## Agar Spread Plates, Comparison with the BART testers



Spread plates use agar to make a jelly-like base upon which the bacteria can grow to form colonies (visible piles of cells) that are often easy to count and, with the right agar, can also be used to identify the types of bacteria that are present. That is why the counts using agar refer to "colony forming units" also known as "c.f.u". The problem with the agar plates is that the microorganisms have to grow on the agar into a recognizable form commonly as a distinctive colony. While this method has a lot of convenient features it does not detect the many types of bacteria that are not able to grow on agar surfaces, cannot tolerate the high levels of oxygen, or cannot extract water effectively from the agar. BART testers have the advantage in that many more types of microorganism can grow in the BART tester often much faster because of the greater variety of environments that the tester presents to the organisms in the sample. BART testers are therefore more sensitive to a wider variety of microorganisms and can generate shorter delays before growth occurs. Therefore BART testers are **more sensitive** and **faster** than comparable agar spread plate techniques.