

Fatigue and reduced exercise tolerance

Section 1 of 6: What is fatigue or reduced exercise tolerance?

Understand low energy and reduced exercise tolerance, possible causes, warning signs, testing, and treatment.

What should I do now?

Call 911

Call 911 for new or unexplained chest pressure that persists or returns, severe trouble breathing, collapse without normal recovery, or sudden face/arm weakness or trouble speaking. Do not drive yourself.

Contact your care team

Contact your care team for persistent or worsening fatigue or a meaningful decline in your usual activity.

Keep your care plan

Record how symptoms affect daily tasks, and review sleep and medications with your clinician.

SECTION 1

What is fatigue or reduced exercise tolerance?

Fatigue is a lack of energy or unusual exhaustion. Reduced exercise tolerance means that activities you could previously manage now require more effort or more rest.

You may notice shorter walking distances, difficulty climbing stairs, or needing breaks during household tasks. Fatigue differs from simply

feeling sleepy, although they can overlap.

A persistent or unexplained change should be evaluated. It does not automatically mean heart disease, and it should not simply be dismissed as aging.

Fatigue and reduced exercise tolerance

Section 2 of 6: Possible causes

Understand low energy and reduced exercise tolerance, possible causes, warning signs, testing, and treatment.

SECTION 2

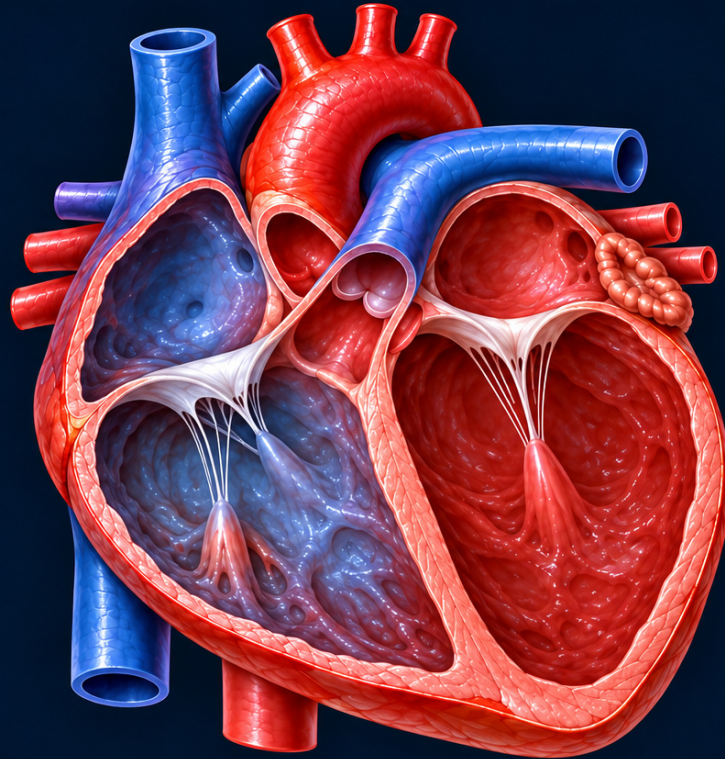
What heart problems can cause low energy?

Heart problems can reduce stamina by affecting pumping, filling, blood supply, or rhythm. More than one cause may be present.

Heart failure: weaker pumping or difficulty filling

A weakened heart may struggle to meet the body's needs during activity. Heart failure can also occur when the heart squeezes normally but does not relax and fill well.

