

Ibuprofen

Classification

Analgesic

Antipyretic

Non-steroidal anti-inflammatory

Indications

■ PCP: Mild to moderate pain

■ ACP: Fever

Contraindications

Allergy to ibuprofen or other non-steroidal anti-inflammatory drugs

Active GI bleeding or ulcers

Pregnancy (first, second, or third trimesters)

Adult dosages

■ PCP: Mild to moderate pain

- 300-400 mg PO. May repeat every 4-6 hours. Maximum daily dose 1,200 mg/day.

■ ACP: Fever

- 300-400 mg PO. May repeat every 4-6 hours. Maximum daily dose 1,200 mg/day.

Pediatric Considerations And Dosing

[Follow weight-based dosing](#)

■ PCP: Mild to moderate pain

- 10 mg/kg PO. May repeat once after 6 hours. Maximum daily dose 40 mg/kg/day from all sources.

■ ACP: Fever

- For temperatures < 39°C: 5 mg/kg. May repeat every 4-6 hours.
- For temperatures > 39°C: 10 mg/kg. May repeat every 4-6 hours.
- Maximum daily dose 40 mg/kg/day from all sources.

Mechanism Of Action

Inhibits prostaglandin synthesis, reducing pain, inflammation, and fever.

Pharmacokinetics

Following oral administration:

- Analgesic effects:
 - Onset: 30 minutes
 - Peak: 1-2 hours
 - Duration: 4-6 hours

- Antipyretic effects:
 - Onset: 30 minutes to 2.5 hours
 - Peak: 2-4 hours
 - Duration: 6-8 hours

Ibuprofen is 80% absorbed through the gastrointestinal tract, metabolised in the liver, and excreted in the urine.

Adverse Effects

The most common adverse reactions involve gastrointestinal upset, ranging from abdominal discomfort to gastric ulceration, bleeding, and perforation. These events are unlikely following a single, prehospital dose of ibuprofen, but care should be exercised in patients with a recent history of NSAID use.

Overdose

The most common symptoms of NSAID overdose are gastrointestinal irritation and CNS depression. Care is primarily supportive.

Warning And Precautions

Alternative treatment options should be considered in patients with a history of gastrointestinal, renal, or significant cardiovascular disease: ibuprofen, and all NSAIDs, have the potential to cause significant adverse reactions. The risk appears to increase with dose, duration of therapy, and underlying risk factors.

Drug Interactions

As a class of medications, NSAIDs may raise blood pressure, limiting the effectiveness of antihypertensives.

