

Message from the BIPM and BIML Directors

World Metrology Day

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Measurement for health

World Metrology Day in 2021 comes at a time when the world is focussed on making a quick and effective recovery from the impact of the COVID-19 pandemic.

The speed and severity with which the virus impacted people around the world at the beginning of 2020 forced governments to respond rapidly. Right from the beginning, new measurement requirements emerged, starting with the need for large-scale testing for the presence of the virus and the performance of personal protective equipment. Subsequently, the development of vaccines has depended on accurate identification and measurement of complex protein and RNA molecules.

The enormous scale of these requirements has changed national priorities globally; governments have re-focussed established science capabilities to meet the challenge of protecting their populations from the impact of the virus. The metrology community around the globe has been involved with these new national and global challenges, and has used its established experience of measurement science to address national needs such as by:

- setting up systems to test masks needed for personal protection,
- contributing to the design and testing of new ventilator systems needed in hospitals,
- identifying and counting virus molecules in test samples, and
- measuring the efficacy of vaccine doses.

This has been possible because of established technical capabilities to support many of the measurements needed to protect and improve health. These include:

- developing international standards for all types of medical devices with a measuring function, including automated blood-pressure instruments, ophthalmic instruments and medical syringes,
- underpinning clinical laboratory testing by ensuring that measurements made by medical thermometers are in line with the internationally recognised temperature scale,
- ensuring that patients experience the correct dose of X-rays during diagnostic procedures, and
- providing the basis for accurate therapeutic doses of radiation in the treatment of cancer.

We chose the theme “Measurement for Health” for World Metrology Day this year to draw attention to the importance of measurement to support the protection of health. It comes at a time when the experience and capabilities invested in metrology organisations around the world have been turned at short notice to address new national health challenges.

We wish you a very successful World Metrology Day 2021 and look forward to receiving your posters and details of any events you are holding.

More details about World Metrology Day,
including the *Measurement for Health* poster for 2021,
are available from

<https://www.worldmetrologyday.org/>