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Heart Attack

A heart attack happens when blood flow to part of the heart muscle stops, most often because a clot closes an artery. Know the signs, act fast and stay on your medicines afterward.

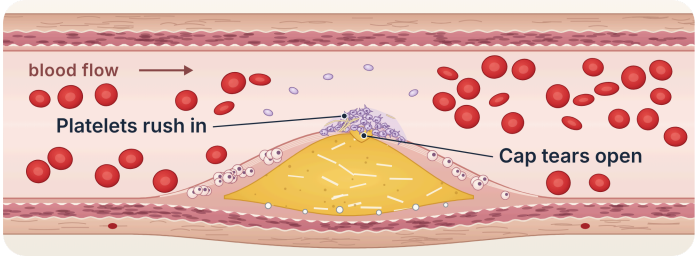
20 to 30
minutes or so of full blockage before heart muscle cells start dying

90 min
goal from hospital arrival to an open artery when it's fully blocked

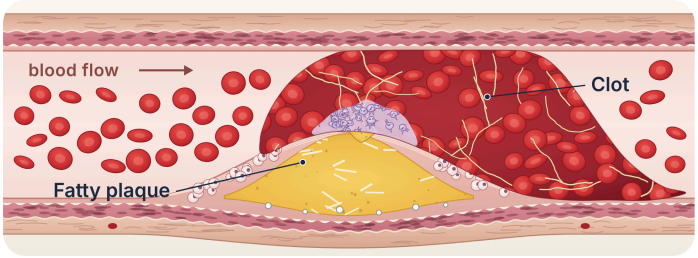
324 mg
of aspirin (four 81 mg baby aspirins) to chew after you call 911

WHAT HAPPENS INSIDE THE ARTERY

A cracked plaque turns into a clot



A plaque cracks, and platelets rush to seal it



Within minutes, the clot closes the artery

Over years, cholesterol and inflammatory cells build into plaque inside the artery wall, and you feel nothing. When a plaque cracks, your body sends platelets to seal it the way it would a cut finger, and that repair becomes a clot that closes the vessel in minutes. Heart muscle starts dying within 20 to 30 minutes and keeps dying over the next few hours, so every minute counts.

THE WARNING SIGNS

Symptoms vary from person to person

Chest pain or discomfort
Pressure, tightness or squeezing that can spread to the jaw, neck, arm or back. Pain that comes and goes still counts.

Other warning signs
Shortness of breath, sweating, nausea or vomiting, lightheadedness, unusual fatigue, or pain between the shoulder blades or in the upper belly.

Easy to mistake
Women more often have shortness of breath, nausea and back or jaw pain. Older adults and people with diabetes may feel no chest pain at all. These symptoms count too.

Any new or unusual chest discomfort deserves immediate evaluation. Unless you're allergic to aspirin or have been told not to take it, chew four 81 mg baby aspirins (324 mg) or one regular 325 mg tablet while you wait, plain rather than coated. It keeps the clot from growing on the way in.

Call 911

Don't drive yourself or have someone drive you. Paramedics can do an EKG on the spot, alert the cath lab and treat a dangerous heart rhythm on the way.

IN THE HOSPITAL AND AFTER

From the emergency room to recovery

STEMI	NSTEMI	Unstable angina
The artery is fully blocked	**Partly blocked, with muscle damage**	**No muscle damage on blood tests**
The goal is an open artery within 90 minutes of arrival	A catheter procedure within 24 hours if high risk, or within a few days if lower risk	Your heart's warning shot, watched closely and sometimes treated with a procedure later

An EKG comes first because it's fast and painless. A normal EKG doesn't rule out a heart attack, so it's repeated every few hours. Troponin, a protein found only in heart muscle cells, starts rising in the blood within 3 to 4 hours of an injury. A very early test can read normal and needs repeating.

OPENING THE ARTERY AND PROTECTING IT

Angioplasty and a stent	A thin tube is threaded from your wrist or groin up to the blockage. A balloon on its tip crushes the clot, and a stent, a small metal mesh tube, usually stays behind to hold the artery open.
Clot-busting drugs	Where angioplasty isn't available right away, a drug given through a vein dissolves the clot. It has to go in within 12 hours of symptoms starting, ideally within the first few.
Bypass surgery	When several arteries are severely blocked or the left main artery is critically narrowed, surgeons build new routes with vessels from your chest, leg or arm.
Medicines	Aspirin right away, which on its own cuts the risk of death about 20 to 25%, plus a second platelet drug such as clopidogrel, prasugrel or ticagrelor. A statin starts immediately whatever your cholesterol reads, usually atorvastatin 80 mg or rosuvastatin 40 mg. ACE inhibitors or ARBs limit harmful reshaping of the muscle afterward. Whether you need a beta-blocker depends on your pumping function. At an ejection fraction of 50% or higher it's no longer routine, from 40 to 49% it helps, and below 40% it's standard. You and your cardiologist decide.

RECOVERY

Cardiac rehab	12 to 36 sessions over 3 to 4 months, with supervised exercise, education, stress management and nutrition counseling. It's one of the best-supported treatments after a heart attack, yet fewer than half of eligible patients go.
Quitting smoking	Quitting after a heart attack lowers your risk of dying by roughly a third in studies of people with heart disease.
Your mood	Depression affects about a third of heart attack patients and raises the risk of another cardiac event and of death. Tell your doctor about lasting sadness, loss of interest, sleep trouble, fatigue or hopelessness.
Be ready	Learn the warning signs, find out which hospital near you runs a 24-hour cardiac catheterization lab, and keep your medication list where your family can find it.

AFTER A STENT

Keep taking both platelet drugs exactly as prescribed. After a heart attack the usual course is 12 months, and your cardiologist may switch you to one drug sooner to lower bleeding risk. Stopping on your own sharply raises the risk of a clot inside the stent.

READ THE FULL ARTICLE

damianrasch.com/heart-attack-guide

For education only, and not a substitute for advice from your own physician. Sources include the 2025 ACC/AHA acute coronary syndromes guideline, the Fourth Universal Definition of Myocardial Infarction (2018), the 2022 ACC chest pain decision pathway and the 2021 ACC/AHA/SCAI revascularization guideline.

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