

WADA's responsibilities in science and medicine include, among others, scientific research, publishing the Prohibited List, laboratory accreditation, Therapeutic Use Exemption and Athlete Passport.

WADA is committed to increasing the volume of research dedicated to developing new and improved detection methods for performance-enhancing substances and methods. Since 2001, WADA has committed tens of millions of dollars to scientific research. Some examples of publicized outcomes include the development and validation of detection methods for haemoglobin based oxygen carriers (HBOCs), homologous blood transfusions, human growth hormone (hGH) and new erythropoiesis stimulating agents (e.g. CERA).

WADA is also in charge of studying emerging threats and anticipating doping trends. In March 2002, a workshop on gene doping was organized by WADA at the Banbury Center in New York. Experts, scientists, ethicists, athletes, and representatives from the Olympic Movement and governments discussed the issue. WADA also created, in 2004, a panel of experts on gene doping. The panel's task is to study the latest advances in the field of gene therapy, the methods for detecting doping, and recommend the research projects for funding by WADA in this area. WADA, in collaboration with Swedish authorities, held a second gene doping symposium in December 2005 in Stockholm. A third gene doping symposium was held in June 2008 in Saint-Petersburg, with the support of the Russian sport authorities.

In January 2004, WADA assumed responsibility for accrediting and re-accrediting anti-doping laboratories worldwide.

Pursuant to the World Anti-Doping Code, WADA is responsible for annually preparing and publishing the Prohibited List in consultation with panels of experts in the field as well as the Agency's many stakeholders. The List is developed through a highly consultative process, beginning with the circulation of a draft List among more than 1,700 stakeholders for comment. The comments received are processed by WADA's List Committee, who then presents its conclusions to the WADA Health, Medical and Research Committee, who in turn submits its final recommendations to the Executive Committee at its annual September meeting. The Executive Committee, WADA's ultimate policy-making body, discusses the recommendations and makes a final decision.

WADA also monitors the Therapeutic Use Exemption (TUE) process, implemented by anti-doping organizations around the world, to ensure compliance with the International Standard for TUEs.

Furthermore, the Agency initiated the development of a more medical approach of anti-doping through the development of the Athlete Passport Program. The fundamental principle of the Athlete Passport is based on the monitoring of an athlete's biological variables to detect abnormal variations that indirectly reveal the effects of doping, as opposed to the traditional direct detection of doping.