

NHS COVID-19 app updates across England and Wales

- Around 40% of adults with eligible smartphones have now downloaded the NHS COVID-19 app
- Updates increase app's accuracy in identifying close contacts
- Removes unnecessary exposure notifications to improve communications to app users

NHS COVID-19 app users will benefit from updates to the app that make it more accurate and user-friendly from today, 29 October. This is the latest in a series of updates since national launch, designed to improve the efficacy and usability of the app.

The app, which has now been downloaded 19 million times by around 40% of eligible smartphone owners, will be updated to better estimate distance between users to increase the accuracy of close-contact notifications sent out by the app.

The accuracy will be even better than at launch, and working in collaboration with scientists from The Alan Turing Institute to utilise the latest version of the Google/Apple API, it is now the only app globally to have innovated its underlying technology to exploit this latest API update. This improves the estimation of distance via Bluetooth, further helping to break chains of transmission.

By improving the accuracy of how the app estimates distance, it can better assess whether someone is at risk of having caught the virus and therefore needs to isolate. This means the app will better protect users, their loved ones and our communities

The app has been designed with user privacy in mind, so it tracks the virus not people, and uses the latest in data security technology to protect privacy. The system generates a random ID for an individual's device, which can be exchanged between devices via Bluetooth (not GPS). These unique random IDs regenerate frequently to add an extra layer of security and preserve anonymity.

The app does not hold personal information such as your name, address or date of birth, and only requires the first half of your postcode to ensure local outbreaks can be managed. No personal data is shared with the government, police or the NHS.

The update also addresses the issue of 'ghost' exposure notifications, sent by Google and Apple when the app interacts with the API, improving the clarity of app communications.

NHS Test and Trace Director of Product, Gaby Appleton, said:

The team behind the app are continually working to improve its accuracy and user experience, to make it as simple as possible to keep users and their loved ones safe.

We are thrilled that over 19 million people have chosen to download the app to help protect their loved ones while preserving their privacy, and that over 680,000 QR codes have been created by businesses to support digital contact tracing.

This update builds on that success by increasing accuracy, and also removing 'ghost' exposure notifications, meaning users will only be notified if they need to self-isolate.

The more people who use the app, the better it works, so I encourage all those who have not yet downloaded the app to do so.

Mark Briers of The Alan Turing Institute said:

It is thanks to the hard work of the NHS COVID-19 app development team and colleagues at the Turing Institute that we have been able to exploit the updated API technology in this way.

This update increases the accuracy, meaning those most at risk will be notified to self-isolate.

Change to risk threshold

The app uses a combination of distance, proximity and infectiousness of a contact to calculate the risk threshold at which someone is notified to self-isolate. The latest update uses technology to better measure distance, meaning we can reduce the number of low-risk contacts notified to self-isolate without impacting the number of high-risk contacts notified to self-isolate.

This means now, more than ever, those who are notified by the app to self-isolate are at high-risk and should isolate to break the chain of transmission and control the spread of the virus.

The risk threshold is not static – it can be turned up or down and will be kept under review and changed periodically to reflect the stage of the coronavirus pandemic.

The update will also lower the threshold set to notify users at risk of having caught the virus to self-isolate. See [more detail on this change](#).

This is expected to increase the number of people asked to self-isolate by the app having been in close contact with someone who has tested positive. In the context of rising infection rates across the country, this change is necessary to break the chain of transmission, helping curb the spread of the virus and therefore ensuring fewer people are infected in the long term.

Ending 'ghost' notifications

By removing these unnecessary 'ghost' exposure notifications, it will be clearer to app users they only need to self isolate when instructed to do so by the app. The new update will be available immediately on all eligible Android phones, and iPhones running on operating system iOS 3.7 or above.

The app is also set to become interoperable with contact tracing apps in Scotland, Northern Ireland, Jersey and Gibraltar. We are currently consulting with the National Cyber Security Centre to ensure this process is secure and reliable, functioning effectively to benefit everyone using contact tracing apps across the UK. We expect this update to be released in early November.

When interoperability is implemented, if an app user tests positive for coronavirus, they can choose to upload the anonymous keys their phone has been exchanging with other phones so alerts can be sent to other app users across the UK, Jersey and Gibraltar.

We are committed to publishing more detailed app data in due course.

Background information

The app is available to all those over 16 in England and Wales, and operates in 12 languages. It forms a central part of the NHS Test and Trace service in England and the NHS Wales Test, Trace, Protect programme, identifying contacts of those who have tested positive for coronavirus.

As of Sunday 25 October, the NHS COVID-19 app had been downloaded over 19 million times across England and Wales.

The NHS Test and Trace team behind the app has worked closely with major tech companies, including Google and Apple, scientists within The Alan Turing Institute and Oxford University, Zuhlke Engineering, medical experts, privacy groups, at-risk communities and teams in countries across the world using similar apps – such as Germany – to develop an app that is safe, simple and secure.

See: