

Many communities
learnt this the hard way...

...let's learn from their
mistakes.



All these outbreaks have been caused
by untreated or inadequately treated
groundwater.

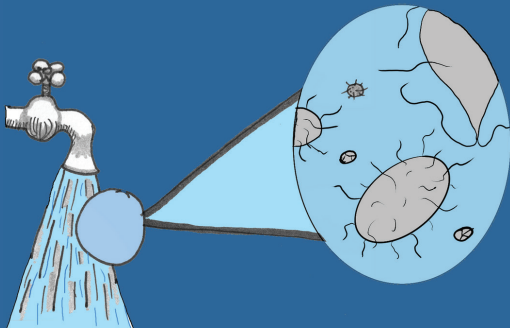
Why do we
need to
treat
groundwater
to make
it safe
to drink?

Water quality has never been a problem before... Water is just H₂O right?

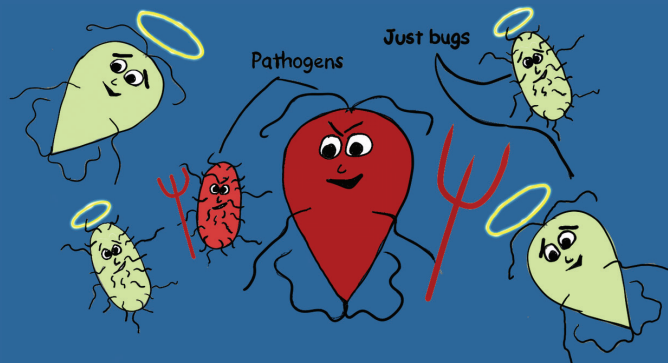
Not exactly, it can pick up tiny bugs on its way to your house. Let's take a closer look....



There can be millions of microbes in a single drop of clear water...



The ones that can make you sick are called "pathogens"



But not all bugs are pathogens

Pathogens come from what scientists call "faecal contamination"



It's the scientific way of saying "poo got in the water".



So you can get sick if human or animal poo gets into the water?

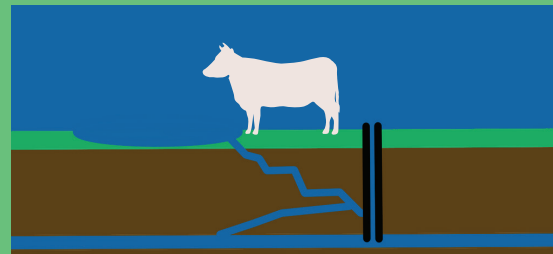
But the water here is clear, from deep underground!

Just because it's clear doesn't mean it's clean.

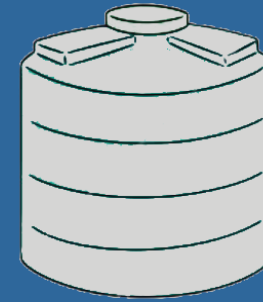
Let's look at how pathogens can get in



Even in very deep aquifers, old bores (and cracks from earthquakes) can let surface water into the groundwater



This is one of many possible paths for pathogens to get into drinking water

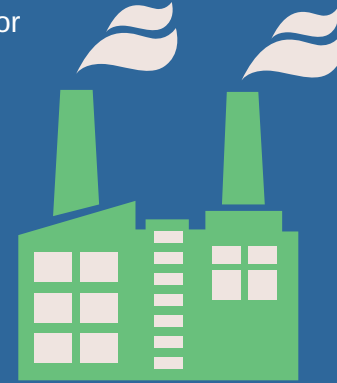


Or after treatment, birds and vermin can contaminate it.

Even if the reservoir is roofed (or the chamber is sealed) they may not be in perfect condition forever.

Even close to your house, dirty water can enter pipes from cross-connections or return-flow from other properties.

Backflow prevention devices stop this happening, but not all properties have them installed.



So the more people and animals in our environment, the more chances of pathogens getting into the water!



That's why we have to start treating water... it's not just pure H₂O after all.