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URL of this page: https://medlineplus.gov/heartattack.html

Heart Attack
Also called: MI, Myocardial infarction

Each year almost 800,000 Americans have a heart attack. A heart attack happens when blood flow to the heart suddenly becomes blocked. Without the blood coming in, the heart can't get oxygen. If not treated quickly, the heart muscle begins to die. But if you do get quick treatment, you may be able to prevent or limit damage to the heart muscle. That's why it's important to know the symptoms of a heart attack and call 911 if you or someone else is having them. You should call, even if you are not sure that it is a heart attack.

The most common symptoms in men and women are:

- **Chest discomfort.** It is often in center or left side of the chest. It usually lasts more than a few minutes. It may go away and come back. It can feel like pressure, squeezing, fullness, or pain [https://medlineplus.gov/chestpain.html] . It also can feel like heartburn or indigestion.
- **Shortness of breath.** Sometimes this is your only symptom. You may get it before or during the chest discomfort. It can happen when you are resting or doing a little bit of physical activity.
- **Discomfort in the upper body.** You may feel pain or discomfort in one or both arms, the back, shoulders, neck, jaw, or upper part of the stomach.

You may also have other symptoms, such as nausea, vomiting, dizziness, and lightheadedness. You may break out in a cold sweat. Sometimes women [https://medlineplus.gov/heartdiseaseinwomen.html] will have different symptoms then men. For example, they are more likely to feel tired for no reason.

The most common cause of heart attacks is coronary artery disease [https://medlineplus.gov/coronaryarterydisease.html] (CAD). With CAD, there is a buildup of cholesterol and other material, called plaque, on their inner walls or the arteries. This is atherosclerosis [https://medlineplus.gov/atherosclerosis.html] . It can build up for years. Eventually an area of plaque can rupture (break open). A blood clot [https://medlineplus.gov/bloodclots.html] can form around the plaque and block the artery.

A less common cause of heart attack is a severe spasm (tightening) of a coronary artery. The spasm cuts off blood flow through the artery.

At the hospital, health care providers make a diagnosis based on your symptoms, blood tests, and different heart health tests [https://medlineplus.gov/hearthealthtests.html] . Treatments may include medicines and medical procedures such as coronary angioplasty [https://medlineplus.gov/angioplasty.html] . After a heart attack, cardiac rehabilitation [https://medlineplus.gov/cardiacrehabilitation.html] and lifestyle changes can help you recover.

NIH: National Heart, Lung, and Blood Institute

Start Here

- Heart Attack [https://familydoctor.org/condition/heart-attack/?adfree=true] (American Academy of Family Physicians)
  Also in Spanish [https://es.familydoctor.org/condicion/ataque-cardiaco-es/?adfree=true]

- What Does It Mean to Have a Heart Attack? [https://www.health.harvard.edu/heart-health/what-does-it-mean-to-have-a-heart-attack] (Harvard Medical School)

- What Is a Heart Attack? [https://www.heart.org/en/health-topics/heart-attack/about-heart-attacks] (American Heart Association)
- What Is a Heart Attack? [https://www.nhlbi.nih.gov/health/heart-attack] NIH 🎥 (National Heart, Lung, and Blood Institute)
  Also in Spanish [https://www.nhlbi.nih.gov/es/salud/ataque-cardiaco]

Symptoms

- Heart Attack, Stroke and Cardiac Arrest Symptoms [https://www.heart.org/en/about-us/heart-attack-and-stroke-symptoms] (American Heart Association)

Diagnosis and Tests

- C-reactive Protein Test [https://www.mayoclinic.org/tests-procedures/c-reactive-protein-test/about/pac-20385228?p=1] (Mayo Foundation for Medical Education and Research)
- Creatine Kinase [https://medlineplus.gov/lab-tests/creatine-kinase/] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/creatina-cinasa/]
- Heart Health Tests: MedlinePlus Health Topic [https://medlineplus.gov/hearthealthtests.html] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/hearthealthtests.html]
- Lactate Dehydrogenase (LDH) Isoenzymes Test [https://medlineplus.gov/lab-tests/lactate-dehydrogenase-ldh-isoenzymes-test/] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/examen-de-isoenzimas-de-la-lactato-deshidrogenasa-ldh/]
- Lactate Dehydrogenase (LDH) Test [https://medlineplus.gov/lab-tests/lactate-dehydrogenase-ldh-test/] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-lactato-deshidrogenasa-ldh/]
- Troponin Test [https://medlineplus.gov/lab-tests/troponin-test/] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-troponina/]
- Warning Signs of a Heart Attack [https://www.heart.org/en/health-topics/heart-attack/warning-signs-of-a-heart-attack] (American Heart Association)