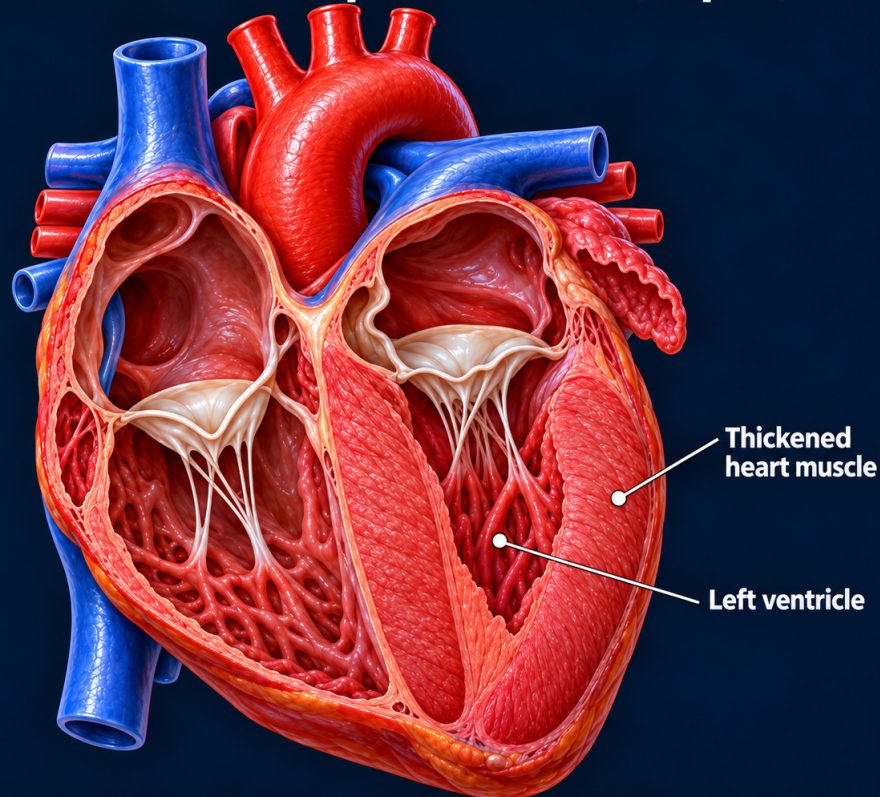
Heart failure with reduced EF



Enlarged ventricles • Weaker pumping

Reduced EF: weaker pumping can contribute to fatigue and reduced exercise tolerance.

Heart failure with preserved EF (HFpEF)



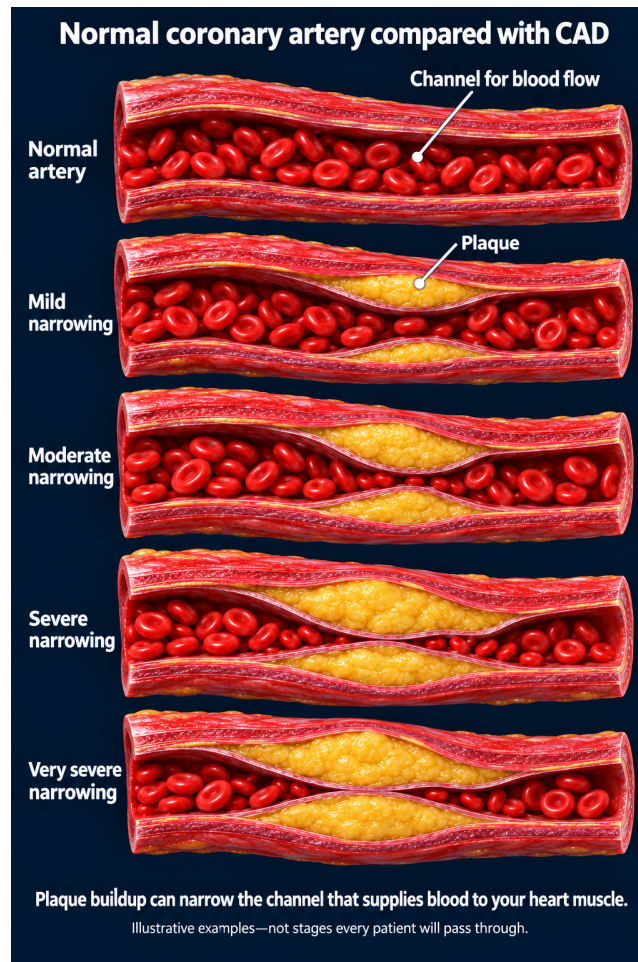
Preserved squeezing strength • Difficulty relaxing and filling

One example of HFpEF; not every patient has thickened heart muscle.

Preserved EF: difficulty relaxing and filling can also reduce stamina. Not every patient has thickened heart muscle.

