

The Stellenbosch Consensus on Legal National Responses to Public Health Risks

Clarifying Article 43 of the International Health Regulations

Roojin Habibi, JD MSc

Research Fellow, Global Strategy Lab, and Doctoral Candidate, Osgoode Hall Law School, York University, Toronto, Canada

roojinhabibi@osgoode.yorku.ca

*Steven J. Hoffman, JD PhD LL.D.**

Dahdaleh Distinguished Chair in Global Governance & Legal Epidemiology, and Professor of Global Health, Law, and Political Science, York University, Toronto, Canada

steven.hoffman@globalstrategylab.org

Gian Luca Burci, JD PhD

Adjunct Professor of International Law, Graduate Institute of International and Development Studies, Geneva, Switzerland

gian-luca.burci@graduateinstitute.ch

Thana Cristina de Campos, MPhil DPhil

Associate Professor of International Law, Human Rights and Global Bioethics, Pontificia Universidad Catolica de Chile, Santiago, Chile

thana.campos@gmail.com

Danwood Chirwa, LLB (Hons) LLM PhD

Professor and Dean, Faculty of Law, University of Cape Town, Cape Town, South Africa

danwood.chirwa@uct.ac.za

Margherita Cinà, JD/BCL LLM

Research Fellow, Global Strategy Lab, York University, Toronto, Canada

margherita.cina@georgetown.edu

* Corresponding author: Steven J. Hoffman, Global Strategy Lab, York University 4700 Keele Street, Dahdaleh Building 2120 Toronto, Ontario, Canada, M3J 1P3
steven.hoffman@globalstrategylab.org

Stéphanie Dagron, Dr. iur. PhD

Professor of Law, University of Geneva, University of Geneva, Geneva,
Switzerland

stephanie.dagron@unige.ch

Mark Eccleston-Turner, LLB (Hons) LLM PhD

Lecturer in Law, School of Law, Keele University, Staffordshire, United
Kingdom

m.r.eccleston-turner@keele.ac.uk

Lisa Forman, LLB MA SJD

Associate Professor, Dalla Lana School of Public Health, University of
Toronto, Toronto, Canada

lisa.forman@utoronto.ca

Lawrence O. Gostin, JD LLD (Hon.)

Professor and Founding O'Neill Chair in Global Health Law, Georgetown
Law, Georgetown, Washington D.C., USA

gostin@georgetown.edu

Benjamin Mason Meier, JD LLM PhD

Associate Professor of Global Health Policy, Department of Public Policy,
University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

meierb@email.unc.edu

Stefania Negri, MPS PhD

Associate Professor of International Law, Department of Legal Sciences,
University of Salerno, Salerno, Italy

snegri@unisa.it

Gorik Ooms, Lic. Jur. PhD

Honorary Professor of Global Health Law & Governance, London School of
Hygiene and Tropical Medicine, London, United Kingdom

gorik.ooms@lshtm.ac.uk

Sharifah Sekalala, LLB LLM DPhil

Associate Professor and Fellow of the Higher Education Academy, School of
Law, Warwick University, Coventry, United Kingdom

sharifah.sekalala@warwick.ac.uk

Allyn Taylor, JD LL.M. JSD

Professor, School of Law, University of Washington, Seattle, WA, USA

allyntaylor99@gmail.com

Alicia Ely Yamin, JD MPH

Senior Fellow, Petrie-Flom Center for Health Law Policy, Biotechnology and Bioethics, Harvard University, Cambridge, MA, USA

ayamin@hsph.harvard.edu

Abstract

The *International Health Regulations* (IHR), of which the World Health Organization is custodian, govern how countries collectively promote global health security, including prevention, detection, and response to global health emergencies such as the ongoing COVID-19 pandemic. Countries are permitted to exercise their sovereignty in taking additional health measures to respond to such emergencies if these measures adhere to Article 43 of this legally binding instrument. Overbroad measures taken during recent public health emergencies of international concern, however, reveal that the provision remains inadequately understood. A shared understanding of the measures legally permitted by Article 43 is a necessary step in ensuring the fulfillment of obligations, and fostering global solidarity and resilience in the face of future pandemics. In this consensus statement, public international law scholars specializing in global health consider the legal meaning of Article 43 using the interpretive framework of the *Vienna Convention on the Law of Treaties*.

Keywords

Vienna Convention on the Law of Treaties – International Health Regulations – international organizations – World Health Organization – global health law – pandemics – travel bans – trade restrictions

1 Introduction

This article contains the first of two consensus statements that apply generally accepted principles and doctrine of public international law to interpret countries' legal obligations under the International Health Regulations (IHR). This

first statement clarifies what additional health measures countries can legally enact under Article 43 of the IHR when responding to public health events.

International travel connects countries and people around the world more than ever before.¹ This global interconnectedness has also hastened the international spread of infectious diseases, including prominent recent outbreaks like Severe Acute Respiratory Syndrome (SARS) in 2003, H1N1 influenza in 2009, Middle East Respiratory Syndrome (MERS) in 2012, Ebola in 2014, Zika in 2016, Ebola again in 2018, and most recently, novel coronavirus (COVID-19) in 2020.² As the directing and coordinating authority on international health work,³ the World Health Organization (WHO) administers the legally binding *International Health Regulations* (IHR), which aim to “prevent, protect against, control and provide a public health response to the international spread of disease” while avoiding “unnecessary interference with international traffic and trade.”⁴ One hundred and ninety-six states have accepted the IHR, highlighting universal recognition for the need to cooperate across borders in preventing the spread of infectious diseases in a globalized world.⁵

The IHR are the product of over 150 years of multilateral efforts to contain the international spread of infectious diseases while preserving economic flourishing and trade.⁶ Its precursors, a series of political agreements and international conventions and regulations between 1851 and 1944, saw European powers and other states agreeing to standardize international quarantine regulations against the spread of specific diseases such as cholera, plague and yellow fever.⁷ The *raison d'être* of these early attempts at global health security

-
- 1 Steven J Hoffman and Clarke B Cole, ‘Defining the global health system and systematically mapping its network of actors’ (2018) 14(1) *Globalization and Health* 38.
 - 2 Lawrence O Gostin and Rebecca Katz, ‘The International Health Regulations: The Governing Framework for Global Health Security’ (2016) 94(2) *Milbank quarterly* 264, 273; Belinda Bennett and Terry Carney, ‘Public Health Emergencies of International Concern: Global, Regional, and Local Responses to Risk’ (2017) 25(2) *Medical Law Review* 223, 224.
 - 3 *Constitution of the World Health Organization*, opened for signature 22 July 1946, 14 UNTS 185 (entered into force 7 April 1948) art 2(a) (‘WHO Constitution’).
 - 4 World Health Organization (‘WHO’), World Health Assembly, *Revisions of the International Health Regulations* Res, WHA58.3, 58th assembly, 23 May 2005, art 2 <https://www.who.int/ipcs/publications/wha/ihr_resolution.pdf> (‘IHR’).
 - 5 Steven J Hoffman, ‘How Many People Must Die from Pandemics before the World Learns?’ (2017) 1(1) *Global challenges* 30.
 - 6 Steven J Hoffman, ‘The Evolution, Etiology and Eventualities of the Global Health Security Regime’ (2010) 25(6) *Health policy and planning* 510.
 - 7 Adam Kamradt-Scott and Simon Rushton, ‘The Revised International Health Regulations: Socialization, Compliance and Changing Norms of Global Health Security’ (2012) 24(1) *Global Change, Peace & Security* 57, 58.

governance was to protect against public health threats⁸ while minimizing disruptions to trade and travel – a balance that remains at the core of the IHR to this day.⁹

The previous century's efforts to draft a more comprehensive international legal agreement on state responses to public health risks gained momentum with the creation of WHO in 1948 as a specialized agency of the United Nations (UN). Article 21 of the WHO Constitution empowers the agency's plenary governing body – the World Health Assembly (WHA) – to adopt legally binding regulations by majority vote concerning “sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease.”¹⁰ Exercising this authority, the WHA adopted in 1951 the *International Sanitary Regulations (ISR)*,¹¹ which was revised and renamed in 1969 the *International Health Regulations* or IHR (1969).¹²

The IHR (1969) remained limited in scope, however, dealing only with the spread of a limited set of diseases, including plague, cholera, yellow fever and smallpox until its eradication in the late 1970s. Critics denounced the poor record of state compliance with its provisions, including states' continued application of excessive health measures beyond those prescribed by the regulations.¹³ In response to these shortcomings, in 1995, the WHA launched a process to revise the IHR (1969).¹⁴ Accelerated by the SARS outbreak in 2003, negotiations concluded with the adoption by consensus of

8 Gostin and Katz, above n 2, 266.

9 Kamradt-Scott and Rushton, above n 7, 58.

10 WHO Constitution, above n 3, art 21.

11 WHO, World Health Assembly, *Adoption of the International Sanitary Regulations (WHO Regulations No. 2)*, WHA4.75, 4th assembly, 25 May 1951 in *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board – Volume 1* <<https://apps.who.int/iris/handle/10665/79012>>.

12 WHO, World Health Assembly, *International Health Regulations*, WHA22.46, 22nd assembly, 25 July 1969 in *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board – Volume 1* <<https://apps.who.int/iris/handle/10665/79012>>.

13 Barbara von Tigerstrom, 'The Revised International Health Regulations and Restraint of National Health Measures' (2005) 13 *Health Law Journal* 35, 37, 43.

14 WHO, World Health Assembly, *Revision and updating of the International Health Regulations*, WHA48.7, 48th assembly, 12 May 1995 in *Forty-Eighth World Health Assembly Summary Records and Reports of Committees* <<https://apps.who.int/iris/handle/10665/178304>>.

a revised IHR by the WHA on 23 May 2005, that entered into force on 15 June 2007.¹⁵

From an international law perspective, the revised IHR went a long way toward more precisely articulating what measures states are legally allowed to implement when addressing public health risks. Clear rules are important because many of the public health measures typically implemented in response to outbreaks – such as government-imposed quarantines, cordon sanitaires, trade restrictions, and travel bans – could have significant deleterious effects on other countries and on those other countries' inhabitants. Generally, states are expected to limit their responses to actions foreseen by the IHR or formally recommended by the WHO. However, Article 43 of the revised IHR allows states to implement additional health measures, but only if they achieve the same or greater levels of health protection than recommendations issued by the WHO¹⁶ or health measures otherwise prohibited by specific articles of the IHR,¹⁷ and only if certain conditions are met and the health measure is reported to the WHO.

Experience across six public health emergencies of international concern (PHEICS), including the ongoing global struggle against the COVID-19 pandemic, demonstrate that consensus on the scope and interpretation of Article 43 – i.e., on what states can legally do when responding to public health risks – remains elusive. This is owing in part to a lack of coherence in the way that additional health measures have been monitored by the WHO since the IHR's inception.¹⁸ It may also be the result of a general lack of familiarity among states with the requirements of Article 43. For instance, when approached by the WHO to provide justifications for the additional health measures adopted during the Ebola outbreak in West Africa, some states responded that their measures were not “health-related” and therefore (incorrectly) concluded those measures were not governed by the IHR.¹⁹

On 26 May 2018, the WHA approved a five-year global strategic plan (2018–2023) to improve the global response to the international spread of disease,

15 IHR, above n 4.

16 Ibid art 43(1)(a).

17 Ibid art 43(1)(b).

18 WHO, Regional Committee of WHO for the Americas, *Implementation of the International Health Regulations (IHR)*, WHO Doc CD55/12, 68th sess, rev 1, 16 September 2016 <<https://www.paho.org/hq/dmdocuments/2016/CD55-12-e.pdf>>.

19 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005): Report of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response (Report by the Director-General)*, WHO Doc A69/21, 69th sess, 13 May 2017 [72] <https://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_21-en.pdf> ('Ebola Review Committee Report').

BOX 1 IHR Article 43 – Additional Health Measures

1. These Regulations shall not preclude States Parties from implementing health measures, in accordance with their relevant national law and obligations under international law, in response to specific public health risks or public health emergencies of international concern, which:
 - (a) achieve the same or greater level of health protection than WHO recommendations; or
 - (b) are otherwise prohibited under Article 25, Article 26, paragraphs 1 and 2 of Article 28, Article 30, paragraph 1(c) of Article 31 and Article 33,
provided such measures are otherwise consistent with these Regulations. Such measures shall not be more restrictive of international traffic and not more invasive or intrusive to persons than reasonably available alternatives that would achieve the appropriate level of health protection.
2. In determining whether to implement the health measures referred to in paragraph 1 of this Article or additional health measures under paragraph 2 of Article 23, paragraph 1 of Article 27, paragraph 2 of Article 28 and paragraph 2(c) of Article 31, States Parties shall base their determinations upon:
 - (a) scientific principles;
 - (b) available scientific evidence of a risk to human health, or where such evidence is insufficient, the available information including from WHO and other relevant intergovernmental organizations and international bodies; and
 - (c) any available specific guidance or advice from WHO.
3. A State Party implementing additional health measures referred to in paragraph 1 of this Article which significantly interfere with international traffic shall provide to WHO the public health rationale and relevant scientific information for it. WHO shall share this information with other States Parties and shall share information regarding the health measures implemented. For the purpose of this Article, significant interference generally means refusal of entry or departure of international travellers, baggage, cargo, containers, conveyances, goods, and the like, or their delay, for more than 24 hours.
4. After assessing information provided pursuant to paragraph 3 and 5 of this Article and other relevant information, WHO may request that the State Party concerned reconsider the application of the measures.
5. A State Party implementing additional health measures referred to in paragraphs 1 and 2 of this Article that significantly interfere with international traffic shall inform WHO, within 48 hours of implementation, of

- such measures and their health rationale unless these are covered by a temporary or standing recommendation.
6. A State Party implementing a health measure pursuant to paragraph 1 or 2 of this Article shall within three months review such a measure taking into account the advice of WHO and the criteria in paragraph 2 of this Article.
 7. Without prejudice to its rights under Article 56, any State Party impacted by a measure taken pursuant to paragraph 1 or 2 of this Article may request the State Party implementing such a measure to consult with it. The purpose of such consultations is to clarify the scientific information and public health rationale underlying the measure and to find a mutually acceptable solution.
 8. The provisions of this Article may apply to implementation of measures concerning travellers taking part in mass congregations.

including by improving the implementation of the IHR (2005).²⁰ The plan proposes a pillar of action centred on “[s]trengthening event management and compliance with the requirements under the International Health Regulations (2005).”²¹ In particular, the plan notes that state compliance with the IHR in relation to additional health measures is a “critical element for the optimal functioning of the global alert and response system.”²² Clarity on the exact obligations that are enshrined in Article 43 is a necessary first (albeit insufficient) step to achieving such compliance. Indeed, without such clarity, it is impossible for states to know what they are allowed to do under the IHR when the next inevitable infectious disease outbreak occurs and it would be impossible for governments, international institutions, judicial bodies, and the public to judge whether those states are in compliance with their international legal obligations.

To provide this clarity, public international law scholars specializing in global health were systematically identified and convened to collectively apply the interpretive framework of the *Vienna Convention on the Law of Treaties* to the

20 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005): five-year global strategic plan to improve public health preparedness and response, 2018–2023*, WHA71(15), 71st sess, 26 May 2018 [22–23] in *Seventy-First World Health Assembly Resolutions and Decisions Annexes* <https://apps.who.int/gb/ebwha/pdf_files/WHA71-REC1/A71_2018_REC1-en.pdf#page=1> (‘WHA Decision 71(15)’).

21 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005) (Report by the Director-General)*, WHO Doc A71/8, 71st sess, 11 April 2018 <https://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_8-en.pdf>.

22 Ibid [22].

IHR, reach a jurisprudential consensus²³ on the legal meaning of Article 43, and author this consensus statement. Twenty scholars were found to meet the following five criteria, and were invited to a consensus conference: 1) public international law scholar; 2) qualified as a lawyer or appointed as a full-time core faculty at a law school; 3) focus at least half of one's scholarly activities on global health; 4) author of relevant peer-reviewed articles published within the last five years; and 5) independent of other scholars, supervisors, governments, and other directive entities. Fourteen scholars participated in the conference, held in Stellenbosch, South Africa, April 8–10, 2019, supported by two research fellows (RH/MC) and funding from the Canadian Institutes of Health Research and the Research Council of Norway. This “Stellenbosch Consensus” statement details the participating group's methodology and legal interpretation of Article 43 of the IHR. Ultimately, the hope is that greater clarity about the exact legal obligations created by the IHR's Article 43 might serve as a starting point for promoting greater compliance with them, for informing possible future revisions to them, and for encouraging the development of global health law more broadly.

2 Methodology

2.1 Preliminary Comments

In this consensus statement, Article 43 of the IHR is interpreted according to the rules of interpretation laid out in Articles 31 and 32 of the 1969 *Vienna Convention on the Law of Treaties*.²⁴ Although the rules of the *Vienna Convention* do not represent an exhaustive compilation of guidance on the interpretation of international agreements, they are widely regarded as having general applicability to the interpretation of international legal instruments as an expression of accepted principles and practices, including instruments like the IHR.²⁵ Support for this latter conclusion can be found under Article 5 of the *Vienna Convention*, which stipulates that “the Convention applies..to any treaty

23 The Oxford Dictionary of Law defines “jurisprudence” as: “[t]he theoretical analysis of legal issues at the highest level of abstraction. Jurisprudence may be distinguished from both legal theory and the philosophy of law by its concern with those questions (e.g. about the nature of a particular right or duty, or a particular line of judicial reasoning) that arise within or are implied by substantive legal disciplines.” See Jonathan Law, *The Oxford Dictionary of Law* (9th ed, 2018) *sub verbo* “jurisprudence”.

