Sampling for Bacteria in Water

The drinking water supplying your taps is disinfected with chlorine at treatment works to make sure that it is free from pathogens i.e. microorganisms that could cause illness

Water quality sampling

Chlorine levels are continuously monitored at all water treatment works. In addition, thousands of water samples are collected from treatment works, treated water storage tanks and from randomly selected homes and businesses for testing to make sure that they meet water quality standards.

Indicator bacteria

We test for particular types of bacteria, called 'indicator bacteria' as they indicate where there may be a possible problem with the quality of the water. We test for 3 main types of "indicator bacteria":

1. Coliform bacteria: they are commonly found in the environment (e.g. soil, vegetation and water). Their presence in water alone does not represent a risk to health. They can reproduce and grow on surfaces in the home such as the plastic inserts at the end of taps. The presence of coliform bacteria in the absence of any other indicator bacteria usually means that the source is probably environmental.
2. *E.coli (Escherichia coli):* is a coliform that is found in large numbers in the intestinal tract of all warm-blooded animals. Some strains of *E.coli* can cause illness. The presence of *E.coli* in drinking water almost always indicates recent faecal contamination – meaning that there is a possibility that harmful germs are also present.
3. Enterococci are harmless bacteria, which like *E.coli*, are found in the intestinal tract of all warm-blooded animals. As with *E.coli,* finding Enterococci in water indicates faecal contamination.

When indicator bacteria are detected

As soon as we are notified of any positive results an immediate investigation takes place to try and locate the source of the contamination.
This generally involves taking repeat samples.

Repeat sampling helps us understand if there is a genuine problem with the water supply or if the problem is isolated to one household in which case the internal plumbing is usually the cause of the water test failure.

In many cases a swab sample from the tap where the original sample was taken from confirms that bacterial growth at the end of the tap was the probable reason for the sample failing the quality standard.

In the rare event that investigative samples confirm the presence of bacteria, we liaise closely with the local Environmental Health Department to jointly agree what measures are necessary to protect public health. We let any customers that are or could be affected know of the situation by writing to them personally and, in the case of an issue that affects a wide area, we inform people through the local news media.

Need more information or advice?

dwrcymru.com | 0800 052 0130
You can also visit the Drinking Water Inspectorate website at **dwi.gov.uk**.

Samplu ar gyfer Bacteria mewn dŵr

Diheintir dŵr tap gyda chlorin mewn gweithfeydd trin dŵr er mwyn gwaredu micro-organebau a allai achosi salwch.

Profi ansawdd dŵr

Bydd pob gwaith trin dŵr yn monitro lefelau clorin yn barhaus. Yn ogystal, cesglir miloedd o samplau dŵr o weithfeydd trin dŵr, tanciau stôr, busnesau a chartrefi (dewis ar hap) er mwyn eu profi i sicrhau byddant yn cyrraedd safonau ansawdd.

Bacteria dangosol

Byddwn yn profi am fathau arbennig o facteria, a allai awgrymu problem gydag ansawdd dŵr. Byddwn yn profi am 3 prif fath o "bacteria dangosol":

1. Bacteria colifform, sy'n gyffredin yn yr amgylchedd (ee pridd, planhigion a dŵr). Nid yw eu presenoldeb ar ben eu hunain yn cynrychioli risg i iechyd. Gallant atgenhedlu a thyfu ar arwynebau yn y cartref megis gorchuddion plastig ar eich tapiau. Fel arfer bydd presenoldeb bacteria colifform yn absenoldeb unrhyw facteria dangosol eraill yn awgrymu eu bod yn deillio o ffynhonnell amgylcheddol.
2. *E.coli (Escherichia coli)* yn is-grŵp o'r grŵp colifform. Gwelir *E.coli* mewn niferoedd mawr yng ngholuddion pobl ac anifeiliaid gwaed cynnes. Mae rhai mathau o *E.coli* yn gallu achosi salwch. Mae presenoldeb *E.coli* mewn dŵr yfed bron bob amser yn awgrymu halogiad ymgarthol - gan awgrymu y gallai germau niweidiol fod yn bresennol.
3. Enterococci yn facteria diniwed, a welir yng ngholuddion pobl ac anifeiliaid gwaed cynnes yn debyg i *E.coli.* Ac yn debyg i *E.coli*, mae presenoldeb Enterococci yn awgrymu halogiad ymgarthol.

Datgelu bacteria dangosol

Pan fyddwn yn derbyn hysbysiad o ganlyniadau positif, cymrir camau yn syth i ddatgelu ffynhonnell y bacteria. Byddwn yn cymryd samplau dŵr ychwanegol.

Bydd ailadrodd y samplau yn ein helpu i ddeall os bydd problem wirioneddol gyda'r cyflenwad dŵr neu os yn gyfyng i un adeilad. Bryd hynny, y pibellau mewnol fydd achos y broblem fel arfer.

Mewn llawer o achosion bydd sampl swab o dap yr un gwreiddiol yn cadarnhau tyfiant bacteria ger y tap oedd y rheswm am fethiant y sampl gwreiddiol.

Ar yr adegau prin pan fydd yr ail samplau'n cadarnhau presenoldeb bacteria byddwn yn cydweithio'n agos â'r Adran Iechyd Amgylcheddol lleol ac yn cytuno ar y cyd pa fesurau fydd angen i ddiogelu iechyd y cyhoedd. Byddwn yn hysbysu unrhyw gwsmeriaid a allai gael eu heffeithio o'r sefyllfa wrth ysgrifennu atynt. Ac yn achos mater yn effeithio ardal eang byddwn yn hysbysu pobl wrth ddefnyddio'r cyfryngau newyddion lleol.

Angen cyngor neu wybodaeth?

dwrcymru.com | **0800 052 0130**
Neu ewch i wefan yr Arolygiaeth Dŵr Yfed sef **dwi.gov.uk**.