Coronary artery disease: reduced blood supply

Narrowed coronary arteries can limit oxygen-rich blood reaching the heart muscle, particularly during exertion. Some patients notice breathlessness or reduced stamina rather than obvious chest pain.



Plaque can limit blood flow when the heart needs more oxygen during activity. Fatigue alone does not establish this diagnosis.

Valve disease: restricted forward flow or a leak

A significantly narrowed valve can obstruct blood flow. A significant leak allows some blood to move backward and adds work for the heart. Either can contribute to fatigue and breathlessness.

Normal valve vs. narrowed valve

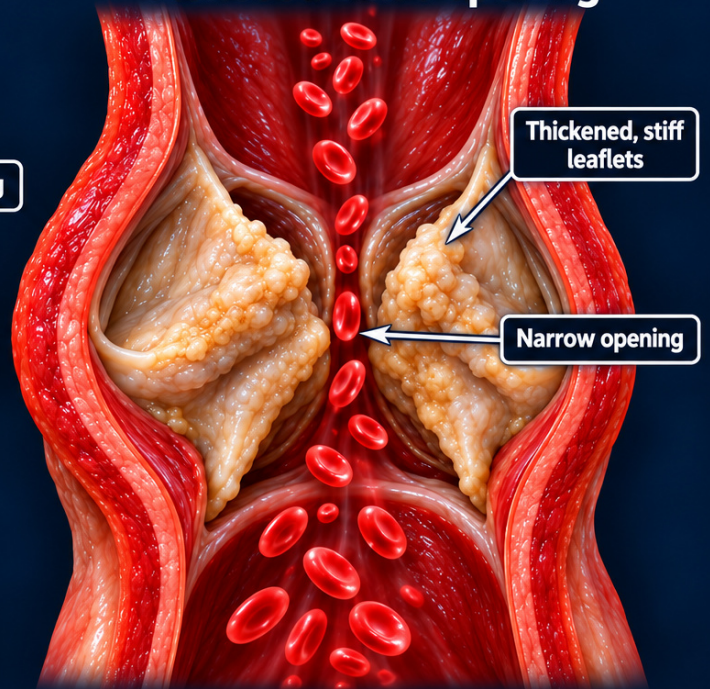
Normal valve opening



Wide opening

The valve opens fully so blood can move forward easily.

Stenosed valve opening



Thickened, stiff leaflets

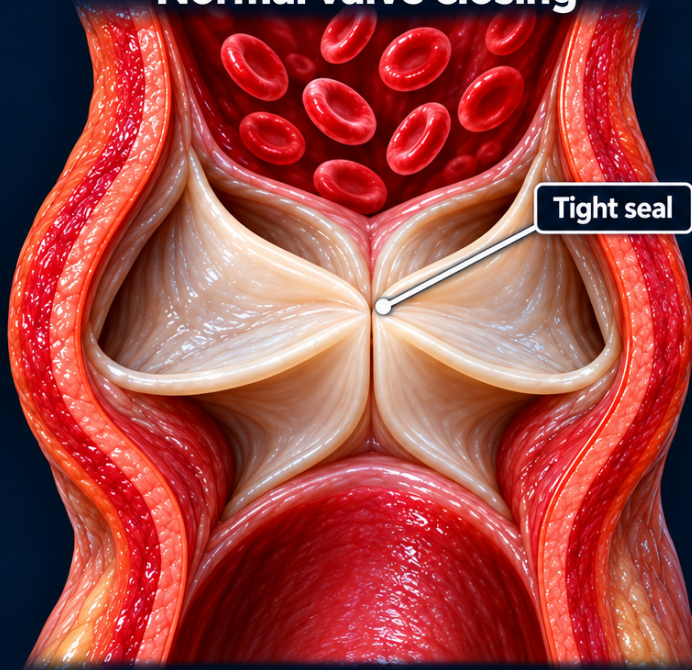
Narrow opening

The valve cannot open fully, restricting blood flow.

Stenosis: a narrowed valve limits forward flow.

