



Coronavirus and handwashing: research shows proper hand drying is also vital

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With the number of people infected with coronavirus increasing around the world on a daily basis, the World Health Organization (WHO) has advised everyone to regularly and thoroughly clean their hands. This can be either with an alcohol-based hand rub or with soap and water. The hope is that good hand hygiene will limit the spread of the virus.

To wash your hands effectively, it needs to be done with clean water and soap. Hands should be rubbed together for at least 20 seconds, followed by rinsing. The use of soap is particularly important for handwashing to be effective as research has shown that washing with soap significantly reduces the presence of microbes (viruses and bacteria) on hands. But one often overlooked part of handwashing is hand drying — which is also integral to effective hand hygiene.

Hand drying not only removes moisture from the hands but it also involves friction, which further reduces the microbial load and the environmental transfer of microorganisms. And the transmission of microbes is more likely to occur from wet skin than dry skin.

How you dry matters

But it's not just as simple as drying your hands off in any old way, because how you dry your hands also matters. And this is particularly the case in hospitals and doctors surgeries.

Our research review has examined the importance of hand drying and the implications of wet hands for patients and healthcare workers. The findings highlight that hot air hand dryers and cloth roller towels can be a problematic way of drying your hands — especially in a hospital.

Our review mainly looked at the impact of hand drying on bacteria, not viruses. But what we found is still relevant when looking at the possible transmission and spread of coronavirus in hospitals and GP surgeries — particularly given the advice from the WHO regarding frequent handwashing.



Drying your hands properly removes a significant number of microorganisms after hand washing.

Disposable paper towels offer the most hygienic method of hand drying. Indeed, warm air and jet air dryers are not recommended for use in hospitals and clinics for hygiene reasons. These types of hand dryers can increase the dispersion of particles and microorganisms into the air, contaminating the environment.

Cloth roller towels are also not recommended as they become a general use towel when the roll comes to an end – and can be a source of pathogen transfer to clean hands.

Importance of hand drying

Our review also found that the most appropriate methods for hand drying within a clinical environment – such as a hospital – differed to that recommended for public washrooms. This is because of the higher risk of contamination and cross-infection in hospitals. So while it is important to dry your hands properly wherever you are, paper towels are always the preferred option if you are in hospital as a patient or a visitor – or a member of staff.

As part of our review, we also looked at government policy on hand drying and found that disposable paper towels are recognised as being the quickest and most effective way of removing residual moisture that may allow for the transmission of microorganisms. This is good to know given the current concerns around the spread of the coronavirus.

In this sense, our research serves as a timely reminder that proper and effective hand drying is integral to hand hygiene whether you're in a hospital, doctor's surgery or just in the office.