24 *Vienna Convention on the Law of Treaties*, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980) (‘Vienna Convention’).

25 Richard K Gardiner, *Treaty Interpretation* 7 (2nd ed, 2015).

adopted within an international organization without prejudice to any relevant rules of the organization.”²⁶ While the IHR is not referred to as a “treaty” by the WHO or its parties, the *Vienna Convention* was nonetheless applied here because it is the most authoritative framework for interpreting all types of written international law instruments no matter their name or label.

Regulations adopted under Article 21 of the WHO Constitution become legally binding on all 194 WHO member states unless a state rejects them (or files a reservation subject to a procedure spelled out in Article 53) within 18 months from the date of notification.²⁷ Since no state party had sought to opt out of the revised IHR before its entry into force, the IHR is binding on all these states, with two additional states, the Holy See and Liechtenstein, acceding subsequently.

The degree to which states understood the IHR to create reciprocal legal obligations subject to the *Vienna Convention* is further illustrated by the responses that emerged from reservations to the regulations. For example, speaking on behalf of 27 member states, Portugal, as then-President of the Council of the European Union, recalled the principle set out in Article 27 of the *Vienna Convention* that “a Party may not invoke the provisions of its internal law as justification for its failure to perform its international obligations” and concluded that federal governments would be expected to “exercise every effort to ensure that the provisions of the IHR are fully implemented and given full effect by the pertinent authorities.”²⁸

2.2 *Interpretive Approach*

The UN International Law Commission (ILC) has previously advised that the interpretation of a treaty should consist of “a single combined operation, which places appropriate emphasis on the various means of interpretation indicated, respectively, in Articles 31 [general rule of interpretation] and 32 [supplementary means of interpretation]” of the *Vienna Convention*.²⁹

This consensus statement interprets Article 43 of the IHR using the elements of the *Vienna Convention's* general rule of interpretation.³⁰ These elements include (a) the ordinary meaning given to the terms of the treaty in

26 IHR, above n 4, art 5.

27 WHO Constitution, above n 3, art 22 ; IHR, above n 4, art 59(1).

28 IHR, above n 4, appendix 2.

29 General Assembly, *Report of the International Law Commission*, UN GAOR, 73rd sess, Supp No 10, UN Doc A/73/10 (30 April-1 June and 2 July-10 August 2018) 13 (‘ILC Study on Subsequent Agreements and Subsequent Practice’).

30 This analysis omits the following components of the general rule of interpretation which do not apply (or exist) as a useful source of interpretation for the IHR: Article 31(2)(b) Any

their context and in light of its object and purpose, as well as WHA resolution 58.3 of 23 May 2005, which qualifies as an agreement relating to – and made by all parties in connection with – the conclusion of the IHR³¹ (Section 3); (b) subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation (Section 4); and (c) any relevant rules of international law applicable in the relations between the parties (Section 5).

Where the meanings resulting from this application of the general rule require confirmation or clarification, recourse is also made to the *Vienna Convention's* supplementary means of treaty interpretation.

2.2.1 General Rule of Interpretation: Ordinary Meaning

As a starting point, under the general rule of interpretation, the IHR must be interpreted in “good faith,” according to the “ordinary meaning” given to the terms in their context and in light of the “object and purpose” of the IHR.³² This general rule essentially calls for a textual interpretation of the treaty. The added requirements to interpret the terms in “good faith” and taking into account its object and purpose ward off a purely literal approach to interpretation, however. Instead, the result of the analysis at this stage is to reflect the intentions as expressed in the text.³³ Section 3 of this consensus statement undertakes this textual interpretation of the ordinary meaning of the IHR’s Article 43, while anchoring the analysis in the greater context of the IHR as well as the underlying object and purpose of these regulations.

2.2.2 General Rule of Interpretation: Subsequent Agreement and Subsequent Practice of the Parties

Relevant as well for the purposes of interpreting the IHR are Articles 31(3) (a) and 31(3)(b) of the *Vienna Convention's* general rule. Article 31(3)(a) states that, alongside the context, there must be taken into account: “[a]ny subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions.”³⁴ Article 31(3)(b) further adds to this list of interpretive sources “any subsequent practice in the application

instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.

31 IHR, above n 4.

32 Vienna Convention, above n 24, art 31(1).

33 Gardiner, above n 25, 172.

34 Vienna Convention, above n 24, art 31(3)(b).

of the treaty which establishes the agreement of the parties regarding its interpretation.”³⁵

In its *Draft conclusions on subsequent agreements and subsequent practice in relation to the interpretation of treaties*, the ILC commented that the term “agreement” under Articles 31(3)(a) and 31(3)(b) is limited to an agreement of “all the parties regarding the interpretation of a treaty.”³⁶ The defining test, for the purpose of identifying state practice, is that the practice establishes the agreement of the parties, typically by showing what has been done “systematically or repeatedly in implementation and application of a treaty.”³⁷

According to the ILC, “the weight of a subsequent agreement or practice as a means of interpretation under article 31, paragraph 3, depends, *inter alia*, on its clarity and specificity” and added that the weight of a subsequent practice also depends on “whether and how it is repeated.”³⁸ There is, however, a presumption that the parties do not intend to amend or modify a treaty through subsequent practice.³⁹ Consequently, caution is warranted if a subsequent agreement or practice appears to change the meaning of a treaty without following the amendment procedures set out by the treaty.⁴⁰ Section 4 will review how parties have applied (or misapplied) Article 43 of the IHR individually and through the WHO itself – via the WHA and WHO’s Executive Board – with a view to determining whether their conduct has given rise to an agreement which may be useful for the interpretation of Article 43.

2.2.3 General Rule of Interpretation: Any Relevant Rules of International Law

As a third but equally important element, the *Vienna Convention* calls for consideration of “any rules of international law applicable to the relations between the parties.” The provision is an expression of the principle of *systemic integration*, which recognizes that “treaties are a creation of the international legal system and their operation is predicated on that fact.”⁴¹ As articulated by the International Law Commission’s Study Group on the Fragmentation of International Law, Article 31(3)(c) aims to generate coherence with “material

35 Ibid art 31(3)(b).

36 ILC Study on Subsequent Agreements and Subsequent Practice, above note 29, 75.

37 Gardiner, above n 25, 254.

38 ILC Study on Subsequent Agreements and Subsequent Practice, above n 29, 70.

39 Ibid 51.

40 Gardiner, above n 25, 226.

41 General Assembly, *Report of the International Law Commission Fifty-Eighth Session*, UN GAOR, 61st sess, Supp No 10, UN Doc. A/61/10 (1 May-9 June and 3 July-11 August 2006) 413.

sources external to the treaty” but nonetheless relevant in its interpretation, including “other treaties, customary rules or general principles of law.”⁴²

According to international legal scholars who have analyzed the preparatory work of the ILC on the *Vienna Convention*, the terms of this clause operationally allow for obligations emerging from other international legal agreements which apply to the parties of a treaty under interpretation to be considered as part of the “relevant rules of international law applicable to the relations between parties.”⁴³ The International Court of Justice (ICJ) confirmed this approach in *Djibouti v France* (2008), a case in which Djibouti successfully supported its claim that France had violated its obligations for mutual assistance under the 1986 *Convention on Mutual Assistance in Criminal Matters* by referring to a 1977 bilateral treaty which required the two countries to found their relations on equality, mutual respect and peace.⁴⁴

A point of continued debate in this element of the general rule is whether Article 31(3)(c) requires *all* parties to the treaty under interpretation to also be parties of the treaties providing interpretive guidance.⁴⁵ **Section 5** examines the relevant normative environment surrounding the IHR, addressing as well this point of continued debate under Article 31(3)(c).

2.2.4 Supplementary means of Interpretation

The *Vienna Convention* enumerates a non-exhaustive list of supplementary means of interpretation under Article 32 “in order to confirm the meaning resulting from the application of Article 31, or to determine the meaning when the interpretation according to Article 31(a) leaves the meaning ambiguous or obscure; or (b) leads to a result which is manifestly absurd or unreasonable.”⁴⁶ These supplementary means may include the preparatory work of the treaty or the circumstances of its conclusion. More recently, the ILC has advised that the “other” subsequent practice in the application of a treaty may also be a supplementary means of interpretation within the meaning of Article 32.⁴⁷ Throughout this consensus statement, supplementary means of interpretation are used to confirm the meanings deduced through the elements of the general rule described in the subsections above.

42 Ibid.

43 Gardiner, above n 25, 301.

44 *Certain Questions of Mutual Assistance in Criminal Matters (Djibouti v France)* (Judgment) [2008] ICJ Rep 177, 219.

45 Gardiner, above n 25, 301.

46 *Vienna Convention*, above n 24, art 32.

47 ILC Study on Subsequent Agreements and Subsequent Practice, above n 29, 13.

3 Ordinary Meaning of Article 43

3.1 *Purpose and Context of the IHR as a Whole*

The purpose of the revised IHR, as stated in Article 2 of this legal instrument, is to “prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.”⁴⁸

The IHR must be implemented in accordance with the principles delineated in Article 3. Using the force of mandatory language, these principles state that the IHR *shall* be implemented “with full respect for the dignity, human rights and fundamental freedom of persons,” “guided by the Charter of the United Nations and the Constitution of the World Health Organization”, and “guided by the goal of their universal application for the protection of all people of the world from the international spread of disease.” In recognition of the principle of sovereignty, Article 3 further recognizes that “[s]tates have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to legislate and to implement legislation in pursuance of their health policies. In doing so they should uphold the purpose of these Regulations.”⁴⁹

Since the *Vienna Convention's* general rule of interpretation focuses on the text of the treaty itself in defining “context”, it is important to reflect upon the architecture of the IHR, Article 43's placement within the regulations, as well as related provisions which would help guide an understanding of what additional measures states can legally enact in response to public health risks.

The IHR is divided into 10 parts. Part I (Articles 1–4) articulates the definitions, purpose, scope, principles, and responsible authorities under the regulations. Part II (Articles 5–14) details the procedures of the public health response, including the system of notification to the WHO of potential PHEICs. Part III (Articles 15–18) delineates the types of recommendations that may be issued by WHO under the IHR, including the non-binding nature of these recommendations. Part IV (Articles 19–22) establishes IHR requirements at ports of entry. Part V (Articles 23 to 34) outlines the public health measures that may be taken in response to public health risks (as well as limits to such measures). Part VI (Articles 35–39) addresses requirements for health documentation. Part VII (Articles 40–41) considers the appropriateness of levying charges for health measures applied to travelers as well as to baggage, cargo, goods,

⁴⁸ IHR, above n 4, art 2.

⁴⁹ *Ibid* art 3.

and other objects. Part VIII (Articles 42 to 46) contains “general provisions” with linkage and applicability to other parts of the IHR. The terms of reference, composition, and mode of operation of the IHR’s Review Committee and the Emergency Committee are contained in Part IX (Articles 47 to 53). Part X (Articles 54 to 66) contains final provisions, including measures for self-reports of IHR implementation, procedures for amending the IHR, and the relationship of the IHR with other intergovernmental agreements. Article 43 is situated in Part VIII alongside clauses invoking transparency, non-discrimination, collaboration, and data confidentiality.

Departing from the disease-specific model of the IHR (1969), the revised IHR adopts an all-hazards approach to public health protection. As such, a “disease” is defined as “an illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans.”⁵⁰ A “public health risk” is defined as the “likelihood of an event that may affect adversely the health of human populations, with an emphasis on one which may spread internationally or may present a serious and direct danger.”⁵¹ It follows from this definition that any “extraordinary event” may be considered a PHEIC if it (1) constitutes a public health risk to other states through the international spread of disease and (2) potentially requires a coordinated international response.⁵²

The authority to declare a PHEIC belongs to WHO’s director-general,⁵³ who must actively consider information provided by affected states, the views of an Emergency Committee of international experts nominated under the IHR to provide advice,⁵⁴ scientific principles, as well as the available scientific evidence and other relevant information.⁵⁵ The determination of a PHEIC is thus an exercise in risk management, requiring an analysis of the risk to human health, the international spread of disease, and interference with international traffic and trade.⁵⁶

A decision instrument in the IHR’s Annex 2 guides states in deciding whether a particular event detected by their national surveillance system may constitute a potential PHEIC that should be notified to the WHO.⁵⁷ States must consider whether: (a) the public health impact of the event is serious; (b) the

50 Ibid art 1.

51 Ibid.

52 Ibid.

53 Ibid art 12(1).

54 Ibid art 48.

55 Ibid arts 12(4)(a)-(d).

56 Ibid art 12(4)(e).

57 Ibid art 6.

event is unusual or unexpected; (c) there is potential for the event to spread internationally; and/or (d) there is a significant risk that restrictions to travel or trade may result because of the event.⁵⁸ An affirmative answer to any two of these questions requires states to notify the event to the WHO. Additionally, Annex 2 contains a list of diseases to which the decision instrument must always be applied due to their ability to have serious public health impact and spread rapidly. States must also notify on the occurrence of a second list of diseases whose occurrence is both unusual or unexpected, may have a serious public health impact, and therefore constitute a PHEIC. This same decision instrument may be used as a further resource by WHO's director-general when evaluating whether to declare a PHEIC.⁵⁹

In contrast to the former IHR (1969), information received by the WHO under the IHR's above-mentioned notification scheme is considered confidential and will only be shared with other states if a PHEIC is confirmed or if the public health risk is too great to justify confidentiality.⁶⁰ The revision was intended to encourage states to report events that may lead to the international spread of disease, without fearing disruptions to travel and trade for doing so.⁶¹

Embracing an "upstream" public health strategy to prevent and contain outbreaks at their source, the IHR requires states to develop minimum core public health capacities at local, regional and national levels (detailed in the IHR's Annex 1) to detect, assess, and report public health issues to the WHO.⁶² As a corollary to this obligation, states agree to "collaborate with each other, to the extent possible," to develop and maintain core capacities.⁶³

Finally, the IHR identifies health measures that states must, may, and cannot legally take when responding to public health risks. According to the IHR, a "health measure" involves any procedure "applied to prevent the spread of disease or contamination," to the exclusion of law enforcement or security measures.⁶⁴ Unlike the former IHR (1969), the list of health measures explicitly recognized is not intended to be exhaustive.⁶⁵ Enumerated under Part v of the IHR, nearly all of the health measures listed are subject to "applicable

58 Ibid annex 2.

59 Ibid art 12(4)(b).

60 Ibid art 11(2).

61 Tigerstrom, above n 13, 40.

62 IHR, above n 4, art 5.

63 Ibid art 44(1).

64 Ibid art 1.

65 Tigerstrom, above n 13, 51.

international agreements,” “other relevant articles” of the IHR, and/or, more particularly, Article 43. In response to a specific public health risk or to a PHEIC, Article 43 allows states to implement additional health measures, but only if they achieve the same or greater levels of health protection than recommendations issued by the WHO⁶⁶ or health measures otherwise prohibited by specific articles of the IHR⁶⁷ and only provided certain conditions are met. Reflecting on recent and ongoing PHEICs, Article 43 has emerged as one of the most contentious provisions of the IHR, both in terms of differing views among states of its meaning and in terms of states’ compliance with its obligations.⁶⁸ A more thorough textual, purposive and practical interpretation of Article 43’s key obligations is therefore needed. Before beginning this interpretive exercise, however, an explanatory note is warranted on the limits of state responsibility under the IHR.

3.2 *The Responsibility of IHR States Parties for Private Acts and Omissions*

The IHR is binding on 196 states parties and governs relevant actions that are attributed to them. As a general rule, it does not apply to the decisions of private entities, corporations and non-governmental actors. Decisions made by these private actors, such as airline flight cancellations or trip itinerary changes by cruise ship operators, may nevertheless impact states parties’ ability to comply with the requirements of Article 43.

Where the conduct of a private actor is concerned, the state may nonetheless bear responsibility for that conduct in accordance with the principle of state responsibility under international law, codified by the ILC in the non-binding but authoritative *Draft articles on responsibility of states for internationally wrongful acts* (draft articles).⁶⁹

The draft articles stipulate that an act or omission that is attributable to a state under international law and which constitutes a breach of an international obligation borne by that state engages state responsibility.⁷⁰ According to Article 5, this includes the conduct of a person or entity that is not an organ of the state but is nevertheless “empowered by the law of that state to exercise

66 Ibid art 43(1)(a).

67 Ibid art 43(1)(b).

68 Ali Tejpar and Steven J Hoffman, ‘Canada’s Violation of International Law during the 2014–16 Ebola Outbreak’ (2017) 54 *Canadian Yearbook of International Law* 366.

69 General Assembly, *Report of the International Law Commission Fifty-Third Session*, UN GAOR, 56th sess, Supp No 10, UN Doc. A/56/10 (23 April–1 June and 2 July–10 August 2001) (‘Draft articles’).