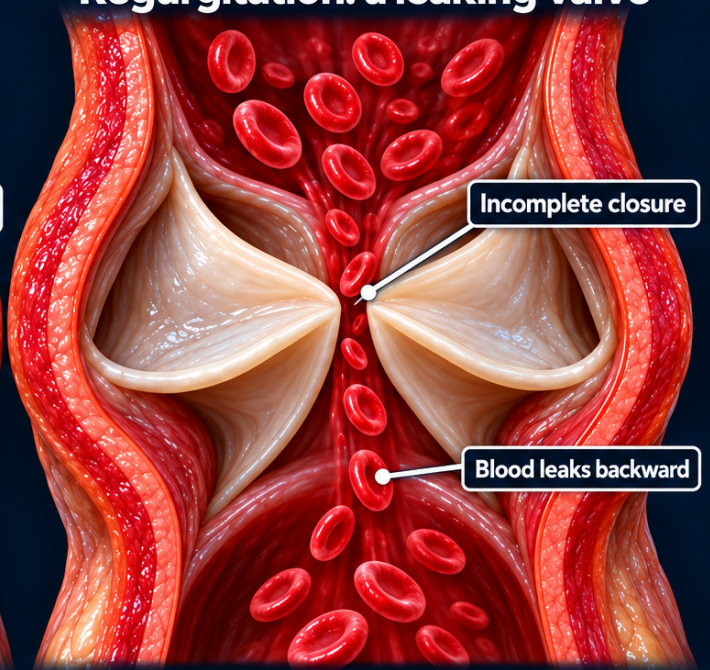
Normal valve vs. leaking valve

Normal valve closing



The valve closes tightly to prevent blood from flowing backward.

Regurgitation: a leaking valve



The valve does not seal tightly, allowing blood to leak backward.

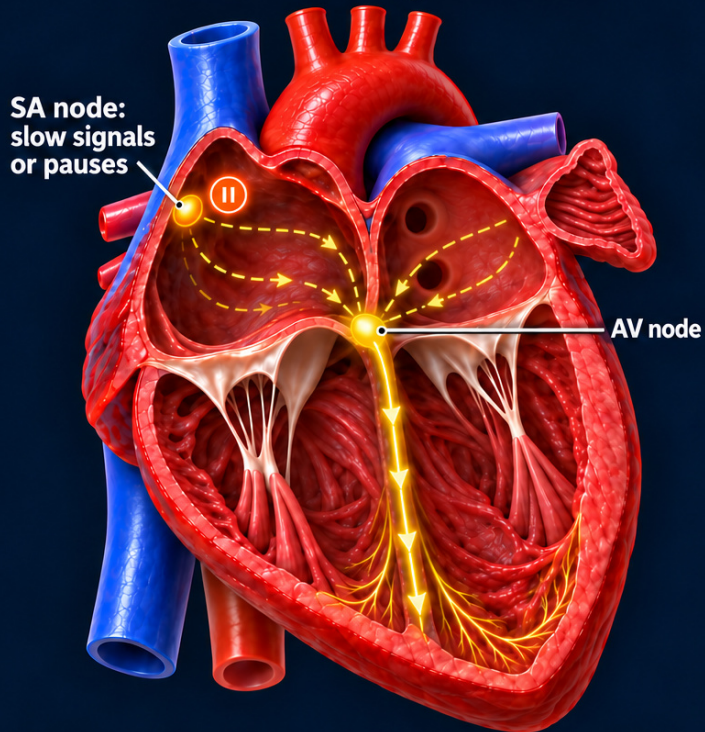
Simplified examples of valve closure.

Regurgitation: a leaking valve allows blood to flow backward.

