



HUMAN VS SUPERBUG: TOO LATE TO TURN THE TIDE?

Video transcript: Presented by Dame Sally Davies, Chief Medical Officer for England

Clearly we are doing our best to fight antibiotic resistance. We have to start with preventing infection - lots of hygiene, washing hands. We have to use our laboratory tests that are slow and make sure that we change antibiotics to the right one as soon as the bug has grown in a laboratory.

But we know that patients are getting more antibiotics than they need in the community because they think that they need them for their sore throat or their chest and the GP has no way of saying “no you don’t”.

The reason antibiotic resistance is such a worry now – I’ve likened it to climate change, we’re doing it to ourselves but we might die of it before climate change gets us – is because we have an empty pipeline of new antibiotics, which is how we coped in the past. Some biotech companies and a couple of the pharma are doing some work, but it takes 10 to 20 years and one and a half billion pounds to produce a new antibiotic.

Most effective antibiotics come actually from natural products. So there’s – I went to a wonderful meeting in Germany recently and insects make lots of antibiotics so there’s work there that will produce new antibiotics in time. There’s work looking at how bacteria talk to each other: quorum sensing. There’s work looking at little viruses called bacteriophages that are very small, that can infect bacteria and we may be able to infect them with things that kill them. So high science will find other ways, but we’re not there with it round the corner at the moment.