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2. Cyanocobalamin

# Vitamin B12 Injection

**Generic name:** cyanocobalamin (injection) [ sye-AN-oh-koe-BAL-a-min ]

**Brand names:** [Vitamin B12](#), Vitamin B-12

**Drug class:** [Vitamins](#)

Medically reviewed by [Philip Thornton, DipPharm](#). Last updated on Dec 30, 2024.

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## What is Vitamin B12?

Vitamin B12 is a man-made form of vitamin B12.

Vitamin B12 is important for growth, cell reproduction, blood formation, and protein and tissue synthesis.

Vitamin B12 is used to treat [vitamin B12 deficiency](#) in people with [pernicious anemia](#) and other conditions.

## Warnings

You should not use Vitamin B12 injection if you are allergic to cobalt, or if you have Leber's disease.

## Before taking this medicine

You should not use Vitamin B12 if you are allergic to cyanocobalamin or cobalt, or if you have Leber's disease (an inherited form of vision loss). Cyanocobalamin can lead to optic nerve damage (and possibly blindness) in people with Leber's disease.

To make sure this medicine is safe for you, tell your doctor if you have:

- eye problems or Leber's disease (in you or a family member);
- kidney or liver disease;
- iron or [folic acid](#) deficiency;
- any type of infection; or
- if you are receiving any medication or treatment that affects bone marrow.

Tell your doctor if you are pregnant or breastfeeding. Your dose needs may be different during pregnancy or while you are nursing.

 [Cyanocobalamin pregnancy and breastfeeding warnings](#) (more detail)

# How is Vitamin B12 injection given?

Use Vitamin B12 exactly as prescribed by your doctor. Follow all directions on your prescription label and read all medication guides or instruction sheets.

Vitamin B12 injection is injected into a muscle or under the skin. A healthcare provider may teach you how to properly use the medication by yourself.

Your dose needs may change if you become pregnant, if you breastfeed, or if you eat a vegetarian diet. **Tell your doctor about any changes in your diet or medical condition.**

**Always follow directions on the medicine label about giving Vitamin B12 injection to a child.** Your child's dose will depend on age, weight, diet, and other factors.

For pernicious anemia, you may have to use Vitamin B12 injection for the rest of your life. Do not stop using the medicine unless your doctor tells you to. Untreated [vitamin B12](#) deficiency can lead to anemia or irreversible nerve damage.

Pernicious anemia is also treated with folic acid to help maintain red blood cells. Folic acid alone will not treat Vitamin B12 deficiency or prevent possible damage to the spinal cord. Use all medications as directed.

You will need frequent medical tests.

Vitamin B12 can affect the results of certain medical tests. Tell any doctor who treats you that you are using Vitamin B12 injection.

Store this medication at room temperature away from moisture, heat, and light.

Use a needle and syringe only once and then place them in a puncture-proof "sharps" container. Follow state or local laws about how to dispose of this container. Keep it out of the reach of children and pets.

## Dosing information

### Usual Adult Dose for Pernicious Anemia:

Initial dose: 100 mcg intramuscularly or deep subcutaneous once a day for 6 to 7 days

If clinical improvement and reticulocyte response is seen from the above dosing:

-100 mcg every other day for 7 doses, then:

-100 mcg every 3 to 4 days for 2 to 3 weeks, then:

Maintenance dose: 100 to 1000 mcg monthly

Duration of therapy: Life

Comments:

-Administer concomitant folic acid if needed.

-Chronic treatment should be done with an oral preparation in patients with normal intestinal absorption.

### Usual Adult Dose for B12 Nutritional Deficiency:

25 to 2000 mcg orally daily

### Usual Adult Dose for Schilling Test:

1000 mcg intramuscularly is the flushing dose

#### Usual Pediatric Dose for B12 Nutritional Deficiency:

0.5 to 3 mcg daily

**i** [Detailed Cyanocobalamin dosage information](#)

## What happens if I miss a dose?

Call your doctor for instructions if you miss a dose.

Get your prescription refilled before you run out of medicine completely.

## What happens if I overdose?

Seek emergency medical attention or call the Poison Help line at 1-800-222-1222.

## What should I avoid while using Vitamin B12 injection?

Avoid drinking large amounts of alcohol while you are being treated with Vitamin B12 injection.

## Vitamin B12 side effects

Get emergency medical help if you have **signs of an allergic reaction to Vitamin B12**: [hives](#); difficulty breathing; swelling of your face, lips, tongue, or throat.

Call your doctor at once if you have:

- **heart problems** - swelling, rapid weight gain, feeling short of breath;
- **fluid build-up in or around the lungs** - pain when you breathe, feeling short of breath while lying down, wheezing, gasping for breath, cough with foamy mucus, cold and clammy skin, [anxiety](#), rapid heartbeats; or
- **low potassium level** - leg cramps, [constipation](#), irregular heartbeats, fluttering in your chest, increased thirst or urination, numbness or tingling, muscle weakness or limp feeling.

Common Vitamin B12 side effects may include:

- [diarrhea](#); or
- swelling anywhere in your body.

This is not a complete list of side effects and others may occur. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

**i** [Cyanocobalamin side effects](#) (more detail)

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# What other drugs will affect Vitamin B12 injection?

Other drugs may interact with cyanocobalamin, including prescription and over-the-counter medicines, [vitamins](#), and [herbal products](#). Tell your doctor about all your current medicines and any medicine you start or stop using.

 [Cyanocobalamin drug interactions](#) (more detail)

## Does cyanocobalamin interact with my other drugs?

Enter medications to view a detailed interaction report using our [Drug Interaction Checker](#).

cyanocobalamin

+

Enter a drug name

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### References

1. [Vitamin B12 Product Label](#)

## More about cyanocobalamin

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## Patient resources

- [Cyanocobalamin \(Intramuscular\) advanced reading](#)
- [Cyanocobalamin \(B12\) Capsules and Tablets](#)
- [Cyanocobalamin \(B12\) Chewable Tablets](#)
- [Cyanocobalamin \(B12\) Extended-Release Tablets](#)
- [Cyanocobalamin \(B12\) Injection](#)

## Other brands

Nascobal, Neuroforte-R, CaloMist, Cobal 1000, ... +3 more

Professional resources

- [B-12 Compliance Injection prescribing information](#)
- [Cyanocobalamin \(FDA\)](#)

Other brands

[Dodex](#), [Nascobal](#)

Related treatment guides

- [Vitamin B12 Deficiency](#)
- [Pernicious Anemia](#)
- [Schilling Test](#)
- [B12 Nutritional Deficiency](#)

Further information

Remember, keep this and all other medicines out of the reach of children, never share your medicines with others, and use Vitamin B12 injection only for the indication prescribed.

Always consult your healthcare provider to ensure the information displayed on this page applies to your personal circumstances.

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DRUG STATUS


Availability

Rx

OTC

Rx and/or OTC

Pregnancy & Lactation




Risk data available

CSA Schedule\*

N/A

Not a controlled drug

Approval History



Drug history at FDA



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