70 Ibid 26.

elements of the governmental authority” – provided the person or entity was acting in said capacity in the particular instance under issue.⁷¹ Such a situation may arise, for instance, when private or state-owned airlines are delegated authority in relation to immigration control or quarantine.⁷² Where the law of the state empowers the person or entity to exercise some aspect of governmental authority, the state may be held responsible, irrespective of whether it gave specific instructions or directed the specific conduct derived from such authority.⁷³

Relatedly, the conduct of a person or group of persons, acting under the instructions, direction or control of the state may be attributed to the state for the purposes of determining responsibility under Article 8.⁷⁴ While merely owning or establishing a corporation does not lead to a presumption of responsibility, a state may be deemed responsible for the conduct of corporations or private entities that it owns or has established, if that conduct can be attributed to the state within the meaning of Article 5, and if that state has in fact directed, instructed or controlled a particular conduct or activity of the entity in question.⁷⁵

Situations of total or partial state collapse, or the loss of state authority over a locality, are also foreseen by the draft articles. In such circumstances, conduct may be attributed to a state where a person or group of persons carries out elements of governmental authority in the absence or default of the official authority, and where circumstances called for the exercise of such authority.⁷⁶

Finally, Article 11 of the draft articles allows for conduct to be attributable to the state where there is tacit acknowledgment and adoption of the conduct as the state’s own. In these situations, responsibility will accrue upon the state even where the conduct would normally be considered “purely private” under any other circumstances.⁷⁷

For the remainder of this consensus statement, interpretations of Article 43 refer only to those health measures which are decided upon and implemented by the state and/or health measures which can be attributed to the state per the elements of the draft articles articulated above.

71 Ibid.

72 Ibid.

73 Ibid.

74 Ibid.

75 Ibid 48.

76 Ibid 26.

77 Ibid.

3.3 *Textual Interpretation of IHR Article 43*

3.3.1 Article 43(1): Typology of Additional Health Measures

While no standalone definition of “additional health measure” is provided under the IHR, paragraph 1 of Article 43 qualifies an additional health measure in one of two ways: either (1) it achieves the same or greater levels of protection than the WHO recommendations (including temporary recommendations);⁷⁸ or (2) it is applied despite being otherwise prohibited by the following provisions:

- Article 25, which prohibits the application of health measures to ships and aircraft in transit and not coming from an affected area;⁷⁹
- Article 26, which prohibits the application of health measures to civilian lorries, trains and coaches in transit and not coming from an affected area;⁸⁰
- Article 28 paragraph 1 or 2, which prohibit the denial of *free pratique* [permission for a ship, aircraft or ground transport vehicle to embark or disembark, discharge or load cargo or stores] to ships and aircraft or their calling at any point of entry, except under certain conditions;⁸¹
- Article 30, which requires giving permission to travellers under public health observation to continue on an international voyage if the traveler does not pose an imminent public health risk;⁸²
- Article 31 paragraph 1(c), which prohibits the requirement for invasive medical examination, vaccination or other prophylaxis as a condition of entry except pursuant to Article 43 or annexes 6 and 7;⁸³ and
- Article 33, which prohibits the application of health measures to goods, other than live animals, in transit without transshipment.⁸⁴

For efficiency, the above list of otherwise prohibited health measures will hereafter be referred to as “listed” additional health measures, while the measures foreseen by paragraph 1(a) will be referred to as “non-listed” additional health measures. Article 43 restricts the permissibility of both listed and non-listed additional health measures through a set of *prima facie* conditions under paragraph 1 and scientific decision-making criteria under paragraph 2. These serve as the focus of analysis in the below sections because they serve as the primary limitations on what additional measures states may implement in response to public health risks.

78 IHR, above n 4, art 43(1)(a).

79 Ibid art 25.

80 Ibid art 26.

81 Ibid arts 28(1) and 28(2).

82 Ibid art 30.

83 Ibid art 31(1)(c).

84 Ibid art 33.

3.3.2 Article 43(1): Preliminary conditions underpinning the permissibility of additional health measures

Four overarching conditions serve as prerequisites to the use of additional health measures. As a first condition, additional measures must be in accordance with “the relevant national law” of the state and their “obligations under international law.”⁸⁵ Elsewhere in the IHR, reference is also made to the IHR’s relationship with other international agreements; it is provided that the provisions of the IHR should be interpreted so as to be compatible with other international agreements, and that such provisions “shall not affect the rights and obligations of any State Party deriving from other international agreements.”⁸⁶ Such agreements include “special treaties”⁸⁷ and the “common rules in force” within a regional economic integration organization.⁸⁸ The constraints and allowances placed on additional health measures outlined in paragraph 1 must be informed by other relevant international legal obligations, which form the subject of our analysis in **Section 5**.

Secondly, these measures must be taken in response to a specific public health risk (as defined earlier) or to a PHEIC. Furthermore, these measures must be “otherwise consistent” with the IHR.⁸⁹ This statement reinforces the importance of ensuring that Article 43 aligns with the numerous provisions of the IHR which enshrine obligations toward human rights and fundamental freedoms of persons and travelers. These provisions, and the broader human rights framework, are examined in greater detail in **Section 5**.

Referring to additional health measures as defined above, paragraph 1 of Article 43 closes with the final condition that such measures “shall not be more restrictive of international traffic and not more invasive or intrusive to persons than reasonably available alternatives that would achieve the appropriate level of health protection.”⁹⁰ Article 1 defines “intrusive” as “possibly provoking discomfort through close or intimate contact or questioning” while “invasive” is defined as “the puncture or incision of the skin or insertion of an instrument or foreign material into the body or the examination of a body cavity.” “International traffic” is also broadly conceptualized as “the movement of persons, baggage, cargo, containers, conveyances, goods or postal parcels across an international border, including international trade.”⁹¹ Taken together, this clause

85 Ibid art 43(1).

86 Ibid art 57(1).

87 Ibid art 57(2).

88 Ibid art 57(3).

89 Ibid art 43(1).

90 Ibid art 43(1).

91 Ibid art 1.

serves as a reminder to states that the principle of proportionality is embedded within the IHR, including a requirement that their additional health measures must be “commensurate with and restricted to public health risks.”⁹²

3.3.3 Article 43(2): Assessing the Appropriateness of an Additional Health Measure

Paragraph 2 of Article 43 delineates how states are to assess the appropriateness of an additional health measure in light of the risks to human health, and in so doing, it further limits the range of additional health measures that may be considered appropriate. These limits apply to the decision framework states must use to implement any additional health measures described in paragraph 1. They also apply to the implementation of certain health measures expressly permitted elsewhere in the IHR, and specifically under the following provisions:

- Article 23(2), which allows, on a case-by-case basis and on the basis of evidence of a public health risk, for the application of the “least intrusive and invasive medical examination” on a suspected or affected traveler that would achieve the public health objective of preventing the international spread of disease;⁹³
- Article 27(1), which allows for the implementation of additional health measures, including the isolation of conveyances by a competent authority, where there is evidence of a public health risk on board a conveyance;⁹⁴
- Article 28(2), which allows states to subject the granting of *free pratique* of ships and aircrafts to inspection, and if infection or contamination is found, to carry out the necessary measures to prevent the spread of the infection or contamination;⁹⁵ and
- Article 31(2)(c), which states that, in the absence of consent from a traveler for whom the state requires a medical examination, vaccination or other prophylaxis, where there is evidence of imminent public health risk, and to the extent necessary to control such a risk, the state may “compel the traveler to undergo or advise the traveller...to undergo...additional established health measures that prevent or control the spread of disease, including isolation, quarantine or placing the traveller under public health observation.”⁹⁶

92 Ibid art 2.

93 Ibid art 23(2).

94 Ibid art 27(1).

95 Ibid art 28(2).

96 Ibid art 31(2)(c).

Any decision on the implementation of an additional health measure captured in paragraphs 1 and 2 of Article 43 must be based on “(a) scientific principles;⁹⁷ (b) available scientific evidence of a risk to human health, or where such evidence is insufficient, the available information from WHO or other relevant intergovernmental organizations and international bodies;⁹⁸ and (c) any available specific guidance or advice from WHO.”⁹⁹

The use of the prescriptive “shall” in paragraph 2 (as opposed to “should” or “may”) indicates that the exercise of determining whether an additional health measure should be implemented is a mandatory requirement for states. This is in keeping with the object and purpose of the IHR to “provide a public health response to the international spread of disease while avoiding *unnecessary* interference with international traffic and trade [emphasis added]”.

The verb “base” is also significant; when compared to other IHR provisions containing verbs with related meaning (such as “conform”¹⁰⁰), its use suggests that states have some margin of appreciation in *how* they render their determination of an additional health measure. The use of “and” rather than “or” in paragraph 2 signals that the sources of information listed in paragraphs 2(a) to 2(c) must be cumulatively present when states are determining whether to apply additional health measures. The meanings of these specific terms are more closely examined below.

“Scientific Principles” (Art. 43(2)(a)) and “Available Scientific Evidence” (Art. 43(2)(b))

Beyond Article 1 and Article 43, “scientific principles” and “scientific evidence” appear three times in the IHR, always making their appearance together: under Article 12, the WHO director-general must consider “scientific principles as well as the available scientific evidence and other relevant information” prior to declaring a PHEIC;¹⁰¹ under Article 17, the director-general must consider “scientific principles as well as available scientific evidence” prior to issuing, modifying or terminating recommendations.¹⁰²

It is reasonable to conclude that efforts made to avoid qualifying “scientific principles” with the adjective “available” were deliberate across the IHR. Scientific principles, as defined in the IHR, are “the accepted *fundamental laws* and

97 Ibid art 43(2)(a).

98 Ibid art 43(2)(b).

99 Ibid art 43(2)(c).

100 Ibid arts 36(1), 36(2), 37, 38, 39.

101 Ibid art 12(4)(d).

102 Ibid art 17(c).

facts of nature known through the methods of science [emphasis added].¹⁰³ On the other hand, scientific evidence is described in the IHR as “information furnishing a level of proof based on the *established* and *accepted* methods of science [emphasis added].”¹⁰⁴

While the IHR provides no further definition or guidance regarding the sources and standard of evidence that parties should consider when deciding to implement additional health measures, such evidence must be generated by the “methods of science”. The Oxford Dictionary of Public Health describes the “scientific method” as typically involving steps to:

...define the problem; if possible, frame the problem as a hypothesis; select in advance a valid and proven method and specify procedures to study the problem; conduct all observations according to a stated protocol that is or will be available for examination by peers; include all observations in the stated results; and, if any observations or measurements are discarded or disqualified, the reason must be stated and explained.¹⁰⁵

On this basis, and given that the purpose of the IHR is to “provide a public health response to the international spread of disease”, it is clear that states should implement only those measures that can withstand scientific scrutiny in the discipline of public health. In other words, beyond merely accessing results published in scientific journals, deliberate care must be exercised to appraise the quality of the evidence supporting the use of an additional health measure and to rely upon scientific findings that are sound in methodology, ethics and integrity. While states have a margin of appreciation in deciding whether or not to implement additional health measures, these decisions are subject to overriding public health considerations imposed by the purpose of IHR.

Often, there may be a degree of scientific uncertainty involved at the outset of a public health risk. This uncertainty may be related to the disease’s transmission methods, incubation period, and fatality rate, and evidence supporting appropriate health measures may not be available.¹⁰⁶ In such cases, additional health measures must be supported by scientific principles. Paragraph 2(b) clarifies that absent sufficient scientific evidence, reference may alternatively

103 Ibid art 1.

104 Ibid.

105 Miquel Porta and John M Last (eds), *The Oxford Dictionary of Public Health* (2nd ed, 2018) *sub verbo* “scientific method”.

106 Jonathan E Suk, ‘Sound Science and the New International Health Regulations’ (2007) 1(2) *Global Health Governance* 1, 2.

be made to the “available information from WHO or other relevant intergovernmental organizations and international bodies.” The text remains vague about the minimum level of scientific evidence and/or information that might be deemed as “sufficient” for the purposes of the assessment exercise under paragraph 2. Nevertheless, as will be discussed in our analysis of the relevant rules of international law in **Section 5**, at minimum, there should be a rational and proportional connection between the legitimate aim that the additional health measure is seeking to address and the scientific evidence underpinning the decision to implement the health measure. Such scientific evidence need not be the monolithic view or opinion of all scientists but must withstand scientific scrutiny in the discipline of public health.

“Information from WHO or Other Relevant Intergovernmental Organizations and International Bodies” (Art. 43(2)(b))

A further criterion which may support the assessment of whether additional health measures are permissible is information from WHO or other ‘relevant’ intergovernmental organizations and international bodies. Which other organizations and bodies are ‘relevant’? It is worth noting the qualifying term “relevant” used in the English text of Article 43 paragraph 2(b). The term “competent” (‘competent’) is used in place of the equivalent word for ‘relevant’ in the French text. Article 66 of the IHR confirms that the English and French texts, along with four other languages, are equally authoritative¹⁰⁷ – which aligns with the *Vienna Convention’s* approach as well.¹⁰⁸ Where there is a difference in meaning between two texts, the *Vienna Convention* reminds us to use the meaning “which best reconciles the texts, having regard to the object and purpose of the treaty.”¹⁰⁹

The difference in choice of words may be significant. According to the Oxford Dictionary of English, the word ‘relevant’ refers to being “closely connected or appropriate to what is being done or considered”, while ‘competent’ refers to “having the necessary ability, knowledge, or skill to do something successfully.”¹¹⁰ However, the term ‘compétent’ in French also refers to having jurisdiction over something (for example, French lawyers refer to “competence de la compétence” to indicate when an organ has the authority to define the scope of its own mandate). As a result of this discrepancy, the French text

107 IHR, above n 4, art 66(1).

108 Vienna Convention, above n 24, art 33(1).

109 Ibid art 33(4).

110 *Oxford Dictionary of English* (OUP, 3rd ed, 2010) *sub verbo* “relevant”; *Oxford Dictionary of English* (OUP, 3rd ed, 2010) *sub verbo* “competent”.

suggests that the international organizations or bodies which may provide information supporting the implementation of an additional health measure are limited to those organizations and bodies having the mandate and possessing the ability (such as the scientific expertise and technical resources) to issue such information.

Given equal authority, the term ‘competent’ should be favoured over ‘relevant’ for two reasons: (1) it is logical in light of the IHR’s purpose to expect that an international organization or body that is issuing information on responses to public health risks be *competent* to do so; and (2) the term ‘competence’ is invoked elsewhere in the English version to describe external bodies with whom WHO is expected to work.¹¹¹ It is also used in WHA resolution 58.3 (an agreement made by all parties in connection with the conclusion of the IHR) which provides a non-exhaustive list of organizations which may qualify as “competent intergovernmental organizations or international bodies with which WHO is expected to cooperate and coordinate its activities.” These include the United Nations, International Labour Organization, Food & Agriculture Organization (FAO), International Atomic Energy Agency, International Civil Aviation Organization, International Maritime Organization, International Committee of the Red Cross, International Federation of Red Cross & Red Crescent Societies, International Air Transport Association, International Shipping Federation, and Office International des Epizooties (OIE).¹¹²

Therefore, unless there is sufficient scientific evidence available or supporting information from competent intergovernmental organizations or international bodies, additional health measures would not be permissible under Article 43(2).

“Any Available Specific Guidance or Advice from WHO” (Art. 43(2)(c))

The implementation of an additional health measure must also be informed by guidance or advice from WHO where available and where such guidance or advice is specific – presumably, to the public health risk at hand. The use of the word “specific” in Article 43(2)(c) contrasts with the previous phrase examined.

For states to rely on WHO guidance or advice for implementing additional health measures, WHO will have had to issue a positive recommendation, rather than merely abstain from issuing a recommendation against the additional health measure. Given the context of the IHR, guidance should be (1) an official statement (i.e., from the WHA, Executive Board, or the Secretariat) that

¹¹¹ IHR, above n 4, art 14(1).

¹¹² IHR, above n 4.

(2) stemmed from a formal and scientific process and (3) is expressed normatively. Examples of such guidance include WHO's SARS travel advisories, advice on personal protective equipment for Ebola, and statements on safe burial practices during infectious disease outbreaks.¹¹³ While "specific guidance or advice" need not be focused on the IHR – and can be construed more broadly – it must be *specific* to the public health risk at hand.

The guidance or advice from WHO that most clearly meets the IHR Article 43(2)(c)'s specificity requirement would be those formal recommendations that can be issued by the director-general under Articles 15 to 18 of the IHR. Under these provisions, WHO's director-general may issue recommendations after considering: affected states' views; the Emergency Committee's advice, scientific principles and available evidence; appropriate health measures that are not more restrictive of international traffic and trade than reasonably available alternatives that would achieve the appropriate level of health protection; relevant international standards and instruments; activities undertaken by other intergovernmental organizations; and any other available relevant information.¹¹⁴

Where a PHEIC has been declared, WHO's director-general will issue temporary recommendations to affected states or other states that are "non-binding... time-limited [and] risk-specific" and which may be modified or extended as appropriate, including after the PHEIC has ended.¹¹⁵ WHO may also issue standing recommendations of appropriate health measures, for routine or periodic application, in response to a specific public health risk.¹¹⁶

Temporary recommendations issued by the WHO director-general may include health measures regarding "persons, baggage, cargo, containers, conveyances, goods and/or postal parcels"¹¹⁷ and may be informed by, among other sources, the views of the affected states, the advice of the Emergency Committee, scientific principles as well as available scientific evidence and information, relevant international standards and instruments, and other appropriate and specific information related to the event.¹¹⁸ Temporary recommendations expire automatically three months after their issuance, after which they can be modified or extended for additional periods of up to three months.¹¹⁹

113 François Lamontagne et al, 'Evidence-Based Guidelines for Supportive Care of Patients with Ebola Virus Disease' (2017) 391 *The Lancet* 700.

