HEALTH BASICS

yellow fever virus strain 17D-204 live antigen

A weakened live form of yellow fever virus used as the active antigen in some yellow fever vaccines.

WHAT IT IS
A weakened live virus used in yellow fever vaccines

WHERE IT COMES UP
Vaccine labels, consent forms, and travel vaccination records

WHY IT MATTERS
Supports immune protection against yellow fever

WHAT IT IS NOT
Not yellow fever disease or a diagnosis

WHO TO ASK
Yellow fever vaccination centre or travel health clinician

HOW IT IS CHECKED
Vaccination records; antibody testing only in selected situations

Overview

Yellow fever virus strain 17D-204 live antigen is an active ingredient in some yellow fever vaccines. An antigen is a substance that teaches the immune system what to recognize. A strain is a particular laboratory line of a virus.

The 17D-204 strain is live but attenuated , meaning weakened. It can reproduce to a limited degree after vaccination, which helps create a strong immune response. It has been changed through controlled laboratory production so that it behaves differently from the wild yellow fever virus spread by mosquitoes.

This antigen is not yellow fever disease, a diagnosis, or a test result. It is also not the whole vaccine. A vaccine product contains the antigen along with other ingredients needed to keep it stable and usable. Ingredients can differ between brands, countries, and formulations.

You may see "17D-204" on a vaccine information sheet, package insert, medical record, or travel vaccination document. Some records list only "yellow fever vaccine" without naming the strain.

How it works

After vaccination, cells in your body respond to the weakened virus. Your immune system makes antibodies and develops memory cells. Antibodies are proteins that can recognize and help control a virus. Memory cells allow the immune system to respond more quickly if it later meets yellow fever virus.

Because 17D-204 is a live antigen, the immune response is generally broader than the response to an inactive vaccine ingredient. The vaccine strain does not spread through mosquito bites in the way wild yellow fever virus does.

The antigen is grown under controlled manufacturing conditions, commonly using chicken embryos. Each finished vaccine must meet standards for identity, strength, purity, and safety before release. The exact amount, additional ingredients, storage conditions, and method of administration come from the product's approved prescribing information.[1]

Protection is not immediate. For international travel purposes, a certificate following a first yellow fever vaccination generally becomes valid 10 days after vaccination. Under the International Health Regulations, the certificate remains valid for the vaccinated person's lifetime. Whether an additional dose is medically advised in a particular situation is a separate question from certificate validity.[2][4]

Why it matters for your health

Yellow fever is a mosquito-borne viral infection found in parts of Africa and South America. Vaccination may be recommended because of infection risk, required for entry into a country, or required when travelling from an area where yellow fever occurs.

The words "17D-204 live antigen" matter mainly because they confirm that the vaccine uses a live, weakened yellow fever virus strain. This affects the safety questions a vaccination clinician will ask before giving it.

Live vaccines require particular care for people whose immune systems may not control the vaccine strain normally. This may include people with severe immune suppression caused by an illness, a transplant, cancer treatment, or certain medicines. A history of a thymus disorder associated with abnormal immune function is also important.

Age, pregnancy, breastfeeding, and serious allergies to vaccine components can affect the balance of benefits and risks. Yellow fever vaccine is not automatically unsuitable in every such situation. The decision may depend on the person's health, travel destination, route, timing, and likelihood of exposure.[2][3]

The strain name alone does not prove that you are protected. A dated vaccination record is

more useful. For travel, you may also need an International Certificate of Vaccination or Prophylaxis completed by an authorized yellow fever vaccination centre.

What can go wrong

Most concerns relate to vaccination, recordkeeping, or confusion about the terminology rather than to the antigen name itself.

Common reactions after yellow fever vaccination can include soreness where the injection was given, headache, muscle aches, or a mild fever. These usually settle without specific treatment. Contact a healthcare service for routine advice if a reaction lasts longer than expected, is getting worse, or concerns you.

A severe allergic reaction, called anaphylaxis , can occur after any vaccine. Breathing difficulty, swelling of the face or throat, widespread hives, severe dizziness, or collapse need emergency medical help.

Rare serious conditions linked to yellow fever vaccination include:

Seek urgent or emergency care after vaccination for confusion, a seizure, new weakness, trouble breathing, yellow skin or eyes, fainting, or rapidly worsening illness. Tell the healthcare team when and where the vaccine was given.

Problems can also arise from incomplete records. A handwritten note without a date, vaccine details, authorized stamp, or signature may not meet travel-document rules. Replacement rules are different from medical recommendations about whether another dose is appropriate.

Different yellow fever vaccines may use related 17D strains but have different product names and additional ingredients. Do not assume that information about one brand's allergy risks, storage, or administration applies to every product.

- Yellow fever vaccine-associated neurologic disease , which affects the brain or nerves
- Yellow fever vaccine-associated viscerotropic disease , which affects several internal organs and can resemble severe yellow fever
- Serious allergic reactions to the antigen or another vaccine ingredient

What you can do

Before vaccination, give the vaccination service an accurate list of your medicines and health conditions. Include treatments that weaken immune function, even if they are temporary. Mention pregnancy, breastfeeding, thymus disease, previous reactions to vaccines, and

serious allergies, including egg or gelatin allergy.

Useful questions include:

Keep a copy of your vaccination record. Record the date, product name, lot number, vaccination centre, and certificate details. A photograph or secure digital copy can help if the paper certificate is lost, although border authorities may still require the original document.

There is no home test for this antigen. Blood tests that measure neutralizing antibodies -antibodies able to block the virus-exist, but testing is not routinely needed after vaccination. It may be considered in selected situations, such as when the immune response is uncertain. A travel health or infectious diseases service can explain whether testing would provide useful information.

If you only saw "17D-204" in an old record and have no travel plans or health concern, there may be nothing you need to do. Keep the record with your other vaccination documents.

- Is vaccination recommended or required for my exact destination and route?
- Does my health or medication list change whether vaccination is suitable?
- When will my travel certificate become valid?
- Do I need another dose for medical reasons, even if my certificate remains valid?
- Which vaccine product and strain will I receive?

Common questions

Is 17D-204 the same as yellow fever?

No. Yellow fever is a disease caused by wild yellow fever virus. The 17D-204 antigen is a weakened vaccine strain used to build immune protection.

Can the vaccine give me yellow fever?

The vaccine does not cause mosquito-transmitted yellow fever. Rare vaccine-associated conditions can affect the nervous system or internal organs, but these are named vaccine complications rather than ordinary yellow fever infection.

Does "live" mean I can pass the vaccine virus to other people?

Routine close contact with a vaccinated person does not spread yellow fever. The main issue with a live vaccine is whether the vaccinated person's immune system can safely control the weakened strain.

Is 17D-204 the only yellow fever vaccine strain?

No. Yellow fever vaccines can use different lineages derived from the 17D vaccine strain. The

exact product available depends on the country and vaccination service.

Do I need an antibody test to prove the vaccine worked?

Usually not. The vaccination record or international certificate is normally used as proof. Antibody testing is reserved for selected clinical questions and may not be accepted as a substitute for required travel documentation.

Does everyone need a booster?

No single answer applies to every traveller. One dose provides long-lasting protection for most people, and the international certificate is valid for life. Additional doses may be advised for certain people or exposure situations. Ask a yellow fever vaccination centre about your health history and itinerary.[2][6]

Sources

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