Slow heart rhythms and heart block

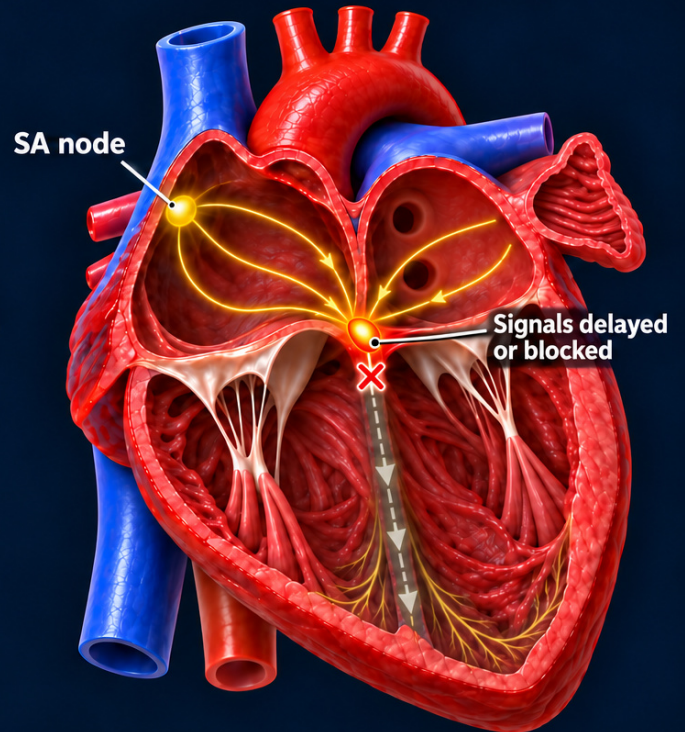
A very slow pulse, blocked electrical signals, or a pulse that does not rise appropriately during activity can reduce energy. Some people have a naturally slow resting pulse without symptoms.

Sinus node dysfunction



The natural pacemaker starts signals too slowly or pauses.

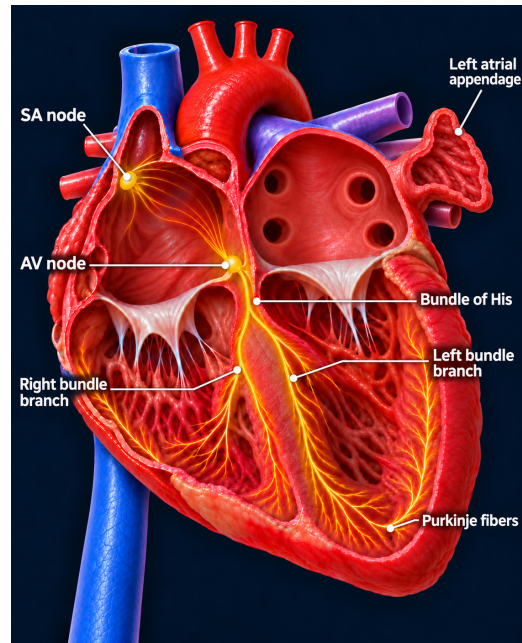
Heart block



Signals from the upper chambers do not reliably reach the lower chambers.

Simplified electrical pathways for teaching

The normal pacemaker or electrical conduction system can sometimes limit the heart's response to activity.