114 IHR, above n 4, art 17.

115 Ibid, art 1 and 15(1).

116 Ibid art 53.

117 Ibid art 15(2).

118 Ibid art 17.

119 Ibid art 15(3).

Under IHR Article 13, states may also reach out to the WHO to request guidance or advice concerning appropriate responses to public health risks¹²⁰ or PHEICs.¹²¹

3.3.4 Article 43(3) to 43(5): Obligation to Report Additional Health Measures that Interfere Significantly with International Traffic

According to paragraph 3 of Article 43, where a state has implemented an additional health measure that significantly interferes with international traffic, it must provide the WHO with its public health rationale and relevant scientific information for it, which will then be shared with other states.¹²² The state's public health rationale must be provided within 48 hours of implementing additional measures.¹²³

'Significant interference' with international traffic and trade is *generally* defined by the IHR as "refusal of entry or departure of international travelers, baggage, cargo, containers, conveyances, goods, and the like, or their delay, for more than 24 hours."¹²⁴ States that implement measures having such effect are required to review these within three months, in light of the evidentiary criteria outlined in paragraph 2.¹²⁵ The foregoing does not preclude the possibility of there being circumstances where significant interference may not be defined in temporal terms. For instance, even where a health measure delays goods or travelers for less than 24 hours, it may be so widely applied or be of such a nature that it has acute effects on some populations. Such a measure may still "significantly interfere" with international traffic even if it does not impede travel for more than 24 hours.

Furthermore, any state affected by an additional health measure may request that the state implementing such a measure consult with it in order to clarify the scientific information and public health rationale supporting the decision, and to find a mutually acceptable solution.¹²⁶

Article 43 is vague on what may constitute a public health rationale, though the most reasonable interpretation may be that a public health rationale is formulated from the criteria outlined in paragraph 2, namely: (1) scientific principles; (2) available scientific evidence of a risk to human health; and (3) any available specific guidance or advice from the WHO. The fact, as explained

¹²⁰ Ibid art 13(3).

¹²¹ Ibid art 13(6).

¹²² Ibid art 43(3).

¹²³ Ibid art 43(5).

¹²⁴ Ibid art 43(3).

¹²⁵ Ibid art 43(6).

¹²⁶ Ibid art 43(7).

in the following section, that states must review additional health measures implemented within three months, taking into account the advice of WHO, scientific principles and available scientific evidence or available information from intergovernmental organizations and international bodies,¹²⁷ lends support to this interpretation that a public health rationale would stem from the logic established under paragraph 2.

A second possible interpretation is that a state's public health rationale for implementing additional health measures could include any factual statement, whether or not it is formulated in terms of the above criteria. This interpretation may be supported by the specific choice of the term "rationale" as revealed through the IHR's negotiating history. Indeed, during negotiations, a predecessor to Article 43 (Article 39 of the September 2004 IGWG draft), required states to provide WHO with "scientific justifications" upon request.¹²⁸ In the January 2005 draft, this clause was changed to require states to provide, upon WHO's request, a "public health rationale and relevant scientific information for it";¹²⁹ the revised text also included the option for a state impacted by an additional health measure to clarify the public health rationale and scientific information with the state imposing the health measure. The underlying intention leading to the shift from "justification" to "rationale" may have been to weaken the burden of proof. The Oxford English Dictionary defines "justification" as "the action of showing something to be right or reasonable."¹³⁰ By contrast, "rationale" is defined as "a set of reasons or a logical basis for a course of action or belief."¹³¹ The former seeks acceptance, the latter explains and clarifies. That being said, this second broader interpretation of what could constitute a "rationale" would likely frustrate the underlying purpose and objective of requiring states to explain their rationale in the first place, and other overarching public health goals of the IHR.

In terms of its application, the clause was further modified in the adopted text to require the provision of public health rationale and scientific information only where the additional health measure interferes "significantly" with

¹²⁷ IHR, above n 4, arts 43(2), 43(6).

¹²⁸ WHO, Intergovernmental Working Group on the Revision of the International Health Regulations, *Review and approval of proposed amendments to the International Health Regulations: draft revision*, Doc No A/IHR/IGWG/3 30 September 2004, art 39(2) ('IGWG September Working Draft').

¹²⁹ WHO, Intergovernmental Working Group on the Revision of the International Health Regulations, *Review and approval of proposed amendments to the International Health Regulations (Proposal by the Chair)*, Doc No A/IHR/IGWG/2/2, 2nd sess, 24 January 2005, art 39(2) ('IGWG Proposal by Chair').

¹³⁰ *Oxford Dictionary of English* (OUP, 3rd ed, 2010) *sub verbo* "justification".

¹³¹ *Ibid*, *sub verbo* "rationale".

international traffic; In so doing, the clause created an automatic and relatively clear threshold beyond which states would be required to provide a public health rationale and relevant scientific information for having implemented an additional health measure.

3.3.5 Article 43(6) to 43(8): Obligation to Review Additional Health Measures Taken Pursuant to Article 43

Paragraphs 6 and 7 of Article 43 create an obligation to review any additional health measure taken pursuant to paragraph 1 and 2, regardless of whether the additional health measure significantly interferes with international traffic or not. This section of Article 43 serves as a reminder that any additional health measures must be time-limited and tied to a “public health rationale and relevant scientific information.”

Paragraph 6 requires that parties carry out a review, within three months, of any additional health measures they have taken. This timeline is analogous to the lifecycle of a temporary recommendation issued by WHO’s director-general, which automatically expires three months after its date of issuance.¹³² States’ review of their additional health measures must be informed by both the “advice” of WHO and the criteria set out in paragraph 2, namely: (1) scientific principles; (2) available scientific evidence; and (3) any available specific guidance or advice from WHO. It is unclear, based on a textual interpretation, whether the “advice of the WHO” in paragraph 6 differs from “any available specific guidance or advice from the WHO” already listed within the criteria of paragraph 2. The most likely meaning of this double reference to WHO’s advice is that the reference in paragraph 6 may refer to both direct advice provided by WHO to the implementing state and more general advice provided by WHO to all states, in accordance with the criteria outlined in Art 43(2)(c).

Paragraph 7 of Article 43 allows for the possibility of consultation between a state impacted by an additional health measure and the state that has implemented the additional health measure. The consultation process is without prejudice to the impacted state’s rights under Article 56, which envisions a series of dispute resolution mechanisms, beginning with peaceful means such as “good offices, mediation or conciliation,”¹³³ then allowing for states to invite the WHO director-general to make an effort to settle the dispute, followed by the parties’ voluntary submission to compulsory arbitration. At any time, states may also refer their dispute settlement to the mechanisms of other intergovernmental organizations or those foreseen by any other international

¹³² IHR, above n 4, art 15(3).

¹³³ Ibid art 56(1).

agreement such as the *Statute of the International Court of Justice*. According to publicly available records, none of these dispute settlement mechanisms has ever been used by states affected by additional health measures, and no adjudicative body has yet had the opportunity to interpret Article 43.

3.4 *Conclusion on Ordinary Meaning of Article 43*

Overall, in response to specific public health risks or PHEICs, Article 43 permits states to seek an appropriate level of health protection through the implementation of additional health measures subject to several preconditions, including the use of measures that are no more intrusive or invasive to persons, and no more restrictive of international traffic, than reasonably available alternatives, and a scientific assessment of the proposed measure that must be insofar as possible, evidence-based. Once the decision is made to implement an additional health measure, states trigger two distinct obligations: (1) the obligation to review any additional health measure imposed within three months in light of scientific evidence and the advice of WHO; and (2) the obligation to report to WHO within 48 hours when an additional health measure is expected to interfere significantly with international traffic and trade. Actions taken by private and nonstate actors, such as airlines, cruise ship operators, and insurgent groups, do not fall under the purview of Article 43 unless they meet the criteria outlined under the draft articles. The ordinary meaning of Article 43 is illustrated across Figure 1, Figure 2, and Figure 3.

What remains less clear from an ordinary-meaning analysis – and where other general and supplementary means of interpretation will be needed – is further clarity on the level of scientific evidence required to justify additional health measures under Article 43(2)(b). Article 43 also lacks direct guidance on what constitutes a valid “public health rationale and relevant scientific information” under paragraph 3. It is argued that, in order to fulfill the purpose of the IHR to facilitate public health responses “that are commensurate with and restricted to public health risks,”¹³⁴ additional health measures must be supported by a public health rationale that is, at minimum, based on the scientific evidence appraised in paragraph 2. This interpretation is supported by a closer examination of subsequent state practice, which is discussed in the next section.

Based purely on an ordinary-meaning analysis, it also remains unclear how states should operationalize the requirement for additional health measures to be no more restrictive of international traffic and no more invasive or intrusive

134 IHR, above n 4, art 2.

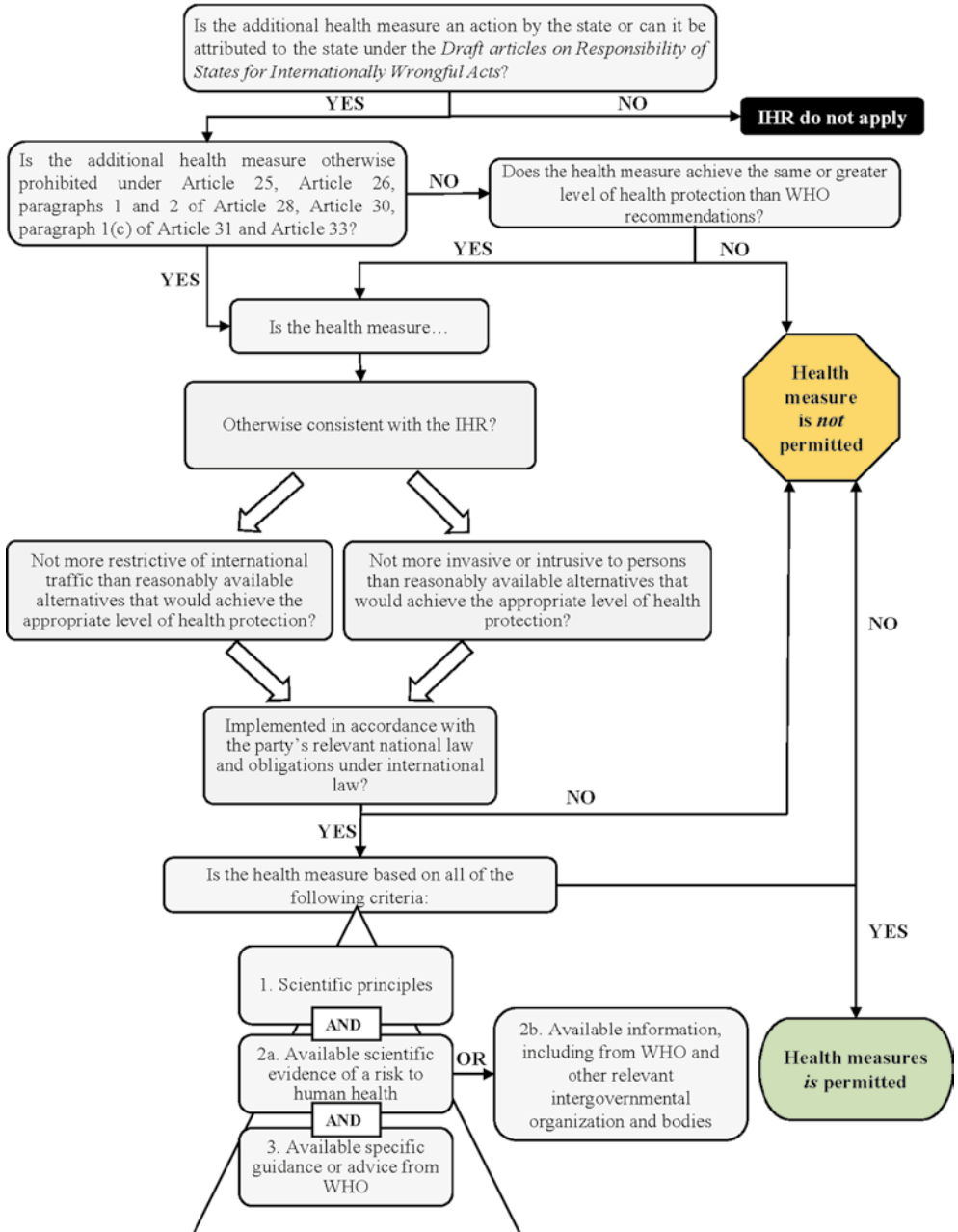


FIGURE 1 State Actions Permissible Under Articles 43(1) and 43(2) of the *International Health Regulations* in Response to a Specific Public Health Risk or a Public Health Emergency of International Concern

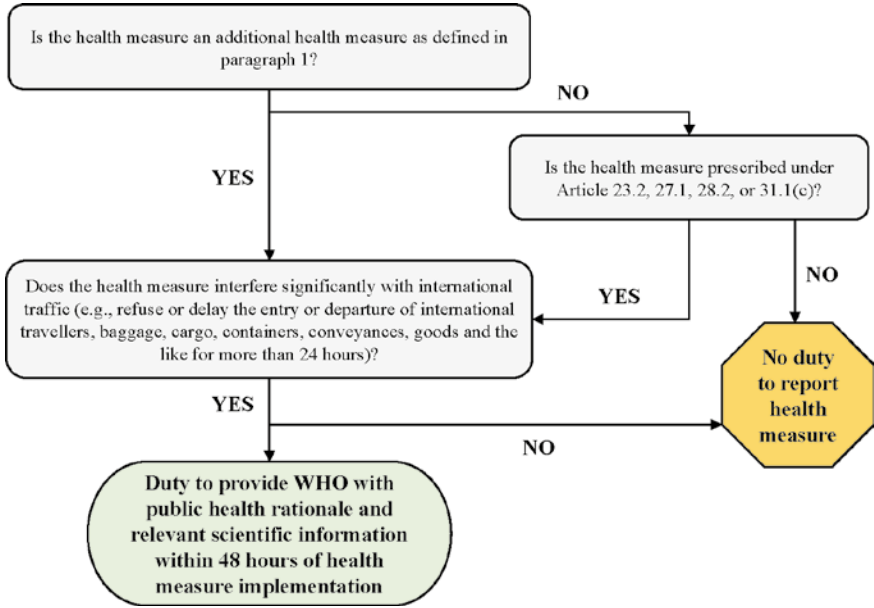


FIGURE 2 State Obligation to Report Additional Health Measures Interfering Significantly with International Traffic under Articles 43(3) and 43(5) of the *International Health Regulations*

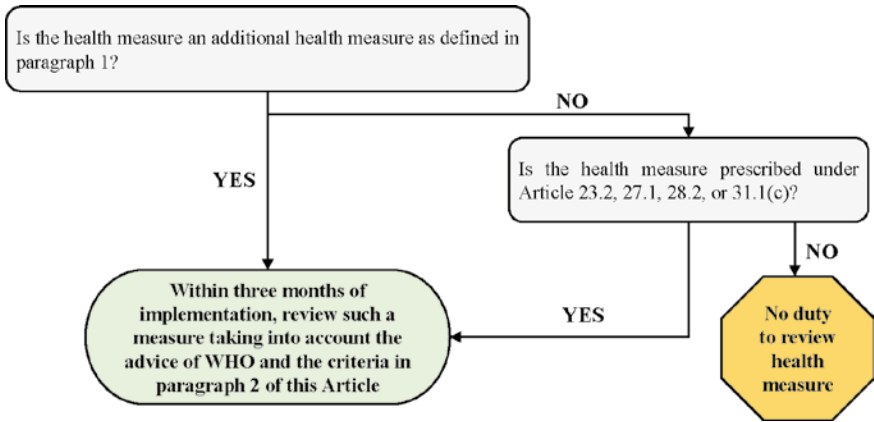


FIGURE 3 State Obligation to Review Additional Health Measures Implemented Under Article 43(6) of the *International Health Regulations*

to persons than reasonably available alternatives that would achieve the appropriate level of health protection, nor what such an ‘appropriate’ level of health protection might be. These questions will be addressed in the sections that follow.

4 Subsequent Practice and Subsequent Agreement in the Application of Article 43

According to the *Vienna Convention*, in addition to the ordinary meaning and context, the interpretation of an international legal instrument should involve an analysis of conduct “which establishes the agreement of the parties regarding its interpretation.”¹³⁵

The weight of subsequent state practice depends *inter alia* on its clarity and specificity, and, furthermore, on “whether and how it is repeated.”¹³⁶ In other words, it should consist of “action of such frequency and uniformity that it warrants a conclusion that the parties have reached a settled agreement regarding the interpretation of the treaty.”¹³⁷ Statements or conduct of other actors, including those of international organizations, can also “reflect, or initiate, relevant subsequent practice” of the parties.¹³⁸ Subsequent agreements which do not reflect the volition of all parties (such as resolutions adopted by consensus via an international organization) may nevertheless serve as a supplementary means of interpretation under Article 32 of the *Vienna Convention*.¹³⁹ The interpretive contribution of subsequent state practice as a supplementary means of interpretation, per the ILC, includes providing clarity on meanings derived from a textual interpretation of the instrument, or lending meaning to gaps or ambiguities within the text.¹⁴⁰ Considering the above, the next two sections examine how parties to the IHR have implemented Article 43 in practice through (1) their individual actions and (2) by means of decisions and resolutions adopted by consensus at the WHA and WHO’s Executive Board.

For reasons of data availability, this analysis is primarily situated in the context of two major PHEICs that generated in-depth study by the WHO: the 2009 influenza A(H1N1) outbreak and the 2014–2016 Ebola outbreak in West Africa.¹⁴¹ At the time of writing, neither the WHO secretariat, nor other intergovernmental organizations, systematically published the details of additional health measures adopted by states. This consideration applies in particular to the widespread and extreme national measures adopted in response to the COVID-19 pandemic, still ongoing at the time of finalizing the present

135 Vienna Convention, above n 24, art 31(3)(a), 31(3)(b).

136 ILC Study on Subsequent Agreements and Subsequent Practice, above n 29, 70.

137 Ibid 72.

138 Ibid 40.

139 Ibid 33.

140 Ibid 56.

141 Steven J Hoffman and Sarah L Silverberg, ‘Delays in Global Disease Outbreak Responses: Lessons from H1N1, Ebola, and Zika’ (2018) 108(3) *American Journal of Public Health* 329.

contribution. While a WHO tool to identify outbreak-related health measures was under development in the recent past,¹⁴² it remains inaccessible to the public. In the meantime, the best available source of subsequent state practice in applying Article 43 comes from media reports, empirical studies, and WHO's *Weekly Epidemiological Record*, many of which were produced in reaction to the H1N1 and Ebola outbreaks.

