

Intermittent Explosive Disorder

DSM-5-TR 312.34 | ICD-10-CM F63.81

Recurrent impulsive aggressive outbursts grossly out of proportion to provocation, unplanned, and followed by remorse and distress.

PREVALENCE

~2.7% 12-mo; ~7.3% lifetime

TYPICAL ONSET

Late childhood to teens

SEX RATIO

More common in males

COURSE

Chronic; years of episodes

CLINICAL PICTURE

- Outbursts begin abruptly, peak within minutes, and end within about 30 minutes, followed by remorse, embarrassment, and physical exhaustion.
- Aggression is grossly out of proportion to the trigger, which is often trivial: a spilled drink, a traffic maneuver, or a perceived slight.
- Presentation includes verbal tirades, property destruction such as punched walls and thrown objects, and assaults on people or animals.
- Between episodes the patient generally functions well, which is why partners describe two different people living in the same house.
- Legal, occupational, and relational consequences accumulate: arrests, job loss, divorce, and recurrent injuries to hands and knuckles.
- Patients rarely self-refer and usually arrive after a court mandate, a partner ultimatum, or an emergency visit for a fight-related injury.

DIAGNOSTIC CRITERIA AT A GLANCE

- Recurrent behavioral outbursts reflecting a failure to control aggressive impulses, satisfying either a high-frequency or a high-severity pattern.
- The high-frequency pattern requires verbal or nonassaultive physical aggression about twice weekly for 3 months without damage or injury.
- The high-severity pattern requires three outbursts causing damage, destruction, or physical injury to people or animals within 12 months.
- Aggression must be grossly disproportionate to provocation, impulsive rather than premeditated, and not committed for tangible gain or coercion.
- Chronological or developmental age must be at least 6 years, and other disorders, substances, and medical causes must be excluded first.

NEUROBIOLOGY & PHYSIOLOGY

- Serotonergic hypofunction is the best-replicated finding, with blunted prolactin response to fenfluramine and low CSF 5-HIAA in impulsive aggression.
- Amygdala hyperreactivity to angry faces with reduced orbitofrontal and anterior cingulate modulation defines the top-down control failure.
- Elevated peripheral inflammatory markers, including C-reactive protein and interleukin-6, correlate with lifetime aggression scores.
- Heritability estimates for impulsive aggression run near 40 to 50%, with tryptophan hydroxylase and MAOA variants repeatedly implicated.
- Childhood trauma, traumatic brain injury, and an elevated testosterone-to-cortisol ratio all raise reactive aggression risk.
- Medical burden is elevated in epidemiologic samples, including hypertension, coronary artery disease, stroke, and diabetes.

PSYCHOLOGICAL MECHANISMS

- Hostile attribution bias leads patients to read ambiguous social cues as deliberately provocative, priming an immediate aggressive response.
- Deficits in emotion regulation and distress tolerance mean anger escalates from baseline to maximum with no usable intermediate steps.
- Aggression is negatively reinforced when it ends the aversive arousal and positively reinforced whenever other people back down.
- Social learning in violent households models aggression as the normative and effective response to frustration and interpersonal conflict.
- Rumination between episodes and weak problem-solving skills sustain a chronically elevated baseline of irritability and readiness to react.

DIFFERENTIAL & COMORBIDITY

- Separate the instrumental, premeditated aggression of antisocial personality disorder and conduct disorder from these impulsive outbursts.
- Borderline personality disorder aggression is embedded in abandonment fear and pervasive affective instability across the clinical picture.
- Rule out mania, psychosis, substance intoxication or withdrawal, delirium, traumatic brain injury, and complex partial seizures.
- It is not diagnosed when disruptive mood dysregulation disorder criteria are met, and it should not be diagnosed before age 6.
- Comorbidity with depressive, anxiety, and substance use disorders is very high, and suicidal behavior risk is significantly elevated.

Treatment EVIDENCE-BASED MANAGEMENT

PHARMACOLOGIC

- Fluoxetine 20-60 mg/day** reduced impulsive aggression versus placebo in a randomized trial, though full remission occurred in a minority.
- Other **SSRIs** are used similarly, and 8 to 12 weeks at an adequate dose is needed before judging response on aggression outcomes.
- Divalproex** improved impulsive aggression within cluster B personality disorder, but the overall trial was negative; monitor LFTs and platelets.
- Anticonvulsant mood stabilizers such as **oxcarbazepine** or **carbamazepine**, and **lithium**, have supportive but limited evidence.
- Avoid **benzodiazepines**, which disinhibit and can worsen aggression, and reserve antipsychotics for comorbid psychosis or mania.

PSYCHOTHERAPY

- Cognitive-behavioral therapy** for anger over 12 weeks, in group or individual format, reduced aggression versus wait list in a randomized trial.
- Core components are relaxation training, cognitive restructuring of hostile attributions, and explicit relapse prevention planning.
- Dialectical behavior therapy** skills, particularly distress tolerance and emotion regulation, transfer well to impulsive aggression.
- Couples and family therapy addresses the interaction sequences that precede outbursts and repairs the relational damage that follows them.
- Anger monitoring logs recording trigger, intensity, duration, and consequence form the backbone of every effective treatment protocol.

ADJUNCT & SUPPORTIVE

- Safety planning comes first: assess weapon access, arrange firearm removal, and document intimate partner violence risk at every visit.
- Treat comorbid alcohol and stimulant use disorders concurrently, since intoxication is the most common proximal trigger for outbursts.
- Measure with the **Overt Aggression Scale-Modified** or the **Buss-Perry Aggression Questionnaire** to track frequency and severity over time.
- Court-mandated batterer intervention programs are not a substitute for treating impulsive aggression and show only modest effects.
- Address sleep loss, chronic pain, and anabolic steroid or stimulant use, all of which measurably lower the aggression threshold.

- ☆ **CLINICAL PEARLS**
- Impulsive and regretted, not planned and profitable: that is IED, not antisocial.
 - Ask about firearm access and partner violence before anything else.
 - Benzodiazepines disinhibit; they are the wrong drug for explosive anger.

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NOTE

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