



Screening for rheumatic heart disease (RHD): What are the benefits, harms and uncertainties?

What is RHD?

- Rheumatic heart disease (RHD) is caused by rheumatic fever.
- RHD is a problem involving your heart valves.
- The seriousness of RHD ranges from mild through to very severe symptoms.
- Severe RHD may require heart surgery, and can sometimes cause heart failure and death.

Why 'screen' for RHD?

- Many people with RHD do not know they have had rheumatic fever.
- Those who have had rheumatic fever can get it again, and each attack can cause more heart damage.
- 'Screening' checks for signs of heart damage.
- If there are signs, antibiotics can help prevent rheumatic fever from happening again.
- This will help to prevent further heart damage.
- However, it's important to understand that **every** screening test has **benefits**, **harms**, and **uncertainties**.

What are the potential benefits?

The main benefit of RHD screening is that it might help to
stop RHD from getting worse.

If someone with RHD gets rheumatic fever again, **it can make their RHD worse.**

Screening helps to find people with RHD who don't know they have it, **so that they can be treated.** Antibiotics can prevent rheumatic fever happening again. This might prevent any further heart damage.

Four out of ten people who are admitted to hospital with RHD **have no record of ever having rheumatic fever.**

This means that they probably didn't get the medical care that rheumatic fever patients usually get – like antibiotic injections – which might have stopped their heart damage from getting worse.

Screening might help find these patients.

Many people with RHD
do not know
that they have had
rheumatic fever.



You will be given more information about the test itself (and what may happen afterwards) by those who are running the screening test.

What are the potential harms?

- **No screening test is perfect.** Sometimes a test result will say there is a problem, when the person may never have suffered poor health from RHD.
- This means that some people who are told they have RHD using this test **might not actually have it** – they just have a result that is different to what is usually seen.

There are a few reasons why this is important:

The main harm of RHD screening comes from **diagnosing RHD when there is nothing really wrong.**



Parents who are told their child has RHD will understandably **worry about the result.**



Those diagnosed with RHD from screening may be given **monthly antibiotic injections for 5 to 10 years.**



Children diagnosed with RHD through screening may change the way they live their lives – and sometimes **reduce or stop healthy physical activity.**

What are the uncertainties about RHD screening?

Because we still have lots to learn about RHD, there are some things that make us **uncertain** about whether screening for RHD is a good idea or not. Here are some reasons:

Diagnosing RHD isn't always easy.

A child may be diagnosed with either definite or 'borderline' RHD.

RHD is rare in kids.

More than 4,000 kids were screened in NZ from 2007 to 2012, and **only 1%** were diagnosed with definite RHD.



Not everyone will be given medicine after their diagnosis.

Because of uncertainty, those with 'borderline' RHD **don't usually get antibiotics.** Instead, doctors will keep an eye on their condition over time.

We need to learn more about the benefits and harms of screening.

For example, we are still uncertain how many children might be wrongly labelled as having a problem when, in fact, there is not one.