4.1 *Subsequent Practice of States*

Global cooperation and consensus in the application of health measures commensurate with public health risks has historically been difficult to achieve. Feared losses in trade, tourism, and reputation disincentivized national governments from reporting disease surveillance information to WHO under the IHR (1969). These fears appear to be well-founded. The 1991 cholera outbreak in Peru, for instance, resulted in an estimated loss of USD 700 million due to far-reaching trade restrictions imposed on Peruvian imports.¹⁴³ Similarly, despite advice from WHO that no travel or trade restrictions were warranted, the international community met the 1994 plague outbreak in a defined region of Surat, India with a range of unilateral health measures, including the cancellation of flights, border closures, and, in some cases, restrictions on Indians living abroad.¹⁴⁴ Economic losses India incurred as a result of reporting the plague outbreak have been estimated at nearly USD 2 billion.¹⁴⁵ China similarly delayed disclosing information about the SARS outbreak in 2003 to avoid facing similar economic blows, and is reported to have delayed once again the timely notification of COVID-19 outbreaks in the city of Wuhan, Hubei province in late 2019.¹⁴⁶

The impetus for revising the IHR (1969) in 1995 arose in part from experiences such as the 1991 Peruvian cholera outbreak and the 1994 Indian plague outbreak, which underscored the need for significant improvement in state compliance with limitations on additional health measures to mitigate the

142 Adam Kamradt-Scott et al, 'WHO Tracking Mechanism for IHR Additional Health Measures' (2018) 392 *The Lancet* 2250.

143 David P Fidler, 'Return of the Fourth Horseman: Emerging Infectious Diseases and International Law' (1997) 81(4) *Minnesota Law Review* 771, 815–816.

144 Richard A Cash and Vasant Narasimhan, 'Impediments To Global Surveillance Of Infectious Diseases: Consequences of Open Reporting In A Global Economy' (2000) 78(11) *Bulletin of the World Health Organization* 1358, 1361.

145 *Ibid* 1362.

146 Tsai-Yu Lin, 'The Forgotten Role of WHO/IHR in Trade Responses to 2009 A/H1N1 Influenza Outbreak' (2010) 44(3) *Journal of World Trade* 515, 519; Gostin and Katz, above n 3, 267; Matthew M Kavanagh, 'Authoritarianism, Outbreaks, and Information Politics' (2020) 5(3) *The Lancet Public Health* e135 <[https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30030-X/abstract](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30030-X/abstract)>.

economic consequences of public health risks.¹⁴⁷ The SARS outbreak accelerated the pace and intensity of negotiations during the final two years before agreement on the final text of the revised IHR, with an Intergovernmental Working Group (IGWG) holding meetings in November 2004 and February 2005 to draft and address revisions released in January 2004,¹⁴⁸ September 2004,¹⁴⁹ and January 2005.¹⁵⁰ The degree to which states would have the flexibility to implement additional health measures beyond those recommended by the WHO director-general or prescribed by the IHR was a point of contention throughout the revision process.¹⁵¹

As the first PHEIC declared under the IHR, H1N1 provided the earliest opportunity for an in-depth review of the IHR's functioning, including how states applied Article 43. The latter topic was the subject of a WHO survey, published in the *Weekly Epidemiological Record*, evaluating the public health measures taken at international borders during the first three months (20 April 2009, to 31 July 2009) of the outbreak.¹⁵² The report surveyed public health authorities, as well as representatives from the airline industry, maritime industry and airports. Of the 144 responses received, 56 were from state public health authorities.

One temporary recommendation, which remained unchanged from the date of its issuance by WHO's director-general on 27 April 2009 until the end of the PHEIC, was "not to close borders and not to restrict international travel."¹⁵³ Nevertheless, nearly half of states responding to the survey (i.e., 26 of 56 states) reported advising their citizens to avoid travelling to affected states during the

147 Asha Herten-Crabb and Suerie Moon, 'Outbreak-Related Travel Restrictions: Health & Economic Consequences' (Geneva and London: Global Health Centre, the Graduate Institute of International and Development Studies and Centre on Global Health Security, Chatham House, 2017) <https://repository.graduateinstitute.ch/record/295277/files/Briefing_Note_Outbreak-Related_Travel_Restrictions_FINAL.pdf>.

148 WHO, Intergovernmental Working Group on the Revisions of the International Health Regulations, *International Health Regulations (Working Paper for regional consultations)*, Doc No IGWG/IHR/Working paper/12.2003, 12 January 2004.

149 IGWG September Working Draft, above n 128.

150 IGWG Proposal by Chair, above n 129.

151 See eg WHO, Intergovernmental Working Group on the Revisions of the International Health Regulations, *Review and approval of proposed amendments to the International Health Regulations: explanatory notes*, Doc No A/IHR/IGWG/4, 7 October 2004 [13]; *IGWG Proposal by Chair*, above n 129, art 39; Tigerstrom, above n 13, 48.

152 WHO, *Public Health Measures Taken at International Borders During Early Stages of Pandemic Influenza A (H1N1) 2009: Preliminary Results*, (2010) 85(21) *Weekly Epidemiological Report Record* 186.

153 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005): Report of the Review Committee on the Functioning of the International Health Regulations (2005) in relation to Pandemic (H1N1) 2009 (Report by the Director General)*, 64th assembly, Doc No A64/10, 5 May 2011, 80 ('H1N1 Review Committee Report').

early stages of the H1N1 outbreak, while two states reported denying entry to travelers from affected states. Thirty-four of 56 (61%) states reported screening incoming passengers, usually combined with some form of isolation of confirmed cases. Ten states that isolated confirmed cases also quarantined asymptomatic close contacts of cases for 3–10 days.

In terms of trade restrictions, the WHO survey found that 6 of the 56 responding states reported restricting the entry of animals or goods from affected states.¹⁵⁴ However, media reports indicate that up to 20 countries adopted bans on American, Canadian and Mexican pigs and pork imports.¹⁵⁵ These bans occurred despite a joint statement from WHO, FAO, OIE and World Trade Organization (WTO) stating that pork products could not transmit the disease.¹⁵⁶

As the official Review Committee on the Role of the International Health Regulations (2005) ('Ebola Review Committee') reported, several states repeated the use of additional health measures during the 2014–2016 Ebola outbreak. Despite the WHO director-general's ongoing recommendation against any ban on international travel or trade from March 2014 and April 2015, there were reports of 570 additional health measures implemented by 69 countries. More than 470 of these measures were deemed by WHO's secretariat to have *not* interfered with international traffic. Of the remaining 100 measures, 41 were found to have interfered significantly with international traffic. These measures included the compulsory quarantine of travelers, refusal of entry visas, cancellation of flights, and closure of air, land and sea borders.¹⁵⁷ By December 2015, the Emergency Committee noted that 34 countries continued to enact "inappropriate travel and transport measures."¹⁵⁸

A second study, conducted by a group of independent researchers between March 2015 and April 2015, found that at least 58 states had enacted travel restrictions to or from Ebola-affected countries in West Africa.¹⁵⁹ States like Antigua and Barbuda, Australia, and Jamaica banned all travel from Ebola-affected

154 Ibid.

155 Laura MacInnis, 'Flufears prompt new bans on pork, meat imports' *Reuters* (Website, 4th May 2009) <<https://www.reuters.com/article/us-flu-who-trade/flu-fears-prompt-new-bans-on-pork-meat-imports-idUSTRE5434NP20090504>>.

156 Jennifer B Nuzzo et al, 'Travel Bans Will Increase the Damage Wrought by Ebola' (2014) 12(6) *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 306, 307.

157 *Ebola Review Committee Report*, above n 19, [70–72].

158 WHO, *Statement on the 8th meeting of the IHR Emergency Committee regarding the 2014 Ebola outbreak in West Africa* (18 December 2015) <<https://www.who.int/mediacentre/news/statements/2015/ihr-ebola-8th-meeting/en/>>.

159 Wendy Rhymer and Rick Speare, 'Countries' Response to WHO's Travel Recommendations during the 2013–16 Ebola Outbreak' (2017) 95(1) *Bulletin of the World Health Organization* 10.

states, while others like Afghanistan and Indonesia implemented strict visa entry requirements.¹⁶⁰ Ebola was estimated to have cost the three most-affected states economic losses totaling USD 2.8 billion.¹⁶¹

Both the H1N1 Review Committee and the Ebola Review Committee also expressed concern that states rarely reported additional health measures that significantly interfered with international travel or trade and that they rarely provided the public health rationale and relevant scientific information for these measures. The H1N1 Review Committee noted that no state that implemented additional health measures complied with its obligation to proactively inform WHO and provide the rationale for additional health measures implemented and few provided rationales even when requested by WHO to do so.¹⁶² Similarly, the Ebola Review Committee pointed out that only 40% of states responded to WHO requests for verification of the public health rationale and relevant scientific information supporting the use of excessive additional health measures.¹⁶³ In the early days of the 2020 COVID-19 pandemic, more than two thirds of states that had implemented additional health measures were again reported to have neglected their obligation to inform the WHO of such measures.¹⁶⁴

While much attention is often paid to those states that implement additional health measures grossly exceeding appropriate limits, and even as these states fail to report such additional health measures to WHO, it appears that most states remain in compliance with the IHR most of the time and follow recommendations issued by WHO's director-general.¹⁶⁵ Additional health measures adopted during the 2014–2016 Ebola outbreak were vigorously denounced by other states through resolutions adopted at the UN Security Council,¹⁶⁶ and the Assembly of the African Union,¹⁶⁷ among other international fora. More

160 Tejpar and Hoffman, above n 68, 377.

161 World Bank Group, *2014–2015 West Africa Ebola Crisis: Impact Update* (Geneva: World Bank Group, 2016).

162 H1N1 Review Committee Report, above n 153, 80.

163 Ebola Review Committee Report, above n 19, [72].

164 Roojin Habibi et al, 'Do not violate the International Health Regulations during the COVID-19 outbreak', (2020) 395 *The Lancet* 664.

165 Trygve Ottersen, Steven J Hoffman and Gaelle Groux, 'Ebola again shows the International Health Regulations are broken: What can be done differently to prepare for the next pandemic?' (2016) 42(2–3) *American Journal of Law & Medicine* 356 ; Sara E Davies, Adam Kamradt-Scott and Simon Rushton, *Disease Diplomacy: International Norms and Global Health Security* (Baltimore: Johns Hopkins University Press, 2015) 103.

166 UNSC, *Peace and Security in Africa*, SC Res 2177, 7268th mtg (18 September 2014) [3–4] ('SC Res 2177').

167 African Union, Assembly of the Union, *Decision on Ebola Virus Disease (EVD) Outbreak*, Assembly/AU/Dec.553(XXIC), 24th sess, 2015, [4].

recently, in May 2018, South Africa reportedly declined to implement of travel restrictions in response to the outbreak of Ebola in the Democratic Republic of Congo (DRC), their National Institute for Communicable Diseases citing the fact that “the WHO does not recommend that any travel or trade restrictions be applied to the DRC.”¹⁶⁸

The above analysis of state practice suggests a lack of ‘clear,’ ‘specific’ or consistent practice in the application of additional health measures by states that could assist in the interpretation of Article 43. Most states follow the provisions of Article 43 most of the time.¹⁶⁹ While some states implement additional health measures that may not be commensurate with public health risks, such actions have generally been met with disapproval by other states.

4.2 *Subsequent Agreement of States as Expressed through IHR Review Committees and through the WHA*

According to the ILC, the “pronouncements” – that is, the relevant factual and normative assessments¹⁷⁰ – of an expert treaty body may “give rise to” or “refer to” a subsequent agreement by the Parties which establishes their understanding of a treaty under Articles 31(3)(a) and 31(3)(b) of the *Vienna Convention*, though this result is not easily achieved in practice.¹⁷¹ More commonly, such pronouncements may give rise to, or refer to, subsequent practice under Article 32 (i.e., serve as a supplementary means of interpretation).¹⁷² An “expert treaty body”, per the ILC’s conclusion above, must be composed of members who serve in their *personal capacity*, meaning that they “are not subject to instructions when they act” in their capacity as an expert.¹⁷³ The expert treaty body must also have competence which is authorized by a treaty.¹⁷⁴

In the context of the IHR, the expert committees foreseen by this legal instrument would be equivalent or at least analogous to the expert treaty bodies referred to by the ILC. Under Article 50, WHO’s director-general may establish

168 SA declines to issue travel restriction to DRC, saying Ebola is in ‘very remote area’ *Business Day* (11 May 2018) <<https://www.businesslive.co.za/bd/national/health/2018-05-11-sa-declines-to-issue-travel-restriction-to-drc-saying-ebola-outbreak-is-in-very-remote-area/>>.

169 This specific claim is analogous to Louis Henkin’s more general claim that “[a]lmost all nations observe almost all principles of international law and almost all of their obligations almost all the time.” Louis Henkin, *How Nations Behave: Law and Foreign Policy* (Council on Foreign Relation, 2nd ed, 1979) 47.

170 ILC Study on Subsequent Agreements and Subsequent Practice, *supra* note 30, 108.

171 *Ibid* 111.

172 *Ibid* 112.

173 *Ibid* 107.

174 *Ibid* 107.

a Review Committee composed of members from the IHR Expert Roster and, when appropriate, other WHO expert advisory panels.¹⁷⁵ Such a Review Committee is expressly authorized by the IHR to serve in an advisory role to the director-general, and may be asked to carry out one or more of the following tasks: (a) make technical recommendations regarding amendments to the IHR; (b) provide technical advice to the director-general with respect to standing recommendations; and (c) provide technical advice on any matter referred to it regarding the functioning of the IHR.¹⁷⁶ Article 50(2) further specifies that “the Review Committee shall be considered an expert committee” and subject to the *WHO Regulations for Expert Advisory Panels and Committees* (“WHO Advisory Panel Regulations”).¹⁷⁷ Several provisions within the latter document, such as the prohibition against receiving remuneration from WHO, and the ban against receiving instructions from any external authority, suggest that experts serving such committees are doing so in their personal capacity.¹⁷⁸

The IHR Emergency Committee is another expert committee explicitly foreseen and mandated by the IHR.¹⁷⁹ Like the Review Committee, it is established by the director-general, but limited in duration and scope.¹⁸⁰ Unlike the Review Committee, however, no provision in the IHR subjects the Emergency Committee to *Advisory Panel Regulations*.

The IHR clarifies that the views of a Review Committee “shall not commit the Organization and shall be formulated as advice to the director-general” and that the views of an Emergency Committee are to be forwarded to the director-general, who “shall make the final determination” on matters pertaining to its competence.¹⁸¹ This does not preclude the possibility, however, that the pronouncements of either body may give rise to, or refer to, a subsequent agreement by the IHR’s states parties which establishes their understanding regarding the interpretation of the IHR. To be of assistance in treaty interpretation, pronouncements made by expert treaty bodies need not be legally binding.¹⁸²

175 IHR, above n 4, art 50(3).

176 Ibid art 50(1).

177 Ibid art 50(2).

178 WHO, *Regulations for Expert Advisory Panels and Committees*, arts 3.4, 4.6 ; Unni Gopinathan, Steven J Hoffman and Trygve Ottersen, ‘Scientific Advisory Committees at the World Health Organization: A Qualitative Study of How Their Design Affects Quality, Relevance, and Legitimacy’ (2018) 2(9) *Global Challenges* 1; Unni Gopinathan and Steven J Hoffman, ‘Institutionalizing an Evidence-Informed Approach to Guideline Development: Progress and Challenges at the World Health Organization’ (2018) 3(5) *BMJ Global Health* 1.

179 IHR, above n 4, arts 48–49.

180 Ibid art 48(2).

181 Ibid arts 52(1), 49(5).

182 ILC Study on Subsequent Agreements and Subsequent Practice, above n 29, 109.

Rather, the weight accorded to such pronouncements depends on whether it can be said that the pronouncement “gave rise to” or “referred to” subsequent practice or subsequent agreement of the parties. The ILC has explained that one of the ways such pronouncements may be identified is by examining the “resolutions of organs of international organizations”.¹⁸³ Such resolutions and decisions, when adopted by consensus under the auspices of an international organization, may also serve as a supplementary means of interpretation under the *Vienna Convention*.¹⁸⁴

The WHO Constitution empowers three organs – the 194-member WHA, the 34-member Executive Board, and the secretariat – to carry out the work of the organization.¹⁸⁵ Reports prepared by the IHR review committee are usually submitted for consideration at sessions of the WHA and Executive Board. The reports that substantively discuss the application of Article 43 have arisen mainly in the context of two IHR Review Committee analyses of how these regulations functioned during the 2009 H1N1 and 2014–2016 Ebola outbreaks. Some assessments from the above-mentioned reports have formed the subject of resolutions and decisions at the WHA. These report findings, and their subsequent uptake in resolutions, are referenced below.