Prevention and Risk Factors

- *New!* Aspirin and Dual Antiplatelet Therapy [https://www.heart.org/en/health-topics/heart-attack/treatment-of-a-heart-attack/aspirin-and-heart-disease] (American Heart Association)
- Aspirin for Reducing Your Risk of Heart Attack and Stroke: Know the Facts [https://www.fda.gov/drugs/safe-use-aspirin/aspirin-reducing-your-risk-heart-attack-and-stroke-know-facts] (Food and Drug Administration)
- Can Vitamins Help Prevent a Heart Attack? [https://www.mayoclinic.org/diseases-conditions/heart-disease/expert-answers/prevent-heart-attack/FAQ-20058253?p=1] (Mayo Foundation for Medical Education and Research)
  Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/heart-disease/expert-answers/prevent-heart-attack/faq-20058253?p=1]
- Halting Heart Attack and Stroke [https://newsinhealth.nih.gov/2024/12/halting-heart-attack-stroke] NIH (National Institutes of Health)
  Also in Spanish [https://salud.nih.gov/recursos-de-salud/nih-noticias-de-salud/detener-un-ataque-al-corazon-y-un-accidente-cerebrovascular]
- How to Prevent Heart Disease: MedlinePlus Health Topic [https://medlineplus.gov/howtopreventheartdisease.html] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/howtopreventheartdisease.html]
- Lifestyle Changes to Prevent a Heart Attack [https://www.heart.org/en/health-topics/heart-attack/life-after-a-heart-attack/lifestyle-changes-for-heart-attack-prevention] (American Heart Association)

Treatments and Therapies

- Angioplasty: MedlinePlus Health Topic [https://medlineplus.gov/angioplasty.html] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/angioplasty.html]
- Blood Thinners: MedlinePlus Health Topic [https://medlineplus.gov/bloodthinners.html] NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/bloodthinners.html]

Living With

- Cardiac Rehabilitation: MedlinePlus Health Topic [https://medlineplus.gov/cardiacrehabilitation.html]
  NIH (National Library of Medicine)
  Also in Spanish [https://medlineplus.gov/spanish/cardiacrehabilitation.html]

- Heart Attack Recovery Questions and Answers [https://www.heart.org/en/health-topics/heart-attack/life-after-a-heart-attack/heart-attack-recovery-faqs] (American Heart Association)

- How Will I Recover from My Heart Attack? [https://www.heart.org/-/media/files/health-topics/answers-by-heart/how-will-i-recover-from-my-heart-attack.pdf] *Easy-to-Read* (American Heart Association) - **PDF**

- When You Visit Your Doctor: After a Heart Attack [https://www.health.harvard.edu/heart-health/when-you-visit-your-doctor-after-a-heart-attack] (Harvard Medical School)

Related Issues

- Dressler Syndrome [https://www.mayoclinic.org/diseases-conditions/dresslers-syndrome/symptoms-causes/syc-20371811?p=1] (Mayo Foundation for Medical Education and Research)
  Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/dresslers-syndrome/symptoms-causes/syc-20371811?p=1]

- Drug-Eluting Stents: Do They Increase Heart Attack Risk? [https://www.mayoclinic.org/diseases-conditions/coronary-artery-disease/in-depth/drug-eluting-stents/ART-20044911?p=1] (Mayo Foundation for Medical Education and Research)
  Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/coronary-artery-disease/in-depth/drug-eluting-stents/art-20044911?p=1]

- Heart Attack and Sudden Cardiac Arrest Differences [https://www.heart.org/en/health-topics/heart-attack/about-heart-attacks/heart-attack-or-sudden-cardiac-arrest-how-are-they-different] (American Heart Association)
  Also in Spanish [https://www.heart.org/es/health-topics/heart-attack/about-heart-attacks/heart-attack-or-sudden-cardiac-arrest-how-are-they-different]

Specifics

- Acute Coronary Syndrome [https://www.heart.org/en/health-topics/heart-attack/about-heart-attacks/acute-coronary-syndrome] (American Heart Association)

- Silent Heart Attack: What Are the Risks? [https://www.mayoclinic.org/diseases-conditions/heart-attack/expert-answers/silent-heart-attack/FAQ-20057777?p=1] (Mayo Foundation for Medical Education and Research)
  Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/heart-attack/expert-answers/silent-heart-attack/faq-20057777?p=1]

