



Public Health
England



FAO: Medical Directors, Consultant Virologist/Microbiologists,
Infectious Diseases Physicians, Infection Laboratory Managers.

Date: 24 April 2020

Dear Colleague,

Introducing the COVID-19 Genomic UK (COG-UK) Consortium

On 23 March 2020, the UK Government and the Chief Scientific Adviser announced the establishment of the **COVID-19 Genomic UK (COG-UK) Consortium** (www.cogconsortium.uk).

Funded by the UK Government and the Wellcome Trust, COG-UK brings together the four UK Public Health Agencies (PHA) and several NHS and academic organisations across the UK to carry out national large-scale sequencing and analysis of SARS-CoV-2 genomes. COG-UK will sequence at 16 sites across the UK including PHE Colindale, Public Health Wales in Cardiff, numerous universities and the Wellcome Sanger Institute (WSI). COG-UK operates from a central hub at the University of Cambridge and the WSI, and conducts analysis across the entire consortium, providing analytical reporting to the four UK Public Health Agencies and the UK government Scientific Advisory Group for Emergencies (SAGE), and equivalents in the devolved administrations. Genomic analysis will support the UK's response to the pandemic by helping build an understanding of the population transmission dynamics and biological characteristics of COVID-19.

This letter explains how laboratories in England are asked to contribute to the work of COG-UK.

How your laboratory can contribute

Public Health England and NHS England are asking all clinical laboratories to become participants in the COG-UK consortium. Labs are asked to submit sample materials or sequencing data for confirmed COVID-19 cases. Laboratories opting for sample materials may submit either residual nucleic acid extracts, lysates or residual primary samples.

Laboratories submitting sequencing data may submit SARS-CoV-2 information from any sequencing platform. An NHS number or lab number is the only mandatory information that is needed – and is transferred electronically directly to PHE using secure NHS mail.

Role of the COG-UK Consortium partners and governance framework

All laboratories in England performing a primary diagnostic role must notify PHE of positive cases of SARS-CoV-2, the causative agent for COVID-19, in accordance the Health Protection (Notification) Regulations 2010. PHE processes confidential patient information on positive cases of all notifiable diseases, including COVID-19, under section 251 of The NHS Act 2006 and regulation 3 of the associated Health Service (Control of Patient Information) Regulations 2002.

The PHE Research Ethics and Governance group has reviewed the COG-UK study protocol and approved it as surveillance forming part of the emergency response to COVID-19. PHE shall use reasonable efforts to ensure that all sequencing sites acting on behalf of COG-UK adhere to governance processes and procedures of equivalent standards to those required by the NHS (but PHE shall not be liable for non-compliance of governance processes by a sequencing site). To this end all COG-UK sequencing sites will operate under the COG-UK data processing and sharing agreement, and code of conduct that will be approved by PHE. PHE is the COG-UK data controller for English data held by COG-UK.

COG-UK is overseen by a Steering group. The purpose of the Steering Group is to provide strategic oversight and is chaired the COG-UK Director, and includes representation from the four UK Public Health Agencies. In addition, there is a separate COG-UK Governance group with independent experts in the field that oversees the overall COG-UK consortium.

How will COG-UK information be shared?

All sequencing data from across COG-UK is uploaded by the various sequencing sites to the MRC-CLIMB server, which has access restricted to COG-UK. All linked clinical and epidemiological data (e.g. Hospital episode statistics, SGSS, ICNARC, etc) from England will be analysed by the COG-UK health informatics team embedded inside PHE Colindale. Only a defined set of depersonalised information will be released to specialised analysis sub-groups within COG-UK. COG-UK will conduct analysis across the consortium within specialised analysis sub-groups, that will have controlled data access.

Laboratories with specialist interests may also wish to join some of these workstreams and are welcome to make analysis suggestions to the COG-UK analysis teams. These sub-groups work together to deliver data to the COG-UK report writing group which generates weekly summary reports for PHE and to the UK Governments Scientific Advisory Group for Emergencies (SAGE). This national analysis is also shared with the devolved administrations Public Health Agencies.

Benefits to joining COG-UK

Participating laboratories will also be able to download their genome data for local analysis purposes (within ~1 week of receipt of samples). In time, overview reports on national analyses will be made available to the participating laboratories, and local sequencing analysis provided to locations without the capacity for local bioinformatic analysis capabilities. There are several sub-studies embedded in the consortium, such as investigations of nosocomial transmission (Hospital Onset COVID-19 Infection (HOI)), and generalisable findings from these will be shared with participating laboratories as soon as available.

Next steps

All laboratories who are willing to participate in the CO-UK Study are asked to nominate a **point of contact** to COG-UK sample management team, so that further information pack containing a copy of the Study Protocol, PHE REGG approval letter, and Sample requirements and shipment details can be provided. Please send details to the COG-UK sample management team: coguksamples@sanger.ac.uk

Further information can be found on the COG-UK website at www.cogconsortium.uk.

Thank you in advance for your support with this important UK-wide initiative to help control COVID-19.



Dr Nick Phin
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Public Health England



Professor Sharon Peacock
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Professor Stephen Powis
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