



# *Clostridioides difficile* GDH positive (Glutamate Dehydrogenase) Toxin negative

Reviewed: May 2024  
Next review: May 2025  
Version 4

## > About this leaflet

The purpose of this leaflet is to give you information about Glutamate Dehydrogenase (GDH). You have been given this because you have had a 'GDH Positive, Toxin negative' test result.

## > What is *Clostridioides difficile*?

*Clostridioides difficile* (previously referred to as *Clostridium difficile*) and commonly called C.diff is a bacteria present in the bowel of approximately 3% of healthy adults. It rarely causes problems as it is kept under control by the normal bacteria in the bowel. However, when antibiotics are given, the balance of bacteria in the bowel can sometimes be disturbed, causing the C.diff to multiply rapidly.

## > What is GDH?

A sample of diarrhoea is sent to the hospital laboratory where diagnosis can be confirmed.

The Department of Health has recommended a two stage testing process:

### Stage 1 – to test if you have C. diff in your bowel.

Stage 1 of these tests looks for a chemical called glutamate dehydrogenase (GDH). If this is found in your sample, this means that you have C. diff in your bowel and the result is therefore called "GDH positive".

### Stage 2 – to test if it is causing you an infection.

Stage 2 tests are carried out on all GH positive samples, to see if there are any toxins in the sample.

These toxins show that C. diff, is causing an infection.

### Your result

Our tests have shown that your sample is GDH positive but you do not have toxins present – your sample is **GDH positive, toxin negative**. This means you have C. diff in your bowel but do not have a C. diff infection.

## **What does a GDH positive result mean for me?**

The diarrhoea you are experiencing is probably due to other causes, for example, antibiotics.

Your doctor will review your medication and make any necessary changes as sometimes the antibiotics can cause the bacteria to start producing toxins.

The majority of patients do not need treatment if they have a GDH positive, toxin negative result. However, if your symptoms are very severe, your doctor may decide to give you treatment.

If your diarrhoea continues, we may need to test further samples. It is important to drink plenty whilst you have diarrhoea to stop yourself becoming dehydrated. Your doctor or nurse will advise you how much you should drink as some patients are fluid restricted.

## **Prevention and Control of Infection Precautions**

Even if you do not have a C.diff infection, it is still possible for the bacteria present in your bowel to spread from person to person. This is because the bacteria from the bowel can spread in the environment, contaminating flat surfaces, equipment, bathrooms, toilets and shower facilities etc. This is more of a risk of contamination whilst suffering from diarrhoea.

To avoid the spread of the bacteria strict hand hygiene measures and thorough cleaning is essential.

**Washing your hands using soap and water is essential.**

**Hand rub is not effective at killing the C.diff bacteria.**

To avoid the spread of infection staff caring for you will wear an apron and gloves and wash their hands using soap and water. You should wash your hands with soap and water after using the toilet and before eating.

In hospital, patients who are GDH positive and have diarrhoea will be cared for in a single room, with either en-suite facilities or their own nominated commode. Look out for an infection control notice displayed on the door which alerts and advises all patients, staff and visitors to the required precautions.

These special precautions are required to stay in place until you have not had diarrhoea for 48 hours and have passed normal stools.

**How can your family and friends protect themselves when visiting?**

1. Hands must be washed with soap and water when leaving the room.
2. Visitors do not need to wear gloves and aprons when visiting unless providing direct care to the patient.
3. Visitors should not visit if they are unwell or have recently had diarrhoea.
4. Avoid sitting on hospital beds when visiting.
5. Do not bring in food to eat whilst visiting.
6. **Observe any restrictions that are in place.**



## Further advice and information

- Speak to your doctor or nurse on the ward or department.
- Speak to the hospital Prevention and Control of Infection team, telephone 0141 951 5808.

### All of our publications are available in different languages, larger print, braille (English only), audio tape or another format of your choice.

我們所有的印刷品均有不同語言版本、大字體版本、盲文（僅有英文）、錄音帶版本或你想要的另外形式供選擇。

كافة مطبوعاتنا متاحة بلغات مختلفة و بالأحرف الطباعية الكبيرة و بطريقة بريل الخاصة بالمكفوفين (باللغة الإنكليزية فقط) و على شريط كاسيت سمعي أو بصيغة بديلة حسب خيارك.

Tha gach sgrìobhainn againn rim faotainn ann an diofar chànanan, clò nas motha, Braille (Beurla a-mhàin), teip clàistinn no riochd eile a tha sibh airson a thaghadh.

हमारे सब प्रकाशन अनेक भाषाओं, बड़े अक्षरों की छपाई, ब्रेल (केवल अंग्रेज़ी), सुनने वाली कसेट या आपकी पसंदनुसार किसी अन्य फॉरमेट (आरएफ) में भी उपलब्ध हैं।

我們所有的印刷品均有不同語言版本、大字體版本、盲文（僅有英文）、錄音帶版本或你想要的另外形式供選擇。

ਸਾਡੇ ਸਾਰੇ ਪਰਚੇ ਅਤੇ ਕਿਤਾਬਚੇ ਵਗੈਰਾ ਵੱਖ ਵੱਖ ਭਾਸ਼ਾਵਾਂ ਵਿਚ, ਵੱਡੇ ਅੱਖਰਾਂ ਅਤੇ ਬ੍ਰੇਲ (ਸਿਰਫ਼ ਅੰਗਰੇਜ਼ੀ) ਵਿਚ, ਆਡੀਓ ਟੇਪ 'ਤੇ ਜਾਂ ਤੁਹਾਡੀ ਮਰਜ਼ੀ ਅਨੁਸਾਰ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ ਵੀ ਮਿਲ ਸਕਦੇ ਹਨ।

ہماری تمام مطبوعات مختلف زبانوں، بڑے حروف کی چھپائی، بریل (صرف انگریزی)، سنے والی کست یا آپ کی پسند کے مطابق کسی دیگر صورت (فارمیٹ) میں بھی دستیاب ہیں۔



 : 0141 951 5513