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WHO Expert Advisory Committee on  
Developing Global Standards for Governance  
and Oversight of Human Genome Editing

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HUMAN GENOME EDITING:  
**POSITION PAPER**



World Health  
Organization



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Global Standards for Governance and Oversight  
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WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing. Human Genome Editing: position paper

ISBN 978-92-4-003040-4 (electronic version)

ISBN 978-92-4-003041-1 (print version)

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**Suggested citation.** WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing. Human Genome Editing: position paper. Geneva: World Health Organization; 2021. Licence: **CC BY-NC-SA 3.0 IGO**.

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Graphic design and layout by Trans.Lieu Company Ltd

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# Acknowledgements

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The governance framework and the recommendations on human genome editing form a pair of reports that have been developed by the WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing.

These publications have been developed under the direction and coordination of Ms Katherine Littler (Co-lead, Health Ethics & Governance Unit), under the overall guidance of John Reeder (Director, Research for Health) and Soumya Swaminathan (Chief Scientist).

Dr Piers Millett (consultant, United Kingdom of Great Britain and Northern Ireland) provided support to the project and was the lead writer of the publications as well as the meeting reports of the Committee. Dr Emmanuelle Tuerlings (consultant, Switzerland) also provided support and contributed to the writing of the documents.

WHO wishes to thank the following individuals and organizations for their contributions to the development of these publications.

## **WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing**

WHO is most grateful to the Co-Chairs, Dr Margaret Hamburg, former Commissioner of the U.S. Food and Drug Administration and former Foreign Secretary, National Academy of Medicine, United States of America and Justice Edwin Cameron, Inspecting Judge of Correctional Services, South Africa, and the members of the Committee for their invaluable guidance, expertise and great support throughout the project and the conceptualization and development of the three publications (by alphabetical order):

Dr Mohammed Alquwaizani, Saudi Food and Drug Authority, Kingdom of Saudi Arabia (member until 2 June 2020)

Professor Ewa Bartnik, University of Warsaw, Poland

Professor Françoise Baylis, Dalhousie University, Canada

Professor Alena Buyx, the Technical University of Munich, Germany

Professor Alta Charo, University of Wisconsin, United States of America

Dr Hervé Chneiweiss, CNRS, INSERM, France

Associate Professor Jantina De Vries, University of Cape Town, South Africa

Dr Cynthia Holland, the Australian and New Zealand Infertility Counsellors Association, Australia

Professor Maneesha S. Inamdar, Jawaharlal Nehru Centre for Advanced Scientific Research, India

Professor Kazuto Kato, Osaka University, Japan

Professor Robin Lovell-Badge, The Francis Crick Institute, United Kingdom

Dr Jamie Metzl, Atlantic Council & OneShared, United States of America

Dr Ana Victoria Sánchez-Urrutia, SENACYT, Panama

Professor Jacques Simpore, Université Ouaga I, Burkina Faso

Professor Anne Wangari Thairu-Muigai, Jomo Kenyatta University of Agriculture and Technology, Kenya

Professor Xiaomei Zhai Chinese, Academy of Medical Sciences & Peking Union Medical College, China

All authors and members of the WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing declared their interests according to WHO standard procedures. None of the interests declared were found to be significant.

To the experts and organizations who participated in the in-person meetings, the online meetings and webinars and provided valuable inputs through sharing their experiences and insights on human genome editing. The Annexes of the Governance Framework and Recommendations on Human Genome Editing list the participants in meetings, consultations and webinars.

The many individuals and organizations who participated in the first and second online consultations on the governance framework on human genome editing. Their valuable inputs and comments have contributed to the development of the governance framework.

The technical contributions of colleagues at WHO headquarters: Dr Avni Amin, Dr Samvel Azatyan, Efstratios (Stratos) Chatzixiros, Dr Erika Dueñas Loayza, Mr Ghassan Karam, Dr Ivana Knezevic, Dr Olufemi Taiwo Oladapo, Dr Yuyun Maryuningsih, Dr Soumya Swaminathan, Dr Jacqui Stevenson, Professor John Reeder, Dr Andreas Reis, Dr Anna Laura Ross and Dr Si Hyung Yoo.

The authors of the two reports commissioned by the WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing: Ms Nicola Perrin (independent consultant), Dr Güneş Taylor and Dr Christophe Galichet (The Francis Crick Institute), United Kingdom.

Colleagues at WHO headquarters Ms Elena Egorova, Ms Gloria Haselmann, Anne-line Nippierd Imbsen and Ms Sophie Spillard for their administrative support throughout the project. Special appreciation is also expressed to the external teams who provided administration support for the meetings that have been held in Singapore (14 November 2019) and in Cape Town, South Africa (24-26 February 2020).

WHO gratefully acknowledges the financial support provided by Wellcome Trust for this project and for the development of these publications.

# Executive summary

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The recent application of tools, such as CRISPR-Cas9 (clustered regularly interspaced short palindromic repeats; Cas9 nuclease), to edit the human genome with the intention of treating or preventing disease and the gaps in our scientific understanding, in addition to some of the proposed applications of human genome editing, raise ethical issues that have highlighted the need for robust oversight in this area. The COVID-19 pandemic has clearly demonstrated the importance of using new tools and methods to combat serious diseases and highlighted the potential benefits of human genome editing research. It also reminds us of the need to develop technology carefully, with robust testing and quality assurance measures in place to maximize benefit and minimize harm. The balance between benefit and harm, safety and speed, and innovation and access is relevant to all of human genome editing.

In December 2018, the World Health Organization (WHO) established a global, multidisciplinary expert advisory committee (the Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing, hereafter called the Committee) to examine the scientific, ethical, social and legal challenges associated with human genome editing (somatic, germline and heritable). The Committee was tasked to advise and make recommendations on appropriate institutional, national, regional and global governance mechanisms for human genome editing. Its remit did not include a review of matters to do with safety and efficacy. Committee members were drawn from each of the WHO regions – Africa, the Americas, South-East Asia, Europe, Eastern Mediterranean and Western Pacific.

The 18 members of the Committee worked for two years and developed several products and new initiatives. The governance framework on human genome editing, along with the recommendations of the Committee, form a set of two publications that provide advice and recommendations on appropriate institutional, national, regional and global governance mechanisms for human genome editing. A position paper on human genome editing provides a summary of these two publications.

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