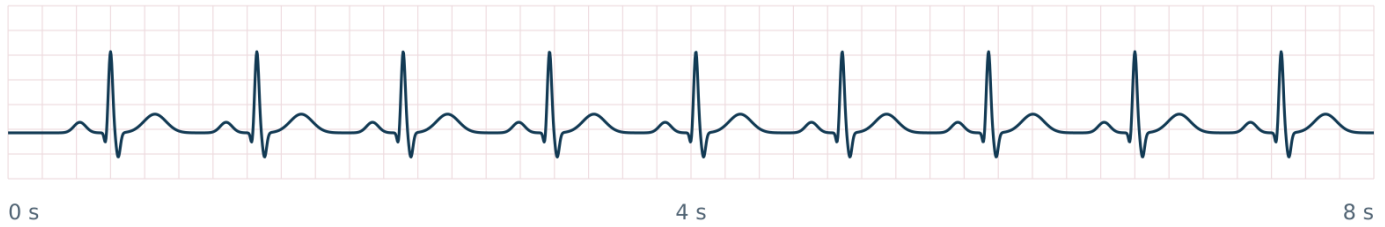
Follow one normal heartbeat

SA node → Atria → AV node → Ventricles

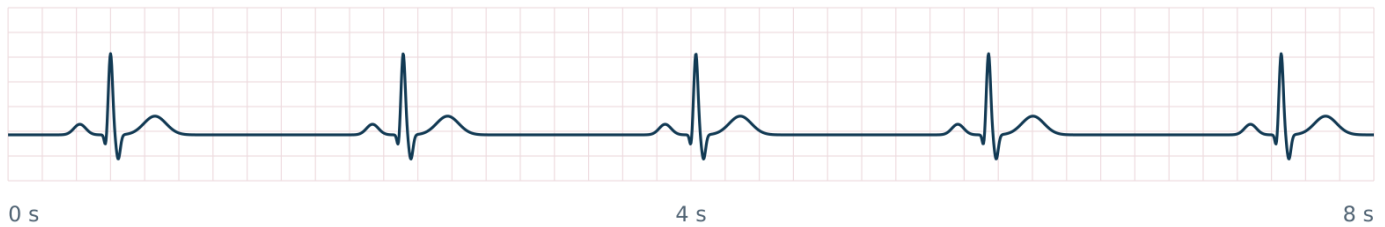
- The SA node starts the signal. The heart's natural pacemaker in the right upper chamber begins each normal sinus beat.
- The signal spreads through both atria. The upper chambers contract, moving blood into the ventricles.
- The AV node briefly delays the signal. This pause gives the ventricles time to finish filling.
- The signal activates the ventricles. It travels through the bundle of His, right and left bundle branches, and Purkinje fibers. The lower chambers contract, pumping blood to the lungs and body.

The atria contract first; the ventricles follow. This organized sequence produces a coordinated heartbeat.

Normal sinus rhythm - comparison

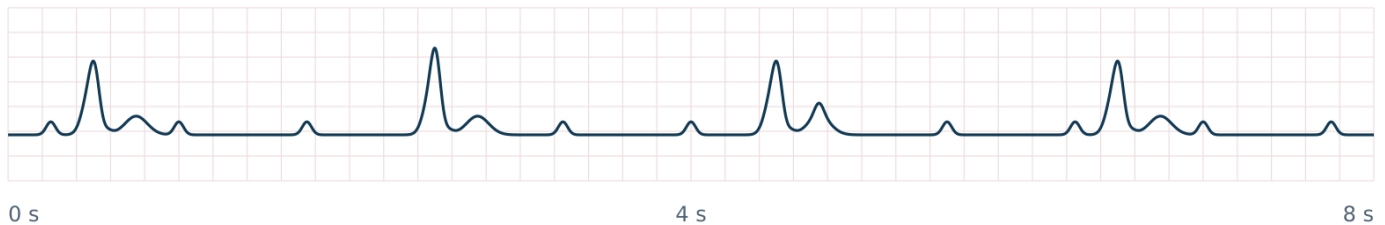


A very slow heartbeat - sinus bradycardia



The beats are farther apart. Whether a slow rate causes fatigue depends on the patient and the heart's response to activity.

