. GI pain)anxiety or eating disordersMore likely to be chronic/recurrentEpisodic events may be triggered by hormonal changes<ul style="list-style-type: none">PMDDPeripartum/postpartum depressionGreater risk for cardiovascular disease than malesSuicide attempts more common	<ul style="list-style-type: none">Emotional symptoms: feelings of worthlessness or guilt, self-blame, hindered decision-making and concentration, loss of interest in activities, suicidal ideation.Physical symptoms: lack of energy, sleep disturbances, weight changes, pain, appetite changesCo-morbidities such as cardiovascular disease	<ul style="list-style-type: none">Less likely to seek helpMore likely to present with<ul style="list-style-type: none">Suicidal ideationMelancholic features such as decreased appetite and sleepViolence, aggressionEmotional suppressionSubstance use disordersHigher number of completed suicides and increased use of lethal means		
	<ul style="list-style-type: none">Linked to changes in expression of glutamate and serotonin receptorsDecrease in serotonin transmission compared to males may contribute to symptom severity	<ul style="list-style-type: none">Change in interaction between neurotransmitter availability & receptor regulation<ul style="list-style-type: none">Disturbance in serotonin, norepinephrine, dopamine, glutamate, and brain-derived neurotrophic factor (BDNF) activityVascular lesions may disrupt neural networks involved in emotion regulation	<ul style="list-style-type: none">Linked to changes in gene expression for brain-derived neurotrophic factor (BDNF) dependent genes		
Diagnostics/Screening	<ul style="list-style-type: none">Peripartum/postpartum depression<ul style="list-style-type: none">Screening: Edinburg Postnatal Depression ScalePMDD<ul style="list-style-type: none">Screening: Premenstrual Symptoms ToolDSM-5 Criteria for PMDD overlap partially with DSM-5 Criteria for Depression	<ul style="list-style-type: none">Screening: Patient Health Questionnaires (PHQ-2 and PHQ-9)DSM-5 Diagnostic criteria:<ul style="list-style-type: none">Symptoms daily for at least 2 weeks5+ symptoms, at least one being depressed mood or loss of interest in activities previously enjoyed (anhedonia)Must cause significant distress or interference with functioningSymptoms not related to medications, substances, or other medical conditions	<ul style="list-style-type: none">Men less likely to be diagnosed:<ul style="list-style-type: none">decreased self-report of symptomsinfluenced by societal expectations of masculinityCertain screening tools may not include symptoms frequently seen in males:<ul style="list-style-type: none">substance abuseviolence and aggressionstress perception and emotional suppression		
	<ul style="list-style-type: none">More likely to respond to selective-serotonin re-uptake inhibitors (SSRIs) than malesPremenopausal females respond less to TCAs than postmenopausal women	<ul style="list-style-type: none">1st line therapy: cognitive behavioral therapy1st line medication: selective-serotonin re-uptake inhibitors (SSRIs)Alternative medications: tricyclic antidepressants (TCAs), serotonin-norepinephrine re-uptake inhibitors (SNRIs), norepinephrine-dopamine re-uptake inhibitors (NDRIs), and others	<ul style="list-style-type: none">Less likely to receive treatmentCurrently there are no treatments aimed at BDNF		
Treatment					
<div><div><div>Created: 8/31/2023</div><div>Last Reviewed: 10/27/2025</div></div><div><div>To learn more or get involved, Visit us at amwa-doc.org/sghc or email us at sghc@amwa-doc.org Authors: Sarah Osborn, BS, Manrit Gill, Roma Matharu, Atira Anuramchand Faculty Mentors: Swati Shroff, MD, MS, FACP Graphics & Editing: Sarah Fountain, Khushi Patel, Sneha Chaturvedi Updated by: Sarah Osborn</div><div><div>Definitions & Disclaimers</div><div>References</div></div></div></div>					
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