

Specific Phobia

DSM-5-TR 300.29 | ICD-10-CM F40.2XX

Intense, circumscribed fear of a particular object or situation that provokes immediate anxiety and persistent avoidance.

LIFETIME PREVALENCE
~12.5% (US adults)

TYPICAL ONSET
Childhood; median age 7-10

SEX RATIO
2:1 female:male

COURSE
Chronic; remits with exposure

CLINICAL PICTURE

- Fear is immediate and cued: the sight of the object or the anticipation of the situation triggers full autonomic arousal within seconds.
- Five specifiers organize presentation: animal, natural environment, blood-injection-injury, situational, and other such as choking or vomiting.
- Blood-injection-injury phobia is unique in producing a biphasic vasovagal response with bradycardia, hypotension, and frank syncope.
- Most patients carry more than one phobia; the average is roughly three feared objects or situations rather than a single isolated fear.
- Impairment surfaces indirectly through skipped MRIs, deferred dental care, declined jobs requiring flights, or long-unvaccinated status.
- Adults recognize the fear as excessive, which separates it from delusional conviction but does nothing to reduce the avoidance itself.

DIAGNOSTIC CRITERIA AT A GLANCE

- Marked fear or anxiety about a specific object or situation, with the phobic stimulus almost always provoking immediate fear or anxiety.
- The object or situation is actively avoided or else endured with intense fear, and the reaction is out of proportion to actual danger posed.
- Persistent, typically lasting **six months or more**, and causing clinically significant distress or impairment in functioning.
- Not better explained by agoraphobia, OCD, PTSD, separation anxiety, or social anxiety disorder; code each distinct phobic stimulus separately.
- Children may express the fear through crying, tantrums, freezing, or clinging rather than reporting that it is disproportionate.

NEUROBIOLOGY & PHYSIOLOGY

- Amygdala-driven conditioned fear with rapid thalamo-amygdala signaling, while prefrontal extinction circuitry remains comparatively intact.
- Ventromedial prefrontal cortex and hippocampus mediate extinction learning and its context-dependent renewal after successful treatment.
- Blood-injection-injury phobia involves a vasovagal reflex with parasympathetic overshoot rather than the sympathetic pattern of other phobias.
- Heritability is roughly **30%**, with modest type specificity that is clearest in the animal and blood-injection-injury clusters.
- Preparedness theory holds that evolutionarily relevant stimuli such as snakes, spiders, and heights condition faster and extinguish more slowly.
- **D-cycloserine** trials and post-exposure consolidation windows illustrate the NMDA-dependent basis of extinction learning.

PSYCHOLOGICAL MECHANISMS

- Rachman's three pathways to fear acquisition: direct traumatic conditioning, vicarious observational learning, and transmission of threat information.
- Avoidance is negatively reinforced by immediate relief, which guarantees that disconfirming evidence is never actually encountered.
- Patients overestimate both the probability and the cost of harm, and disgust sensitivity adds to animal and blood-injury subtypes.
- Inhibitory learning theory reframes exposure as building new safety associations rather than as erasing the original fear memory.
- Expectancy violation, stimulus variability, and removal of safety signals predict durable outcomes better than within-session fear reduction.

DIFFERENTIAL & COMORBIDITY

- Distinguish from **agoraphobia**, where fear concerns escape difficulty across multiple situations, and from social anxiety, where fear is evaluative.
- PTSD avoidance follows an identifiable trauma, and OCD avoidance is tied to obsessions such as contamination rather than the object itself.
- Other anxiety disorders, depression, and substance use disorders commonly co-occur, and the phobia usually precedes them developmentally.
- Blood-injection-injury phobia demands the applied tension technique and syncope precautions during every exposure session.
- Assess medical avoidance directly, since untreated phobia can delay imaging, immunization, dental care, and cancer screening for years.

Treatment EVIDENCE-BASED MANAGEMENT

PHARMACOLOGIC

- No medication is approved or first-line for specific phobia; **exposure therapy** is the definitive and highly effective treatment.
- Benzodiazepines taken before an exposure session impair extinction learning and should be avoided during active phobia treatment.
- A single dose of **propranolol** or a benzodiazepine may be justified for one unavoidable procedure such as an urgent MRI or surgery.
- SSRIs are used only when a comorbid depressive or other anxiety disorder is present, not for the circumscribed phobia itself.
- **D-cycloserine 50 mg** given before exposure has mixed augmentation evidence and remains investigational rather than standard care.

PSYCHOTHERAPY

- **In-vivo exposure** guided by a graded hierarchy is first-line and produces remission in most patients within a handful of sessions.
- **One-session treatment** lasting up to three hours yields lasting remission in 80-90% of animal and injection phobias.
- **Virtual reality exposure** matches in-vivo outcomes for flying, heights, and spiders where live stimuli are impractical to arrange.
- Applied tension, using repeated muscle tensing to raise blood pressure, is the specific technique required for blood-injury phobia.
- Modeling and participant modeling accelerate progress in children and in highly avoidant adults who cannot begin exposure alone.

ADJUNCT & SUPPORTIVE

- Assign between-session exposure homework; therapist-directed practice consistently outperforms purely self-guided exposure on effect size.
- Plan for return of fear by scheduling booster exposures across varied contexts, times, and locations to limit renewal effects.
- Measure progress with subjective units of distress ratings and behavioral approach tests, not with self-report questionnaires alone.
- Involve parents to stop accommodation such as removing spiders or excusing needle procedures, which otherwise maintains child avoidance.
- Coordinate with dentists, radiologists, and phlebotomists so graded exposure can be built into the actual procedures being avoided.

CLINICAL PEARLS

- Exposure works by violating expectations, not by waiting for anxiety to drop within the session.
- Blood-injury phobia needs applied tension, not relaxation; relaxation deepens the vasovagal faint.
- Ask which medical or occupational tasks get skipped; that question reveals the true impairment.

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NOTE

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