

New facts, Radio 1, Belgium

Radio interview with Marc Van Ranst

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Marc Van Ranst, good afternoon.

Good afternoon.

Talking about pictures on the internet, did you see the one with those fungi? Posted on Facebook by a woman from California and shared by hundreds of thousands. It shows a Petri dish, the kind of lab-dish used by biologists. Well, she had put that dish under the hand dryer of a public bathroom.

You are a virologist at the University of Leuven. This woman, Nicole Ward, placed the dish under the hand dryer of a public restroom for 3 minutes, and subsequently let it incubate, she claims. What is that again, incubating?

Oh, those bacteria grow very well at a temperature of 37 °C. So, if you place them in a hot room or in an area where it is 37 °C, then they will grow like weeds.

And the results were truly spectacular, truly nauseating. A dish full of, well what was that, fungi?

Fungi and bacteria, certainly. Of course, you have to put this into perspective. If you or I were to press our hands against a Petri dish and put it in a room with a temperature of 37 °C, you would be surprised at all the things that would grow in it. There are indeed bacteria on our hands.

There are bacteria and fungi on our hands. And it seems that they too can grow to be some centimetres big.

Well, it all starts out really small. The bacteria start to build what we call a colony, and these colonies just keep growing. After a while, the result can look hallucinatory.

But really, those bacteria and fungi are everywhere. Are there just more of them in a hand dryer?

Well, not exactly in any hand dryer, but these hand dryers that blow cold air at 600 km/hour have the purpose of blowing the water off your hands, and with it the bacteria. And if you place a Petri dish at different distances from the dryer - close, further away, and further still - you will see that the bacteria spread extremely easily through the bathroom as they are carried by the high speed of the air. So, the dryers actually do blow the bacteria off your wet hands.

They blow the bacteria off my hands, so it is actually safe?

Well, safe for you, but not so safe for the people in the same bathroom. These people will get the bacteria on themselves and breathe them in, and this is how the contamination spreads. So not only do the hand dryers make a lot of noise, but I don't like to see them in hospitals.

The hand dryers then actually spread fungi and bacteria? They do so through the air rather than via hands?

Yes, indeed. Which is of course not done intentionally. Their purpose is to get your hands from wet to dry in 10 seconds, which is very efficient. But it also means releasing bacteria that are then spread through the environment.

But are those bacteria already in the air? If not, where do they come from?

The bacteria come from your hands. You wash your hands, and then the bacteria are blown off them and spread into the air. If you dry your hands with a paper towel, the problem is significantly smaller. Of course, you will need to dispose of the paper waste in a proper way, which is why the cleaning crews prefer hand dryers as these produce less waste.

But, as a virologist, are you against using these hand dryers? You said you didn't like seeing them?

If they're located somewhere in a football stadium, that's fine. But I don't think they should be used in hospitals. They are also very noisy.

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