After the first PHEIC declared under the IHR, the international community’s response to the H1N1 outbreak was studied in-depth by the IHR H1N1 Review Committee. On the application of Article 43 specifically, the H1N1 Review Committee recommended that parties “reinforce evidence-based decisions on international travel and trade” and urged WHO to “energetically seek to obtain the public-health rationale and relevant scientific information, share it with other States Parties, and, where appropriate, request reconsideration, as stipulated under Article 43.” It also recommended that WHO review and assess the effectiveness and impact of border measures taken during the outbreak to support evidence-based guidance for future events.¹⁸⁶

While the H1N1 Review Committee acknowledged inherent problems in securing compliance with travel and trade requirements under the IHR, it ultimately called for more “rigorous implementation of Article 43, by both States Parties and WHO, rather than amending the IHR.”¹⁸⁷ On 20 May 2011, the WHA urged its member states to “support the implementation of the recommendations contained in the final report of the Review Committee on the Functioning

183 Ibid 111.

184 Ibid 33.

185 WHO Constitution, above n 3, art 9.

186 H1N1 Review Committee Report, above n 153, 130.

187 Ibid 81.

of the International Health Regulations (2005) in relation to Pandemic (H1N1) 2009.”¹⁸⁸

The West Africa Ebola outbreak, the severity and duration of which was widely regarded as having challenged the IHR in “unprecedented ways”,¹⁸⁹ provided a second opportunity for an in-depth review of the interpretation of Article 43 in practice. Unlike H1N1, which occurred in the early phases of IHR implementation, the Ebola outbreak emerged at a time when parties had already overseen at least two major public health situations (i.e., H1N1 and MERS) and would have been more seasoned in the implementation of Article 43. Shortcomings in IHR operationalization and global solidarity led WHO’s Executive Board to call for the establishment of a panel of outside experts (the “Ebola Interim Assessment Panel”) to examine “all aspects of WHO’s response to the Ebola outbreak.”¹⁹⁰ Subsequently, on 26 May 2015, the WHA also called on WHO’s director-general to establish the Ebola Review Committee.¹⁹¹

Although both the Ebola Interim Assessment Panel and the Ebola Review Committee noted that at least 40 states implemented additional health measures that interfered significantly with international traffic without due regard for the procedural and scientific requirements under Article 43, there were key differences between the recommendations issued by the Panel and those suggested by the Committee. For instance, citing the severe economic consequences that were borne by states affected by Ebola, as well as the barriers to receiving necessary personnel and supplies, the Panel called upon the Ebola Review Committee to examine the option of implementing disincentives and imposing sanctions on states that had adopted inappropriate or unjustified additional health measures under the IHR.¹⁹² This recommendation was supported by a separate High-Level Panel on the Global Response to Health Crises convened by the UN Secretary-General in 2015, which observed that “no further action is currently outlined in IHR if a country introduces a measure that is not justified by scientific principles or evidence.” The UN Secretary-General’s High-Level Panel sought to rectify this gap by requesting that the WHO’s Ebola

188 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005)*, Doc No WHA64/2011/REC/1, 64th assembly, 16–24 May 2011, [1].

189 Ebola Review Committee Report, above n 19, 8.

190 Panel of Independent Experts, *Report of the Ebola Interim Assessment Panel* (July 2015), 9 <<https://www.who.int/csr/resources/publications/ebola/ebola-panel-report/en/>> (‘Ebola Interim Assessment Panel’).

191 WHO, World Health Assembly, *2014 Ebola virus disease outbreak and follow-up to the Special Session of the Executive Board on the Ebola Emergency*, Doc No WHA68/2015/REC/1, 68th sess, 18–26 May 2015.

192 Ebola Interim Assessment Panel, above n 191, 12.

Review Committee give consideration for “strengthening the review powers of the WHO and compensation in the event that trade and travel restrictions are determined to have exceeded the temporary recommendations of WHO without adequate justification.”¹⁹³

The Ebola Review Committee disagreed on this point, noting that the will of the states parties during intergovernmental negotiations in 2004 and 2005 was to avoid the inclusion of sanctions for non-compliance. Specifically, the Review Committee opined that “the ethos that underpins international public health is one of cooperation and collaboration, rather than sanctions.”¹⁹⁴ As with the H1N1 Review Committee, the predominant concern of the Ebola Review Committee was the fact that “[i]n practice, very few countries inform the WHO about the implementation of additional measures and few justify or reconsider enacted measures, even when asked to do so.”¹⁹⁵ As a result, the Ebola Review Committee merely reminded states of their need to comply with all relevant IHR obligations when implementing international traffic and trade measures. The Review Committee’s recommendations to the WHO secretariat were more detailed and prescriptive, and called for the active monitoring of measures implemented by parties, as well as actions taken by nonstate actors, and analysis of public health rationales for such measures.¹⁹⁶

Although the Ebola Review Committee did not find it within the spirit of the IHR to suggest including new disincentives or sanctions against states implementing additional health measures, it recommended that the WHO secretariat publish on its website additional health measures that go beyond temporary recommendations or which may have “an unreasonable adverse impact” on one or more IHR states parties, provided that the implementing state has either: (1) failed to notify WHO or provide details about such measures when requested; (2) failed to provide an adequate public health rationale; (3) failed to review such measures within three months; or (4) failed to reconsider them when requested to do so by the WHO secretariat.¹⁹⁷ As an illustration of the ingenuity that these post-Ebola reflections generated, the Review Committee introduced wording (e.g., additional health measures with an “unreasonable adverse impact”) and conditions (e.g., states that fail to reconsider additional measures) that do not appear as such in the text of Article 43.

193 High Level Panel on the Global Response to Health Crises, *Protecting humanity from future health crises: Report of the High-level Panel on the Global Response to Health Crises*, UNGAOR, 70th sess, Agenda Item 125, UN Doc A/70/723, 9 February 2016, [227].

194 Ebola Review Committee Report, above n 19, 81.

195 Ibid 32.

196 Ibid 66.

197 Ibid.

The report of the Ebola Review Committee was well-received by the WHA, which at its meeting in May 2016 requested WHO's director-general to develop a global implementation plan for the Review Committee's recommendations.¹⁹⁸ Later approved by the WHA on 26 May 2018, the five-year global implementation plan acknowledges that states' compliance with additional health measure provisions under the IHR is "a critical element for the optimal functioning of the global alert and response system," though it does not explicitly mention the need for states to publish additional health measures implemented where these health measures interfere significantly with international traffic, as per the criteria suggested in the final report of the Ebola Review Committee.¹⁹⁹

On 17 July 2019, on the recommendation of the IHR Emergency Committee, the director-general declared the Ebola outbreak in the DRC as the fifth PHEIC since the entry into force of the IHR. Referring to the exceptionally harsh nature of the lessons learned from the 2014–2016 Ebola outbreak in West Africa, the Emergency Committee cautioned that "the global community should anticipate possible negative consequences and proactively prevent them from occurring".²⁰⁰ This was followed by a statement from the director-general, who urged the international community not to use the PHEIC "to stigmatize and penalize the very people who are most in need of our help".²⁰¹ Calls against stigma and discrimination have been repeated during COVID-19, both by the director-general, and the UN Secretary-General.²⁰²

The practice of states as discerned through the recommendations of the IHR Review and Emergency Committees, and the adoption of decisions and

198 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005)*, Doc No WHA69/2016/REC/1, 69th sess, 23–28 May 2016, [2].

199 WHA Decision 71(15), above n 20, [22–23].

200 WHO, Emergency Committee, *Statement on the meeting of the International Health Regulations (2005) Emergency Committee for Ebola virus disease in the Democratic Republic of Congo on 17 July 2019* <<https://www.who.int/ihr/procedures/statement-emergency-committee-ebola-drc-july-2019.pdf>>.

201 WHO, *Ebola outbreak in the Democratic Republic of Congo declared a Public Health Emergency of International Concern* <<https://www.who.int/news-room/detail/17-07-2019-ebola-outbreak-in-the-democratic-republic-of-the-congo-declared-a-public-health-emergency-of-international-concern>>.

202 WHO, *Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)* <[https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov))> ; UN, *Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19 (2020)* <https://www.un.org/sites/un2.un.org/files/sg_report_socio-economic_impact_of_covid19.pdf>.

resolutions through the WHA, confirms several aspects of Article 43's ordinary-meaning analysis in **Section 3**. It confirms that additional health measures must be "evidence-based"²⁰³ and that the provision of a public health rationale is not a mere formality but rather a mandatory requirement which must be "adequate."²⁰⁴

Analysis of subsequent agreements of states moreover suggests that certain additional health measures may be rendered impermissible under Article 43, or at minimum subject to review by the WHO, on the basis of their "unreasonable adverse impact" on other states.²⁰⁵ While this term is not explicitly used in the text of Article 43, it is consistent with the requirement under Article 3 of the IHR that the implementation of the regulations "be guided by the goal of their universal application for the protection of all people of the world from the international spread of disease,"²⁰⁶ and it is consistent with the principle elaborated under Article 2 to avoid any "unnecessary" interference with international traffic and trade.²⁰⁷

4.3 *Conclusion on Subsequent Practice and Subsequent Agreement in the Application of Article 43*

Subsequent state practice usually provides helpful interpretive insight into whether parties have agreed upon certain meanings of terms and obligations of an international legal instrument. In the case of the IHR, however, experiences with H1N1, Ebola and COVID-19 reveal inconsistencies and a fractured consensus in the types of additional health measures permitted. States that did implement additional health measures also demonstrated an overall lack of compliance with (and sometimes a lack of awareness for) their obligation to report any additional health measures to WHO and provide a public health rationale where those measures interfere significantly with international traffic. Yet, despite these areas of inconsistent state practice among a minority of states, it appears that most states observe most aspects of Article 43 most of the time.

WHA resolutions adopted by states in response to PHEICs have overwhelmingly expressed disapproval when additional health measures have exceeded temporary recommendations issued by WHO's director-general and negatively

203 H1N1 Review Committee Report, above n 153, [28].

204 Ebola Review Committee Report, above n 19, 66.

205 Ibid 66.

206 IHR, above n 4, art 3(3).

207 Ibid art 2.

impacted the populations and economies of affected countries.²⁰⁸ This suggests that, in addition to the Article 43(1) requirement for measures to be no more restrictive to international traffic and no more intrusive and invasive to persons than reasonably available alternatives that would achieve the appropriate level of health protection, states must also factor into their decision making the real and tangible harm that might result from the implementation of any additional health measures that are not rooted in public health evidence.

5 Insights from Other Rules of International Law

In addition to the *Vienna Convention's* requirement to interpret a treaty through an analysis of its broader normative environment,²⁰⁹ the IHR contains several references to obligations under other international law instruments within its text. Notably, Article 57 of the IHR explicitly states that “the IHR and other relevant international agreements should be interpreted so as to be compatible.” In the event of conflict, the provision clarifies that “the IHR shall not affect the rights and obligations of any State Party deriving from other international agreements.”²¹⁰

The IHR's relationship with other international instruments was a significant point of debate for states during negotiations. Some states expressed concern that the subject-matter of the IHR would overlap with issues covered by other instruments of international law.²¹¹ The WHO responded by commissioning a review which highlighted two principles of treaty drafting and interpretation relevant for the IHR: (1) the principle of “mutual supportiveness” between treaties and the presumption against conflicts; and (2) the principle of not adding to or diminishing the rights and obligations provided by other treaties.²¹² This means that Article 43 must be interpreted in light of other regimes

208 WHO, World Health Assembly, *Implementation of the International Health Regulations (2005)*, above n 198, [2]; WHO, World Health Assembly, *Implementation of the International Health Regulations (2005)*, Doc No WHA64/2011/REC/1, 64th Sess, 2011, [1].

209 IHR, above n 4, art 31(3)(c).

210 Ibid art 57(1).

211 Tigerstrom, above n 13, 55.

212 WHO, Intergovernmental Working Group on Revision of the International Health Regulations, *Review and approval of proposed amendments to the International Health Regulations: relations with other international instruments*, Doc No A/IHR/IGWG/INF.Doc./1, 30 September 2004 [5] ('IGWG – Relation with other international instruments').

of international law that may be affected by the implementation of additional health measures. Two regimes are particularly relevant to this endeavour – (1) international human rights law and (2) international trade law.

5.1 *International Human Rights Law*

Whether it involves quarantine or isolation, the imposition of intrusive or invasive medical procedures, the handling of personal information, the destruction of personal property, or restrictions on the freedom of movement, the implementation of an additional health measure under Article 43 may lead to state limitations to, or derogations from, human rights and freedoms protected by international human rights instruments and enshrined in customary international law. For example, affected rights could include: the right to liberty and security of the person under Article 3 of the *Universal Declaration of Human Rights* (UDHR), and Article 9(1) of the *International Covenant on Civil and Political Rights* (ICCPR); the liberty of movement under Article 13 of the UDHR and Article 12 of the ICCPR; and the right to privacy under Article 12 of the UDHR and Article 17 of the ICCPR.²¹³ The ICCPR is legally-binding upon 172 parties. The UDHR, although not legally binding, is widely regarded as reflecting customary international law.²¹⁴

Rights and freedoms analogous to the above examples from the UDHR and ICCPR are contained in various additional international and regional human rights treaties and related protocols, including the *Convention on the Rights of the Child*, the *International Convention on the Protection of the Rights of all Migrant Workers and Members of their Families*, the *European Convention for the Protection of Human Rights and Fundamental Freedoms*, the *African Charter on Human and Peoples' Rights*, and the *American Convention on Human Rights*. Table 1 provides a non-exhaustive overview of these analogous rights and freedoms across relevant international and regional treaties and protocols.

Although Article 57 of the IHR explicitly gives precedence to state obligations arising from other international legal instruments, it was decided during the drafting of the IHR that the “formulation of... ‘qualified’ rights [would]

213 *Universal Declaration of Human Rights*, GA Res 217 (III), UNGAOR, 3rd sess, Supp No 13, arts 3, 12 and 13 (‘UDHR’); *International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976) arts 9(1), 12, 17 (‘ICCPR’).

214 Hurst Hannum, ‘The Status of the Universal Declaration of Human Rights in National and International Law’ (1998) 25(1–2) *The Georgia Journal of International and Comparative Law* 287, 323.

TABLE 1 The right to liberty and security of the person, right to freedom of movement and the right to privacy across international and regional human rights treaties other than the ICCPR†

ICCPR Recognized Human Right	Alternative Human Rights Treaty or Protocol	Analogous Provision in Treaty or Protocol	
Right to liberty and security of the person art. 9	<i>African Charter of Human and People's Rights</i> , 1981	Right to liberty and to the security of one's person; freedom from arbitrary arrest or detention	Art. 6
	<i>American Convention on Human Rights</i> , 1969	Right to personal liberty and security, including freedom from arbitrary arrest or detention	Art. 7
	<i>European Convention on Human Rights</i> , 1950	Right to liberty and security	Art. 5
	<i>Convention on the Rights of the Child</i> , 1989	Freedom from unlawful or arbitrary deprivation of liberty, arrest or detention	Art. 37
	<i>International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families</i> , 1990	Right to liberty and security of the person; freedom from arbitrary arrest or detention	Art. 16
Freedom of movement art. 12	<i>African Charter of Human and People's Rights</i> , 1981	Right to freedom of movement and residence within the borders of a State; Right to leave any country including one's own and to return to one's country; Right to asylum in case of persecution; Prohibition of mass expulsions	Art. 12
	<i>American Convention on Human Rights</i> , 1969	Right to freedom of movement and residence	Art. 22
	<i>Additional Protocol No. 4 of 1963 to the European Convention on Human Rights</i>	Right to freedom of movement and of residence; the right to leave any country, including one's own	Art. 2
	<i>Convention on the Rights of the Child</i> , 1989	Right to freedom of movement and of residence; the right to leave any country, including one's own	Art. 3
	<i>Convention on the Rights of the Child</i> , 1989	Right to enter or leave a state for the purpose of familial reunification	Art. 10

TABLE 1 The right to liberty and security of the person, right to freedom (*cont.*)

ICCPR Recognized Human Right	Alternative Human Rights Treaty or Protocol	Analogous Provision in Treaty or Protocol	
Right to privacy art. 17	<i>International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families</i> , 1990	Freedom to leave any state, including the state of origin	Art. 8
	<i>Convention on the Rights of Persons with Disabilities</i> , 2008	Right to liberty of movement in the territory of the state of employment and freedom to choose residence there	Art. 39
	<i>African Charter of Human and People's Rights</i> , 1981	Right to liberty of movement, to freedom to choose residence, and to a nationality	Art. 18
	<i>American Convention on Human Rights</i> , 1969	Right to respect for life and integrity of the person	Art. 4
	<i>European Convention on Human Rights</i> , 1950	Right to privacy	Art. 11
	<i>Convention on the Rights of the Child</i> , 1989	Right to respect for private and family life	Art. 8
	<i>International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families</i> , 1990	Freedom from arbitrary or unlawful interference with privacy, family, home or correspondence; freedom from unlawful attacks on honour and reputation	Art. 16
	<i>Convention on the Rights of Persons with Disabilities</i> , 2008	Freedom from arbitrary or unlawful interference with privacy, family, home, correspondence, or other communications; freedom from unlawful attacks on honour and reputation	Art. 14
		Freedom from arbitrary or unlawful interference with privacy, family, or correspondence, or other types of communication; freedom from unlawful attacks on honour and reputation	Art. 22

†This table is intended to illustrate the complex and interdependent relationship between the individual rights affected by IHR Article 43 and international and regional human rights treaties. It is not an exhaustive or comprehensive representation of the rights and freedoms affected by the IHR and protected by international and regional human rights treaties.

allow for a better synergy between the draft Regulations and the [ICCPR].”²¹⁵ As a result, the current IHR regulates the implementation of health measures in a manner that renders such implementation consistent with human rights obligations and especially those rights and freedoms contained in the ICCPR. Broadly speaking, this means that the implementation of the IHR must be undertaken with full respect for the dignity, human rights and fundamental freedoms of persons²¹⁶ and must adhere to the principle of non-discrimination.²¹⁷ Consideration for civil rights reappears again under Article 23 of the IHR, requiring states to obtain express informed consent prior to carrying out any “medical examination, vaccination, prophylaxis or health measure” on a traveler upon their arrival or departure;²¹⁸ under Article 42 of the General Provisions (Part VIII), which requires that health measures be “initiated and completed without delay” and applied in a transparent manner;²¹⁹ and under Article 45, which calls for the confidentiality and appropriate handling of health information collected or received by a state pursuant to the IHR.²²⁰ These provisions must be taken into account when implementing additional health measures under Article 43, since all additional health measures must be “otherwise consistent” with the IHR.²²¹

Except for non-derogable rights such as the right to life, the right to be free from torture, cruel, inhumane and degrading treatment,²²² and the requirement to treat all travelers with courtesy and respect, taking into consideration their gender, sociocultural, ethnic or religious concerns,²²³ certain circumstances may justify limiting the rights explicitly referred to under the IHR. For instance, the requirement to obtain express informed consent prior to carrying out any intrusive or invasive medical examination, prophylaxis or vaccination is waived in cases where there is evidence of an “imminent public health threat” posed by the traveler.²²⁴ Evidence of an imminent public health threat may also justify placing travelers under isolation, quarantine or public health observation, although such measures must withstand the scientific assessment prescribed by Article 43(2).²²⁵

215 IGWG – Relation with other international instruments, above n 212, [30].

216 IHR, above n 4, arts 3(1), 32.

217 Ibid art 42.

218 Ibid art 23(3).

219 Ibid art 42.

220 Ibid art 45.

221 Ibid art 43(1).

222 ICCPR, above n 213, art 4(2).

223 Ibid art 32.

224 Ibid art 31(2).

225 Ibid art 31(2)(c).

Given that the IHR was written with the intention to be compatible with international human rights law, a closer look at limitations and derogations under this regime is also warranted. Article 29(2) of the UDHR explicitly acknowledges the possibility of limitations to the enjoyment of prescribed rights and freedoms where limitations are “determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society”.²²⁶ Unlike limitations, a derogation leads to a full suspension of the right in question in a state of emergency. In this regard, Article 4 of the ICCPR provides that “in time of public emergency which threatens the life of the nation and the existence of which is officially proclaimed”, states may derogate from obligations under this instrument.²²⁷ Other international and regional human rights treaties also contain explicit limitation and derogation clauses justifying the curtailment or suspension of analogous rights and freedoms under limited circumstances. Table 2 provides a non-exhaustive overview of limitations and derogations clauses contained in international and regional human rights treaties.

