



Prioritisation of SARS-CoV-2 antibody samples for serum and plasma storage

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This document relates to serology samples taken for the assessment of antibodies to SARS-CoV-2.

It has been produced to assist health services laboratories in prioritising samples for storage in the event of limited storage capacity.

The following statements are based on the state of knowledge as of 8 July 2020 and will be updated periodically. They are not intended to be exhaustive or definitive and suggestions for improvements are welcome for future iterations (please contact us at covid-19@rcpath.org should you have comments). They are provided to assist and support members in developing their work on COVID-19 and in consideration of some of the complexities.

During the SARS-CoV-2 epidemic, extensive serology testing has been undertaken in the UK, producing hundreds of thousands of serology samples. Guidance given in the Royal College of Pathologists' The retention and storage of pathological records and specimens (5th edition), section 92, recommends that sera and plasma should be stored for 'as long as is practicable', and that laboratories involved 'routinely in public health activities should retain sera for a minimum of one year'.¹

Most serology testing currently takes place in high throughput blood science and chemistry laboratories. These laboratories usually only retain samples for 48 hours after processing due to lack of storage capacity and should not be considered as routinely involved in public health activities. The referenced guidelines requiring storage for a minimum of 1 year¹ should not apply to them.

While the existing guidelines recognise that storage difficulties may occur, guidance on sample storage has been requested. Therefore, the purpose of this document is to provide suggested prioritisation for the storage of SARS-CoV-2 serology samples, accepting that adequate storage for all samples is not generally available.

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The order of prioritisation of serology samples, from highest to lowest priority, should be as-signed as follows:

1. Patient serology samples for laboratory quality control purposes.
2. Patient serology samples obtained for clinical purposes.
3. Patient serology samples obtained for screening or surveillance purposes.
4. Healthcare staff serology samples.

Any process of prioritisation should be used in conjunction with local clinical leadership and individual centre assessment, with regard to their current storage capability, the rate of creation of new storage capacity and the rate of generation of new samples needing to be stored.

This guidance on prioritisation does not apply to serum obtained for antenatal screening, which should be kept for two years.¹

References

1. The Royal College of Pathologists and the Institute of Biomedical Science. *The retention and storage of pathological records and specimens (5th edition)*. 2015. Available from: www.rcpath.org/uploads/assets/049ea966-df5c-4a9f-9353ba24a69bb808/The-retention-and-storage-of-pathological-records-and-specimens-5th-edition.pdf