- What Is Cardiogenic Shock? [https://www.nhlbi.nih.gov/health/cardiogenic-shock] **NIH** (National Heart, Lung, and Blood Institute)
  Also in Spanish [https://www.nhlbi.nih.gov/es/salud/choque-cardiogenico]

Test Your Knowledge

- Are You At Risk For a Heart Attack? [https://medlineplus.gov/ency/quiz/000195_60.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/quiz/000195_113.htm]

Statistics and Research

- Heart and Stroke Statistics [https://www.heart.org/en/about-us/heart-and-stroke-association-statistics] (American Heart Association)

- Heart Attack Research [https://www.nhlbi.nih.gov/research/heart-attack] **NIH** (National Heart, Lung, and Blood Institute)
  Also in Spanish [https://www.nhlbi.nih.gov/es/investigaciones/ataque-card%C3%ADaco]

- New Research from Emory University May Revolutionize How Stroke, Heart Attack, Related Blood-Clotting Conditions Are Treated [https://news.emory.edu/stories/2025/04/hs_blood_clot_conditions_04-04-2025/story.html] (Emory University)

- Risk Score Offers New Way to Assess the Impact That Stress Can Have on the Heart [https://www.nhlbi.nih.gov/news/2025/risk-score-offers-new-way-assess-impact-stress-can-have-heart] **NIH** (National Heart, Lung, and Blood Institute)

- Why Mental Stress Can Take a Toll on the Heart [https://www.nhlbi.nih.gov/news/2024/why-mental-stress-can-take-toll-heart] **NIH** (National Heart, Lung, and Blood Institute)

Clinical Trials

- ClinicalTrials.gov: Myocardial Infarction [https://clinicaltrials.gov/search?cond=%22Myocardial+Infarction%22&aggFilters=status:not%20rec] **NIH** (National Institutes of Health)

Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: Enhancing self-care in post-MI patients: a family-supported educational intervention based on... [https://www.ncbi.nlm.nih.gov/pubmed/40670952]

- Article: Educational Attainment Level and Risk of Mortality and Cardiopulmonary Outcomes in... [https://www.ncbi.nlm.nih.gov/pubmed/40530474]

- Article: Secondary analysis of the EMPACT-MI trial reveals cardiovascular-kidney efficacy and safety... [https://www.ncbi.nlm.nih.gov/pubmed/40514435]

- Heart Attack -- see more articles [https://pubmed.ncbi.nlm.nih.gov/?term=%22Myocardial+Infarction%22%5Bmajr%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bedat%5D+AND+%28patient+education+handout%5Bpt%5D+OR+guideline%5Bpt%5D+OR+clinical+trial%5Bpt%5D%29++NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+]

Reference Desk

- Heart Anatomy [https://www.texasheart.org/heart-health/heart-information-center/topics/heart-anatomy/] (Texas Heart Institute)
  Also in Spanish [https://www.texasheart.org/heart-health/heart-information-center/topics/anatomia-del-corazon/]

- Heart Information Center [https://www.texasheart.org/heart-health/heart-information-center/] (Texas Heart Institute)
  Also in Spanish [https://www.texasheart.org/heart-health/heart-information-center/topics/glosario-de-terminologia-cardiovascular/]

- How the Heart Works [https://www.nhlbi.nih.gov/health/heart] **NIH** (National Heart, Lung, and Blood Institute)
  Also in Spanish [https://www.nhlbi.nih.gov/es/salud/corazon]

Find an Expert

- American Heart Association [https://www.heart.org/en/]

- National Heart, Lung, and Blood Institute [https://www.nhlbi.nih.gov/] **NIH**
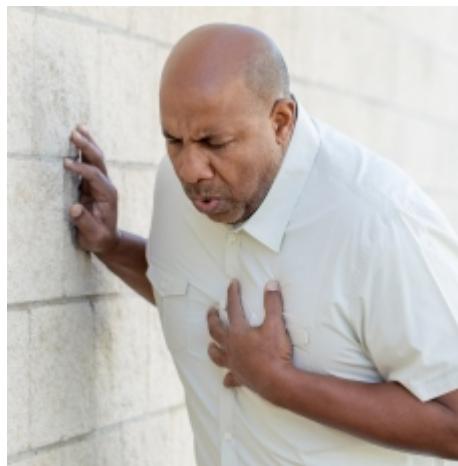
Women

- Calcium Supplements: A Risk Factor for Heart Attack? [https://www.mayoclinic.org/diseases-conditions/heart-attack/expert-answers/calcium-supplements/FAQ-20058352?p=1] (Mayo Foundation for Medical Education and Research)
  Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/heart-attack/expert-answers/calcium-supplements/faq-20058352?p=1]