During public health crises, the appropriateness of state encroachment on human rights hinges upon interlinking criteria widely applied by international courts and tribunals as generally accepted principles of law: (1) the state measure has a legitimate aim (principle of “legitimacy”); (2) the state measure is necessary for the achievement of the legitimate aim (principle of “necessity”); and (3) the state measure is proportional, in temporal, geographic and territorial scope, to the legitimate aim pursued (principle of “proportionality”).^{228,229}

While the above principles are not applied in the same manner by every international court or tribunal, some variation of the above is used. For example, proportionality was a key consideration for the Human Rights Committee (“Committee”) in the 2018 case of *Vandom v Republic Korea*. The Complainant in this case, an English teacher working in South Korea, argued that the state’s mandatory HIV test violated her right to privacy (among

226 UDHR, above n 213, art 29(2).

227 ICCPR, above n 213, art 4.

228 Nicolas AJ Croquet, *The Role and Extent of a Proportionality Analysis in the Judicial Assessment of Human Rights Limitations within International Criminal Proceedings* (Leiden: Martinus Nijhoff, 2015) 28–33.

229 Yutaka Arai-Takahashi, ‘Proportionality’ in Dinah Shelton (ed) *The Oxford Handbook of International Human Rights Law* (OUP, 2013) 449 ; *Statute of the International Court of Justice*, art 38(1).

TABLE 2 Derogation and limitation clauses in major human rights treaties

Classification	Justifying reasons	Rights affected	Legitimacy requirements	Examples‡
Derogation clauses	public emergency threatening the life of the nation; armed conflict	all rights except for: right to life; right to a name; right to juridical personality; right to nationality; freedom from torture and inhumane treatment; freedom from slavery, slave-trade and servitude; right to not be imprisoned for contractual debt; respect for the principle of legality in the field of criminal law; freedom of thought, conscience and religion; rights of the child;	consistency with obligations under international law; proclamation and notification; strict necessity; limitation in scope and duration; proportionality; non-discrimination; safeguards and judicial control	Art. 4 ICCPR; Art. 15 ECHR; Art. 30 ESC; Art. 27 ACHR
Limitation clauses	national security; public order; public health; public safety; public morals; economic well-being of the country; prevention of disorder and crime;	freedom of assembly; freedom of association; freedom of movement; freedom to manifest one's religion or beliefs; freedom of expression; right to privacy	prescription by law; respect for rule of law; (democratic) necessity; proportionality; non-arbitrariness; non-discrimination	Arts. 12, 19, 21, 22 ICCPR; Arts. 8–11 ECHR; Art. 2 Additional Protocol No. 4 to ECHR; Arts. 12, 13, 15, 16, 22 ACHR; Arts. 5 and 8 Additional Protocol to ACHR; Arts. 11–12 ACHR

TABLE 2 Derogation and limitation clauses in major human rights treaties (*cont.*)

Classification	Justifying reasons	Rights affected	Legitimacy requirements	Examples‡
	respect for the rights and freedoms of others			Arts. 10, 13, 15 CRC; Arts. 8, 13, 39 ICRMW

‡ECHR: European Convention for the Protection of Human Rights and Fundamental Freedoms, Rome, 4 November 1950; ESC: European Social Charter, Turin, 18 December 1961, revised Strasbourg, 3 May 1996; Protocol No. 4 to the Convention for the Protection of Human Rights and Fundamental Freedoms, securing certain rights and freedoms other than those already included in the Convention and in the first Protocol thereto, Strasbourg, 16 November 1963; ICCPR: International Covenant on Civil and Political Rights, New York, 16 December 1966; ACHR: American Convention on Human Rights, San José, 22 November 1969; ACHPR: African Charter on Human and Peoples' Rights, Nairobi, 27 June 1981; Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, San Salvador, 16 November 1999; CRC: Convention on the Rights of the Child, New York, 20 November 1989; ICRMW: International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, New York, 18 November 1990.

Adapted from Stefania Negri, "Communicable disease control", in Gian Luca Burci and Brigit Toebe (eds.), *Research Handbook on Global Health Law*, Edward Elgar, 2018.

other rights) protected under the ICCPR. In deciding that the measure was an unjustified violation of the right to privacy, the Committee carefully studied the scientific literature, and noted that there is "no evidence...that HIV restrictions on entry, stay and residence based on positive HIV status alone serve to protect the public health, but rather that such restrictions may harm public health."²³⁰ In considering the state's argument that the policy had the purpose of maintaining public health and order, the Committee therefore observed that:

the State party ha[d] not provided any justification for how the imposition of the mandatory HIV/AIDS and drug testing policy on the specific group of E-2 visa holders and applicants would have been in the furtherance of protecting public health and maintaining public order, or could

²³⁰ Human Rights Commission, *Vandom v. Republic of Korea*, 12 July 2018, UN Doc CCPR/C/123/D/2273/2013 [8.9].

otherwise be justified as reasonable in the circumstances of the case, especially considering the fact that teachers of Korean ethnicity and nationality were exempted from the policy.²³¹

Similar reasoning for deviations from rights prescribed by the ICCPR are also detailed in the *Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights* (“Siracusa Principles”).²³² Non-binding but authoritative, the Siracusa Principles explicitly call for “due regard” to the IHR²³³ and foresee limitations to an ICCPR obligation on public health grounds where a state must take measures to deal with “a serious threat to the health of a population or individual members of the population”. Such measures, however, must be “specifically aimed at preventing disease or injury or providing care for the sick and injured.”²³⁴ Any derogation from rights, according to the Siracusa Principles, must be restricted in severity, duration and geographic scope to that which is necessary to deal with the threat to the life of the nation and proportionate to its nature and extent,²³⁵ and it must nevertheless refrain from discriminating solely on the basis of race, colour, sex, language, religion or social origin.²³⁶

The text of Article 43 complements the principles of legitimacy, necessity and proportionality. Where Article 43(2) requires the state to undertake an assessment of the scientific evidence underpinning the utility of an additional health measure, it responds to the requirement under human rights law to demonstrate that a measure limiting or derogating from human rights is necessary. Where Article 43(1) seeks to implement measures that are not more intrusive to persons than reasonably available alternatives, the principle of proportionality is activated. Specific public health risks and PHEICs may well give rise to legitimate aims.

That travel and trade restrictions must be commensurate with the risk posed to public health is a principle that was also recognized by the UN Security Council during the 2014–2016 Ebola outbreak in West Africa. Shortly after WHO’s director-general declared this PHEIC, the UN Security Council issued Resolution 2177 of 18 September 2014, in which it expressed “concern about the

²³¹ Ibid.

²³² United Nations Commission on Human Rights, *The Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights*, 28 September 1984, UN Doc E/CN.4/1985/4 (‘Siracusa Principles’).

²³³ Ibid [26].

²³⁴ Ibid [25].

²³⁵ Ibid [51].

²³⁶ ICCPR, above n 213, art 4(1).

detrimental effect of the isolation of the affected countries as a result of trade and travel restrictions” and called on states to “lift general travel and border restrictions...that contribute to the further isolation of affected countries and undermine their efforts to respond to the Ebola outbreak.”²³⁷

All of this means that, where additional health measures contemplated under Article 43 pose a risk to the enjoyment of rights protected by international and regional human rights treaties, states must assess planned measures not only against the general Article 43(1) limitations on their implementation and the Article 43(2) requirement for scientific justification, but also against their human rights obligations, including the principles of legitimacy, necessity, and proportionality.

5.2 *International Trade Law*

The broad subject matter of the IHR overlaps to some degree with the international law on trade in goods. Currently, 160 states parties to the IHR are also members of the WTO.²³⁸ Considerable effort was made during negotiations to ensure that obligations under other international legal agreements would either be harmonized with or remain unaffected by the revised IHR. With respect to the international trade law regime specifically, drafters altered certain provisions of the IHR to render them mutually compatible.²³⁹ These include obligations prescribed by the *General Agreement on Tariffs and Trade* (GATT) and the WTO Sanitary and Phytosanitary (SPS) Agreement, which include provisions analogous to Article 43 of the IHR in both scope and objective but specifically addressing measures for attenuating the risk of animal or plant-carried diseases in the context of international trade.²⁴⁰

Like with human rights, the international trade law regime can be a source of interpretation according to Article 31(3)(c) of the *Vienna Convention* and can lend aid in interpreting terms and expressions that lack definition under

237 SC Res. 2177, above n 166, [3–5].

238 The following states and territories are parties to the IHR only (and not Members of the WTO): Algeria, Andorra, Azerbaijan, Bahamas, Belarus, Bhutan, Bosnia and Herzegovina, Botswana, Comoros Cook Islands, Democratic People's Republic of Korea, Equatorial Guinea, Eritrea, Ethiopia, Holy See, Iran (Islamic Republic of), Iraq, Kiribati, Lebanon, Libya, Marshall Islands, Federated States of Micronesia, Monaco, Nauru, Niue, Palau, San Marino, Sao Tome and Principe, Serbia, Somalia South Sudan, Sudan, Syrian Arab Republic, Timor-Leste, Turkmenistan, Tuvalu, Uzbekistan.

239 IGWG – Relation with other international instruments, above n 212, [8–9].

240 *WTO Agreement on the Application of Sanitary and Phytosanitary Measures*, opened for signature 15 April 1994, 1867 UNTS 493 (entered into force 1 January 1995) art 1 ('SPS Agreement').

the IHR – such as “scientific principles,”²⁴¹ “available scientific evidence,”²⁴² and “reasonably available alternatives.”²⁴³ While WTO instruments do not share the IHR’s primary focus on public health, the resolution of WTO disputes involving these same terms in the GATT and the SPS Agreement can serve as an interpretive aid. In other words, while decisions of WTO’s Dispute Resolution Panels and Appellate Body are not directly applicable to the IHR and may not be the most authoritative interpretation of international law broadly, they are nonetheless authoritative in their own domain and the logic that adjudicators employ in those cases can inform arguments that WHO, states, and/or the ICJ could seize upon in similar matters involving similar terms found in the IHR’s Article 43. Specifically, WTO disputes have provided guidance on, among other subjects: (1) whether a measure is “necessary” and how to contend with “reasonably available alternatives”; (2) what constitutes “sufficient scientific evidence”; and (3) whether the precautionary principle can be used to justify the use of protective measures in situations of uncertainty. In the subsections that follow, WTO Panel and Appellate Body decisions are used to assist in the interpretation of these terms and concepts.

5.2.1 On the Necessity of Sanitary and Phytosanitary Measures and Reasonably Available Alternatives

Article XX(b) of the GATT explicitly allows members to take measures that would otherwise violate their GATT obligations if such measures are “necessary to protect human, animal or plant life or health.”²⁴⁴ The provision is subject to the general condition in the chapeau of Article XX, which requires that such matters not be applied “...in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.”²⁴⁵

In the *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products* case (2000) (“EC/Asbestos”), Canada challenged France’s ban on asbestos and products containing asbestos fibres, claiming that chrysotile asbestos-cement products did not present a high enough risk to warrant a ban and that non-scientific and illegitimate factors influenced the decision

²⁴¹ IHR, above n 4, art 43(2)(a).

²⁴² Ibid art 43(2)(b).

²⁴³ Ibid art 43(1).

²⁴⁴ *General Agreement on Tariffs and Trade*, opened for signature 30 October 1947, 55 UNTS 194 (entered into force 1 January 1948) art XX(b) (‘GATT’).

²⁴⁵ Ibid art XX.

to implement the measure.²⁴⁶ The Panel and Appellate Body considered whether the measure was “necessary to protect human...life or health” as per Article XX(b). The Appellate Body upheld the Panel’s finding that chrysotile-cement products posed a risk to human health – noting that the Panel’s conclusion was in keeping with the consensus in views expressed by multiple scientists and international bodies such as the International Agency for Research on Cancer, and the WHO.²⁴⁷ The Appellate Body also opined that a country should be able to choose from among the “reasonably available” alternatives that serve *their* chosen health policy goal or objective,²⁴⁸ and that the more vital or important the objective pursued, the easier it would be to deem the selected measure as being “necessary” to meet those ends.²⁴⁹

The Appellate Body in *Brazil – Measures Affecting Imports of Retreaded Tyres* (2007) followed the decision in *EC/Asbestos* in acknowledging the importance of the objective of preserving human life and health against the threat of disease. It also noted, however, that other factors would have to be considered when determining whether a measure is necessary, including the interests or values at stake, their relative importance, as well as the availability of reasonable alternative measures.²⁵⁰

5.2.2 On the Sufficiency of Scientific Evidence and the Nature of Risk Assessment

Article 2.1 of the SPS Agreement further reaffirms that WTO members “have the right to enact sanitary and phytosanitary...measures that are necessary for the protection of human, animal or plant life or health” provided such measures are otherwise consistent with the SPS Agreement.²⁵¹ Under Article 2.2, such measures must be applied “only to the extent necessary to protect human...life or health, based on scientific principles” and “must not be maintained without sufficient scientific evidence, except as provided for in paragraph 7 of Article 5”.²⁵²

²⁴⁶ Tracey Epps, ‘The facts of the health cases’ in Cheltenham *International Trade and Health Protection: A Critical Assessment of the WTO’s SPS Agreement* (UK: Edward Elgar, 2008) 202, 207.

²⁴⁷ Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products* (WTO Doc WT/DS135/AB/R, 5 April 2001) [162].

²⁴⁸ *Ibid* [174].

²⁴⁹ *Ibid* [172].

²⁵⁰ Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyre* (WTO Doc WT/DS322/AB/R, 17 December 2007) [178].

²⁵¹ SPS Agreement, above n 240, art 2.1.

²⁵² *Ibid* art 2.2.

In *Japan – Measures Affecting Agricultural Products* (1999) (“Japan/Agricultural Products”), both the Panel and Appellate Body agreed that the requirement for “sufficient scientific evidence” under Article 2.2 requires a rational or objective relationship between the SPS measure and scientific evidence.²⁵³ This principle was re-iterated again in *Japan – Measures Affecting the Importation of Apples* (2003) (“Japan/Apples”). The Appellate Body in *Japan/Apples* also distinguished, however, between “scientific uncertainty” (i.e., where diverging conclusions may each be supported by a degree of scientific evidence) and “scientific insufficiency.”²⁵⁴ Relevant scientific evidence, according to the Appellate Body, would be considered insufficient if it “does not allow, in qualitative or quantitative terms, for the performance of an adequate assessment of risks as required under Article 5.1.”²⁵⁵

Article 5 of the SPS Agreement, entitled “Assessment of Risk and Determination of the Appropriate Level of Sanitary or Phytosanitary Protection,” is intrinsically tied with Article 2. Under Article 5.1, measures must be based on an “assessment, as appropriate to the circumstances, of the risks to human...life or health, taking into account risk assessment techniques developed by the relevant international organizations.”²⁵⁶ As pronounced by the Appellate Body in *European Communities – Measures concerning Meat and Meat Products (Hormones)* (1998) (“EC-Hormones”), Articles 2.2 and 5.1 should be constantly read in tandem, with Article 5.1 being “a specific application of the basic obligations contained in Article 2.2 of the SPS Agreement.”²⁵⁷ Consequently, in *Australia – Measures Affecting Importation of Salmon* (1998), the Appellate Body confirmed that if an SPS measure was not based on a risk assessment, it would be presumed not to be based on scientific principles or sufficient scientific evidence either.²⁵⁸

The term “risk assessment” has specific meaning within the framework of the SPS Agreement, referring to:

[t]he evaluation of the likelihood of entry, establishment or spread of a... disease within the territory of an importing Member according to the

253 Appellate Body Report, *Japan – Measures Affecting Agricultural Products* (WTO Doc WT/DS76/AB/R, 19 March 1999) [84] (‘Japan/Agricultural Products’).

