June 15, 2020

Due to questions and concerns raised by the Research Community related to the handling of human samples that may or may not be known to be positive for the SARS-CoV-2 virus, the University of Arizona Institutional Biosafety Committee (IBC) is releasing the following guidance.

- Isolation and growth of the SARS-CoV-2 virus from positive human samples is prohibited outside of a Biosafety Level 3 (BSL-3) laboratory.
  - “Virus isolation in cell culture and initial characterization of viral agents recovered in cultures of SARS-CoV-2 specimens should only be conducted in a Biosafety Level 3 (BSL-3) laboratory using BSL-3 practices.” – CDC Biosafety Guidance on SARS-CoV-2.

- Human samples that have been confirmed positive for the SARS-CoV-2 virus, or are considered potentially infected, should be handled in a Biological Safety Cabinet (BSC) that is certified annually.
  - If unable to conduct work in a BSC, please contact RLSS for approval, unless you have already discussed this with the Biosafety Officer.

- Procedures on human samples that have been confirmed positive for the SARS-CoV-2 virus, or are considered potentially infected, that have a high likelihood of creating aerosols must be conducted inside of a certified BSC.
  - Examples: Opening centrifuge safety cups and sealed rotors, grinding, blending, vigorous shaking and mixing, and sonic disruption.
  - If unable to conduct work in a BSC, please contact RLSS for approval, unless you have already discussed this with the Biosafety Officer.

- RNA/DNA extraction of human samples that have been confirmed positive for the SARS-CoV-2 virus, or are considered potentially infected, should be handled in a certified BSC.
  - Once the RNA/DNA has been extracted, it can be handled outside of the BSC.
  - “RNA extraction should be done in a BSC in a BSL-2 or equivalent facility.” – WHO Biosafety Guidance on SARS-CoV-2.

- Human samples that were collected after January 1, 2020 should be considered potentially infected with the SARS-CoV-2 virus, even if these samples were collected while not actively sampling for the virus.

Guidance on working appropriately in a BSL-2 laboratory can be found on the RLSS website.

If you have any questions about the above guidance, please contact Research Laboratory & Safety Services (RLSS) at rlss-help@arizona.edu.

Best regards,

Michael Riehle, PhD
Chair, Institutional Biosafety Committee