



How Does Abu Dhabi's Coronavirus-Tracking App Work?

A new programme developed by healthcare professionals and university professors has the ability to not only track transmission of coronavirus, but also predict hotspots before outbreaks occur. It's expected that the modelling technology will form a key cornerstone of the UAE's government's policies on imposing travel restrictions, allocating resources and issuing public health guidelines.

Developed as part of a collaborative effort between the UAE University and the Abu Dhabi Department of Health, the programme relies upon the use of a sophisticated computer algorithm. This allows it to create a virtual map of current and upcoming infections, which can help the authorities to see, at a glance, where they should focus their attentions in order to minimise the spread of the virus and mitigate its impact upon those unfortunate enough to contract it.

Science and technology leading the way

The programme has been compiled by experts from a variety of different fields, including artificial intelligence, data science, engineering sciences, epidemiology, mathematical modelling, public health and transportation analysis. By combining all of those talents to come up with a single, streamlined tool for tracking the virus, those behind the project have managed to strike upon a truly ground-breaking solution.

For example, the programme has been loaded with existing information on different segments of Emirati society, such as their age, location and pre-existing health conditions. In this way, it is able to identify [who is most at risk from COVID-19](#) and allocate the resources necessary to ensure they have all the help they may require.

Proactive, not reactive

What's especially remarkable about the Abu Dhabi programme is that it doesn't just track existing cases of coronavirus, but can proactively predict where outbreaks may surface. By mining all of the available data, it is capable of estimating the daily number of casualties attributable to the disease and approximate the resources that will be required to treat them with a 90% degree of accuracy.

Such foresight should prove to be invaluable in containing the spread of the virus and limiting its effect on public health. In a wider sense, that could also help society to



return to some semblance of normality as soon as possible and mitigate the pandemic's detrimental impact on the economy.

Human resilience

It is solutions like these which demonstrate the resilience and resourcefulness of the human race, even in the face of a killer virus which has decimated populations across the globe. "Through this unprecedented pandemic that the globe is facing, we have demonstrated that no obstacle is too challenging for our society as we move towards maintaining the health and well-being of our community," [commented Dr Jamal Al Kaabi](#), who currently serves as the undersecretary for the Department of Health.

"Despite the current circumstances, we continue our approach based on scientific research, and the implementation of modern technologies to ensure high quality healthcare treatment is accessible to all residents in Abu Dhabi. This also demonstrates the department's targeted prevention approach."