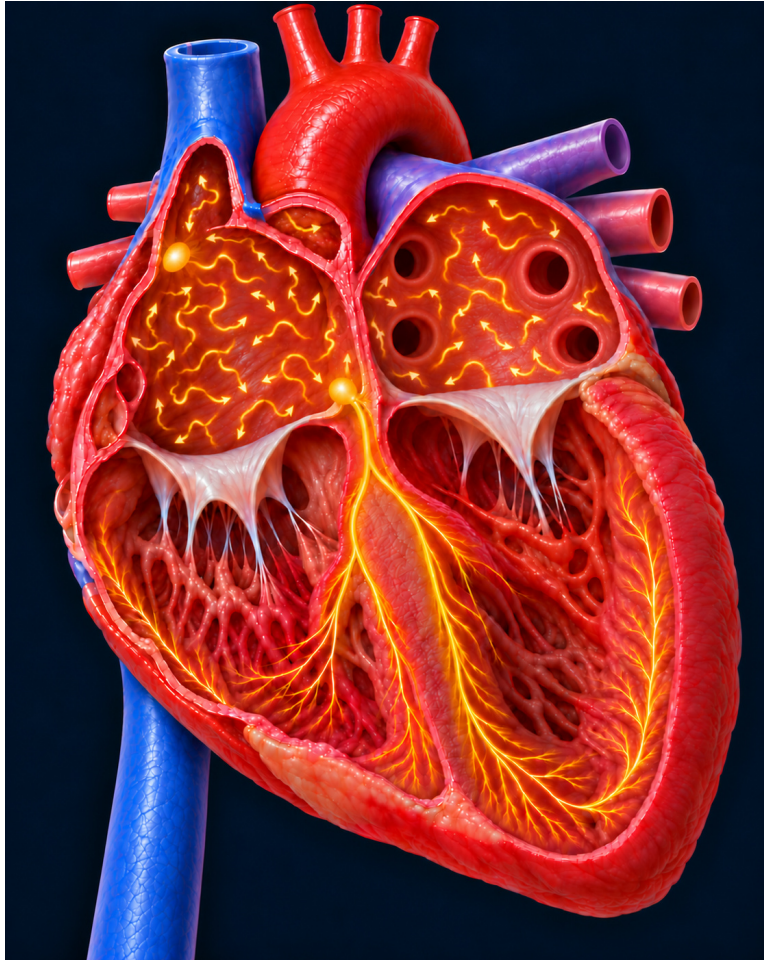
Complete heart block



Signals from the upper chambers do not reach the lower chambers. A slower backup rhythm runs independently.

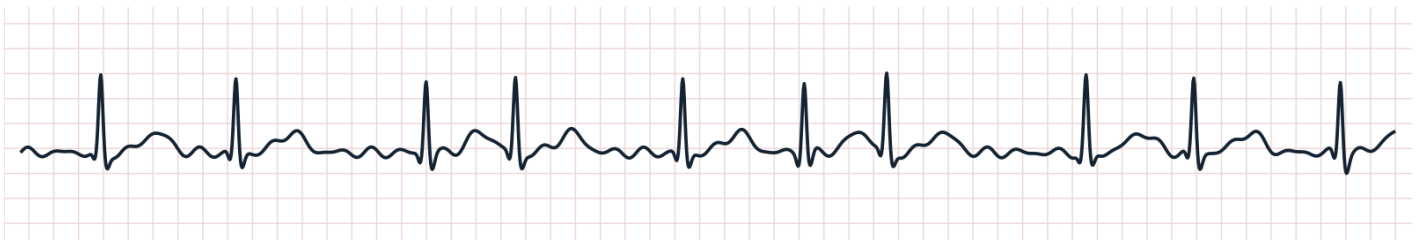
Fast or irregular rhythms

AFib, atrial flutter, and SVT can reduce exercise tolerance, especially when the pulse is rapid. They may affect filling and the coordination of the heartbeat.



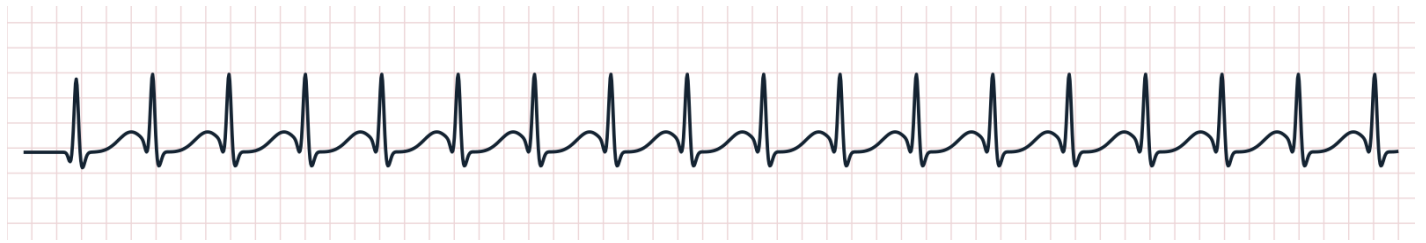
AFib disrupts the normal coordinated activity of the upper chambers.

Atrial fibrillation - irregular rhythm



The spacing between beats varies. AFib can cause fatigue even without a racing pulse.

SVT - a fast, regular rhythm



A rapid rhythm may reduce filling time and stamina.

These EKGs are simplified teaching examples. They do not show whether a particular rhythm is causing your fatigue. Heart failure, coronary disease, and valve disease may be present even with a normal rhythm strip.