- Heart Attack and Women [https://womenshealth.gov/heart-disease-and-stroke/heart-disease/heart-attack-and-women] (Department of Health and Human Services, Office on Women's Health)
  Also in Spanish [https://espanol.womenshealth.gov/heart-disease-and-stroke/heart-disease/heart-attack-and-women]

- Heart Attack Symptoms in Women [https://www.heart.org/en/health-topics/heart-attack/warning-signs-of-a-heart-attack/heart-attack-symptoms-in-women] (American Heart Association)

- Make the Call, Don't Miss a Beat (Heart Attack Information for Women) [https://womenshealth.gov/heart-attack] (Department of Health and Human Services, Office on Women's Health)

Older Adults

- Coronary Artery Disease (Heart Attack) [https://www.healthinaging.org/a-z-topic/coronary-artery-disease-heart-attack] (American Geriatrics Society)

Patient Handouts

- Being active after your heart attack [https://medlineplus.gov/ency/patientinstructions/000093.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000093.htm]

- Cardiac catheterization - discharge [https://medlineplus.gov/ency/patientinstructions/000096.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000096.htm]

- Heart attack [https://medlineplus.gov/ency/article/000195.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/article/000195.htm]

- Heart attack - discharge [https://medlineplus.gov/ency/patientinstructions/000090.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000090.htm]

- Learn What a Heart Attack Feels Like
  [https://www.nhlbi.nih.gov/sites/default/files/publications/Learn%20What%20a%20Heart%20Attack%20Feels%20Like_October%202020_Final.pdf] NIH⟩ *Easy-to-Read* (National Heart, Lung, and Blood Institute) - **PDF**

- Troponin test [https://medlineplus.gov/ency/article/007452.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/article/007452.htm]

MEDICAL ENCYCLOPEDIA

Acute coronary syndrome [https://medlineplus.gov/ency/article/007639.htm]

Apolipoprotein B100 [https://medlineplus.gov/ency/article/003502.htm]

Apolipoprotein CII [https://medlineplus.gov/ency/article/003505.htm]

Being active after your heart attack [https://medlineplus.gov/ency/patientinstructions/000093.htm]

Cardiogenic shock [https://medlineplus.gov/ency/article/000185.htm]

CPK isoenzymes test [https://medlineplus.gov/ency/article/003504.htm]

Creatine phosphokinase test [https://medlineplus.gov/ency/article/003503.htm]

Heart attack [https://medlineplus.gov/ency/article/000195.htm]

Heart attack - discharge [https://medlineplus.gov/ency/patientinstructions/000090.htm]

Heart attack - what to ask your doctor [https://medlineplus.gov/ency/patientinstructions/000231.htm]

Heart attack first aid [https://medlineplus.gov/ency/article/000063.htm]

Heart disease and intimacy [https://medlineplus.gov/ency/patientinstructions/000540.htm]

Lactate dehydrogenase test [https://medlineplus.gov/ency/article/003471.htm]

LDH isoenzyme blood test [https://medlineplus.gov/ency/article/003499.htm]

Lipoprotein-a [https://medlineplus.gov/ency/article/007262.htm]

Myoglobin blood test [https://medlineplus.gov/ency/article/003663.htm]

Myoglobin urine test [https://medlineplus.gov/ency/article/003664.htm]

Pericarditis - after heart attack [https://medlineplus.gov/ency/article/000166.htm]

Thrombolytic drugs for heart attack [https://medlineplus.gov/ency/article/007488.htm]

Thrombolytic therapy [https://medlineplus.gov/ency/article/007089.htm]

Troponin test [https://medlineplus.gov/ency/article/007452.htm]

Related Health Topics

Angina [https://medlineplus.gov/angina.html]

Cardiac Rehabilitation [https://medlineplus.gov/cardiacrehabilitation.html]

Coronary Artery Bypass Surgery [https://medlineplus.gov/coronaryarterybypasssurgery.html]

Coronary Artery Disease [https://medlineplus.gov/coronaryarterydisease.html]

Heart Diseases [https://medlineplus.gov/heartdiseases.html]

Heart Health Tests [https://medlineplus.gov/hearthealthtests.html]

National Institutes of Health

The primary NIH organization for research on *Heart Attack* is the National Heart, Lung, and Blood Institute [http://www.nhlbi.nih.gov/]

Other Languages

Find health information in languages other than English [https://medlineplus.gov/languages/heartattack.html] on *Heart Attack*

NIH MedlinePlus Magazine

Heart Attacks [https://magazine.medlineplus.gov/article/heart-attacks]

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