Medicines and causes outside the heart

Some heart medicines can contribute to fatigue. Poor sleep or sleep apnea, anemia, thyroid disease, lung disease, infection, depression, and reduced conditioning can also cause low energy. Do not stop prescribed medicines on your own.

Sources: [American Heart Association: Heart failure symptoms](#) · [Valve disease symptoms](#) · [AFib symptoms](#)

Fatigue and reduced exercise tolerance

Section 3 of 6: When to seek help

Understand low energy and reduced exercise tolerance, possible causes, warning signs, testing, and treatment.

SECTION 3

When should I seek help?

Call 911 for sudden severe weakness or fatigue with chest discomfort, severe breathlessness, fainting, or stroke symptoms.

Heavy bleeding, vomiting blood, or black stools with weakness or dizziness also require urgent medical attention.

Arrange a visit for a persistent change

Contact your clinician if fatigue limits normal activities, is getting worse, or continues despite reasonable rest. Mention unexplained weight loss, fever, swelling, or a major change in walking ability.

Sudden exercise intolerance should not be pushed through. Stop the activity and seek care appropriate to the accompanying symptoms.

Fatigue and reduced exercise tolerance

Section 4 of 6: Evaluation

Understand low energy and reduced exercise tolerance, possible causes, warning signs, testing, and treatment.

SECTION 4

How is fatigue evaluated?

Your clinician reviews sleep, activity, mood, medicines, and other symptoms. The exam and history guide testing.

Blood tests

Selected tests may assess anemia, thyroid function, kidney function, or other suspected problems.

Heart testing when indicated

An EKG or monitor may assess rhythm. An echo can evaluate pumping and valves.



A Holter monitor records your heart rhythm during normal activities and can help connect fatigue with an abnormal heartbeat.



An echo is useful when symptoms or examination suggest a heart problem.

A stress test may be appropriate if symptoms suggest reduced coronary blood flow or an abnormal response to exercise.

Treadmill stress test



A stress test evaluates selected patients during activity. It is not needed for every case of fatigue.

Nuclear stress test

Heart blood-flow imaging



A nuclear stress test compares blood flow to the heart muscle at rest and during stress. Stress can be produced by exercise or medication.

Sleep testing may be appropriate for loud snoring, witnessed breathing pauses, or excessive daytime sleepiness.

Fatigue and reduced exercise tolerance

Section 5 of 6: Treatment

Understand low energy and reduced exercise tolerance, possible causes, warning signs, testing, and treatment.

SECTION 5

How is fatigue treated?

Treatment targets the identified cause. It may involve treating anemia or thyroid disease, managing sleep apnea, adjusting medicines, or treating heart or lung disease.

Rebuilding stamina

Once activity is safe, a gradual plan can improve conditioning. Selected patients benefit from cardiac rehabilitation. Rest breaks, consistent sleep, and balanced nutrition may help.

Do not assume supplements will solve fatigue or start strenuous exercise to force improvement. Some illnesses require pacing rather than pushing through symptoms.

Report new swelling, breathlessness, or worsening exercise tolerance during treatment. Follow-up helps determine whether the plan is working.

Fatigue and reduced exercise tolerance

Section 6 of 6: Your appointment

Understand low energy and reduced exercise tolerance, possible causes, warning signs, testing, and treatment.

SECTION 6

Preparing for your appointment

- Compare what you can do now with what you could do before.
- Record when fatigue began and whether it is worsening.
- Note sleep quality, snoring, or breathing pauses noticed by someone else.
- List breathlessness, chest discomfort, palpitations, swelling, or bleeding.
- Bring medicines and doses, including supplements and recent changes.

Ask which causes are being considered, what activity is safe, and when to reassess. Bring previous heart tests and relevant laboratory results if available.

A specific example - “I now need to stop halfway up the stairs” - can help your clinician understand the change.

Sources & further reading

MedlinePlus: Fatigue

Mayo Clinic: Causes of fatigue

American Heart Association: Heart failure symptoms

American Heart Association: Valve disease symptoms

Updated October 2026. Educational information; your own care plan may differ. Medical illustrations are simplified examples for teaching.

NHLBI: How the heart beats

MedlinePlus: Cardiac conduction system