254 Ibid [184].

255 Ibid [179].

256 SPS Agreement, above n 240, art 5.1.

257 Appellate Body Report, *European Communities-Measures Concerning Meat and Meat Products (Hormones)* (WTO Doc WT/DS26/AB/R, WT/DS48/AB/R, 13 February 1998) [180] (‘EC Hormones’).

258 Appellate Body Report, *Australia – Measures Affecting Importation of Salmon* (WTO Doc WT/DS18/RW, 6 November 1998) [138].

sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human...health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs.²⁵⁹

In *EC-Hormones*, the Panel and Appellate Body both found that the measures taken by the European Communities were not based on risk assessment as prescribed under Article 5.1 of the SPS Agreement. In reaching this conclusion, the Appellate Body agreed with the Panel's test that, to affirm that a sanitary measure was "based on a risk assessment," there had to be a rational relationship between two sets of conclusions: on one hand, the scientific conclusions implicit in the sanitary measure, and on the other, the scientific conclusions arrived at through risk assessment.²⁶⁰ To this observation, the Appellate Body added: "the results of risk assessment must sufficiently warrant – that is to say, reasonably support – the SPS measure at stake."²⁶¹ It noted, however, that the exercise of risk assessment under Article 5.1 does not have to come "to a monolithic conclusion that coincides with the scientific conclusion or view implicit in the SPS measure" but could also take on diverging scientific opinions.²⁶² The scientific evidence used to support additional measures is not required to represent majority or mainstream scientific opinions.²⁶³ The evidence must nevertheless be grounded in scientific studies and represent more than an opinion.²⁶⁴ The ICJ supported a similar framework in the *Whaling in the Antarctic* (2014) case by assessing whether elements of Japan's whaling program were reasonably connected to its stated scientific objectives, though the ICJ ultimately declined to define what qualified as 'scientific research'.²⁶⁵

While the Appellate Body in *EC-Hormones* generally agreed with the Panel's observation that a risk assessment entailed a scientific process "characterized by systematic, disciplined and objective enquiry and analysis",²⁶⁶ it disagreed with the conclusion that risk assessment "excluded all matters not susceptible to quantitative analysis by empirical or experimental laboratory methods

259 SPS Agreement, above n 240, Annex A.

260 EC Hormones, above n 257, [193].

261 Ibid.

262 Ibid; Japan/Agricultural Products, above n 253, [194].

263 EC Hormones, above n 257, [194].

264 Ibid [194], [198].

265 *Whaling in the Antarctic (Australia v Japan: New Zealand intervening) (Judgement)* [2014] ICJ Rep 226, [88].

266 EC Hormones, above n 257, [187].

commonly associated with physical sciences". Instead, it opted for a more flexible view of risk assessment that not only involved "a risk ascertainable in a science laboratory operating under strictly controlled conditions, but also risk in human societies as they actually exist, in other words, the actual potential for adverse effects on human health in the real world where people live and work and die".²⁶⁷

5.2.3 On the Precautionary Principle

In the context of public health decisions, the precautionary principle encourages states to adopt precautionary measures when knowledge of a potential risk or hazard is uncertain – especially when the stakes are considered to be high.²⁶⁸ Some states have justified the implementation of measures exceeding available scientific evidence by citing the precautionary principle. In the *EC-Hormones* case, the European Communities argued that the precautionary principle was implied under Article 5.7 of the SPS Agreement and that, in any event, it ought to be expanded since it has crystallized into customary international law. The Appellate Body hesitated to pronounce on the latter contention, but noted that the precautionary principle had not been explicitly written into the SPS Agreement as a grounds for justifying measures that go beyond prescribed limits in the SPS Agreement.²⁶⁹ The Appellate Body acknowledged that Article 3.3 of the SPS Agreement explicitly recognizes the right of parties to establish their own level of sanitary protection, but cautioned that such a right was not meant to eliminate the risk assessment exercise provided for under Article 5.1.²⁷⁰

5.2.4 Implications for Article 43

Several rules emerging from an analysis of WTO Panel and Appellate Body decisions may serve as interpretive aids for IHR's Article 43. First, before implementing additional health measures, states must consider whether there is a rational relationship between the measure being implemented and the scientific principles and available scientific evidence cited to support them. Second, scientific evidence may be derived from minority or non-dominant scientific experts, but the evidence must represent more than just an opinion and must consist of a *bona fide* scientific risk assessment exercise. Third, in

²⁶⁷ EC Hormones, above n 257, [187].

²⁶⁸ Didier Bourguignon, *The Precautionary Principle: Definitions, Applications and Governance* (In-Depth Analysis, No PE 573.876, December 2015) 4 <[http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/573876/EPRS_IDA\(2015\)573876_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/573876/EPRS_IDA(2015)573876_EN.pdf)>.

²⁶⁹ EC Hormones, above n 257, [124].

²⁷⁰ *Ibid* [172], [176].

determining whether a measure is necessary to achieve a stated objective, the measure must contribute substantially to the objective. Alternatives will be deemed as 'reasonably available' if they practically serve the level of health protection chosen by a state and are not simply alternatives 'in theory'. Finally, a process of risk assessment is not merely a formality; states can err on the side of caution during risk assessment, but the exercise of risk assessment itself – prescribed by Article 43(2)(b) in the IHR – must be undertaken and must withstand scientific scrutiny.

5.3 *Conclusion on Relevant Rules of International Law*

The public health-focused IHR was expressly crafted to exist in synergy with the broader normative environment and align with states' obligations under other regimes of international law. As a result, Article 43 sets limitations to additional health measures by referring to language and concepts enshrined in international human rights law and international trade law. Indeed, international human rights law provides a well-developed analytical framework based on the principles of legitimacy, necessity, and proportionality that can instruct states on when it may be appropriate to limit or derogate from their human rights obligations. Rules derived from WTO case law can similarly provide interpretive aid during states' risk assessment exercises that must precede the adoption of additional health measures by clarifying terms (e.g., 'scientific principles,' 'scientific evidence,' and 'reasonably available alternatives') that have been the focus of extensive study in cases before the WTO's Panel and Appellate Body. The extent to which concepts from these other sources of international law are relevant for interpreting the IHR may generate debate and discussion. It is presumed, however, that treaties are not drafted and negotiated by states to be in normative conflict with one another. Even if not an authoritative source of interpretation, case law from the WTO may provide invaluable insight or logic, and it certainly qualifies as a supplementary means of interpretation under the *Vienna Convention's* Article 32, and, arguably, a general rule of interpretation under Article 31(3)(c) of the *Vienna Convention* – since WTO case law constitutes an authoritative expression of the obligations in force for WTO members.

6 **Practical Guidelines for Permissible Actions Under Article 43**

In **Section 3**, a framework was developed based on an ordinary-meaning interpretation of the IHR's Article 43 to assist states and others in determining whether additional health measures under consideration would be permissible

(see Figure 1). **Section 4** canvassed subsequent state practice in the application of Article 43 both through states' individual actions and as expressed through resolutions adopted through the WHA. It demonstrated that while some states have applied Article 43 inconsistently, parties to the IHR remain committed, at least in rhetoric, to avoiding disruptions to international traffic and trade, particularly where additional health measures may cause harm to affected countries, and to mounting responses to the international spread of disease that are adequate, evidence-based and commensurate with public health risks. **Section 5** examined decisions issued by the WTO Panel and Appellate Body, with a view to using these sources of case law to clarify the meaning of 'scientific principles,' 'sufficient scientific evidence,' and 'reasonably available alternatives'.

To demonstrate how this methodology-driven legal interpretation of Article 43 may be put to practical use, concepts and meanings discussed above are applied to historical cases of the most common forms of additional health measures: (1) travel restrictions and health screening; (2) contact tracing and quarantine; and (3) restrictions applied to goods.

6.1 *Travel Restrictions and Health Screening*

During the 2014–2016 Ebola outbreak, WHO's director-general recommended that countries with Ebola transmission conduct exit screening at international airports, seaports, and major land crossings, and recommended that other countries avoid a general travel or trade ban.²⁷¹

Despite pressures from the United States Congress to implement travel bans,²⁷² the United States Centers for Disease Control and Prevention's (CDC's) response to the Ebola outbreak involved communication to travelers (e.g., travel notices), provision of technical assistance to facilitate exit screening in countries affected by Ebola, and an entry risk assessment and management program for travelers to the United States from countries with Ebola outbreaks.²⁷³ The entry risk assessment and management program, which began in October 2014, limited the entry of air travelers from Guinea, Liberia, Sierra Leone and Mali to five airports where processes were used to identify travelers, administer an exposure-and-symptom questionnaire, compile details of their contacts, examine travelers' temperatures with non-contact thermometers,

²⁷¹ Nicole J Cohen, 'Travel and Border Health Measures to Prevent the International Spread of Ebola' (2016) 65(3) *MMWR Suppl*, 57.

²⁷² Michael McAuliff, 'Lawmakers Ignore Experts, Push for Ebola Travel Ban', *Huffington Post* (16 October 2014) <https://www.huffingtonpost.ca/2014/10/16/congress-ebola_n_5997214.html>.

²⁷³ Cohen, above n 271, 58.

and observe travelers for signs of illness.²⁷⁴ Travelers who were symptomatic or who reported possible exposures received an in-depth public health risk assessment while symptomatic travelers meeting predefined criteria were referred to receive medical attention. The program was discontinued for travelers on 19 February 2016.²⁷⁵

Several factors render the health measures implemented by the United States during the Ebola outbreaks likely permissible under Article 43. First, measures sought to prevent the spread of disease in the United States while minimizing intrusiveness or invasiveness to persons, and specifically, by avoiding travellers a delay of more than 24 hours.²⁷⁶ Rather than a direct travel ban, measures implemented by the CDC were specific and limited to that which is necessary to achieve the public health objective. The provision of technical assistance to conduct exit screening in affected countries, for instance, allowed the United States to contribute to disease containment at the source while also reassuring airlines that passengers are clear to travel. Exit screening was also found to be the health measure that interfered least with international traffic during the earlier H1N1 outbreak.²⁷⁷

In contrast, the Canadian government's response to the Ebola outbreak involved canceling and restricting visa applications for temporary and permanent residence from anyone who was living in or had been to an Ebola-affected state within the previous three months. It also stopped processing visa applications from foreign nationals intending to travel to Ebola-affected states.²⁷⁸ Though Canada did not wholly ban travel from Ebola-affected states, it made obtaining traveler visas virtually impossible – effectively halting all travel by non-Canadian citizens to the area.²⁷⁹ Indeed, since Canadian citizens traveling to or from West Africa were exempt from these visa restrictions, one American news media outlet even labelled Canada's actions as “dumb, xenophobic and illegal.”²⁸⁰

There is no provision in the IHR which specifically speaks to the legitimacy of cancelling or delaying traveler visas in response to a public health

274 Ibid 61.

275 Ibid.

276 Ibid 58.

277 Khan, above n 1, 370.

278 Tejpar and Hoffman, above n 68, 368.

279 Lorne Sossin, 'Bureaucratic Disentitlement, Vulnerable People, and the Appeal of Review' (2006) 56(4) *The University of Toronto Law Journal*, 389.

280 Julia Belluz, 'Canada's Ebola Visa Ban Is Dumb, Xenophobic, and Illegal', *Vox Media* (5 November 2014) <<https://www.vox.com/2014/11/5/7159705/canada-visa-ebola-virus-outbreak>>.

risk. Nevertheless, Canada's actions objectively qualified as additional health measures exceeding the temporary recommendations issued by the WHO. Canada's measures in response to Ebola were impermissible under Article 43 for at least two reasons. First, these measures discriminatorily targeted non-Canadians. In doing so, they contravened Article 42 (i.e., the principle of non-discrimination) and failed to be "otherwise consistent" with the IHR.²⁸¹ Second, when asked by the WHO to justify adopted measures, the Canadian government responded that its measures did not consist of a "general ban" – that is, Canadians involved in the humanitarian response were still free to travel to Ebola-affected states. Therefore, the government argued, measures did not violate WHO's temporary recommendation against general bans.²⁸² Yet the relevant question to ask under Article 43 is not whether a health measure contravenes temporary recommendations, but whether it achieves the same or greater levels of protection than temporary recommendations issued by the WHO. On this point, it is useful to note that the effectiveness of travel restrictions is unclear from an epidemiological perspective.²⁸³ Moreover, additional health measures must be no more restrictive to international traffic and more intrusive or invasive to persons than reasonably available alternatives that would achieve the same level of health protection. To achieve the public health objective of protecting Canadians from the risk of Ebola infection, the Canadian government might have considered adopting measures similar to those implemented by their southern neighbours, where travelers were not barred from entry, but were rerouted to five major airports for screening – which itself would not have caused a significant interference with travel exceeding 24 hours delay.

6.2 *Contract Tracing and Quarantine*

During the 2009 H1N1 outbreak that originated in Mexico, Chinese authorities implemented a stringent and comprehensive set of health measures designed to prevent the spread of the disease within local communities as well as at points of entry into the country. At the outset of the outbreak, China

²⁸¹ IHR, above n 4, art 43(1).

²⁸² Helen Branswell, 'WHO Objects to Canada's Ban on Visas to Residents of Countries Affected by Ebola', *IPolitics* (9 November 2014) <<http://ipolitics.ca/2014/11/09/who-objects-to-canadas-visa-ban-for-countries-affected-by-ebola/>>.

²⁸³ Ana LP Mateus et al, 'Effectiveness of travel restrictions in the rapid containment of human influenza: A systematic review' (2014) 92(12) *Bulletin of the World Health Organization* 868, 873; Nicole A. Errett, Lauren M. Sauer & Lainie Rutkow, 'An integrative review of the limited evidence on international travel bans as an emerging infectious disease disaster control measure' (2020) 18 *Journal of Emergency Management* 7–14.

quarantined approximately 70 Mexican tourists, as well as some Canadian and American travellers, regardless of their exposure to the virus.²⁸⁴ They also implemented intensive contact tracing, and *fengxiao*, a tightly monitored measure of movement restriction, which prevents college and university students, faculty and staff members from leaving their campuses.²⁸⁵ School classes were cancelled at the first hint of disease.²⁸⁶ Chinese officials justified these measures as being necessary to prevent “the fast spread of the new flu strain.”²⁸⁷ Such measures were not without backlash: China faced harsh criticism from the international community, and WHO subsequently requested China’s rationale for adopting such measures under the IHR.²⁸⁸ China apologized for their non-compliance with the IHR and issued a formal apology to Mexico.²⁸⁹

Several states repeated the use of quarantines again during the 2014–2016 Ebola outbreak.²⁹⁰ The IHR allows states to adopt quarantine measures in accordance with their national laws and other international laws “to the extent necessary to control [the imminent public health] risk”.²⁹¹ The IHR does not set out level of “imminent public health risk” required for states to subject asymptomatic travellers to quarantine orders or prescribe limits to the length of such quarantine orders.²⁹² In addition, the IHR does not describe appropriate procedures for quarantine orders, including due process protections and appeal routes.

In practice, given the principles underlying state derogations from human rights obligations, states should only adopt quarantine orders that are legitimate, necessary, and proportionate to control the spread of infectious diseases. They must also be of limited duration. Some may argue that China has

284 James G Hodge Jr, ‘Global Legal Triage in Response to the 2009 H1N1 Outbreak’ (2010) 11(2) *Minnesota Journal of Law, Science & Technology* 599, 607; ‘The World Response to Flu Crisis’, *BBC* (5 May 2009) <<http://news.bbc.co.uk/2/hi/americas/8022516.stm>>.

285 Sanyi Tang et al, ‘Community-Based Measures for Mitigating the 2009 H1N1 pandemic in China’ (2010) 5(6) *PLoS One* e10911.

286 Edward Wong, ‘China’s Tough Flu Measures Appear to Be Effective’ *The New York Times* (11 November 2009) <<https://www.nytimes.com/2009/11/12/world/asia/12chinaflu.html>>.

287 Mary Lacey and Andrew Jacobs, ‘Even as Fears of Flu Ebb, Mexicans Feel Stigma’, *The New York Times* (4 May 2009) <<https://www.nytimes.com/2009/05/05/world/asia/05china.html>>.

288 David P Fidler, ‘H1N1 After Action Review: Learning from the Unexpected, the Success and the Fear’ (2009) 4(7) *Future Microbiology* 767.

289 Kamradt-Scott and Rushton, above n 7, 67.

290 ‘West Africa: Respect Rights in Ebola Response’, *Human Rights Watch* (15 September 2014) <<https://www.hrw.org/news/2014/09/15/west-africa-respect-rights-ebola-response>>.

291 IHR, above n 4, art 31(2).

292 Gregory P Campbell, ‘Global H1N1 Pandemic, Quarantine Law, and the Due Process Conflict’ (2011) 12(2) *San Diego International Law Journal* 497, 514.

not ratified the ICCPR.²⁹³ Yet, even in the absence of this instrument, the IHR rendered it incumbent on the government to show that its health measures were no more intrusive to persons than reasonably available alternatives that would achieve appropriate public health protection.

6.3 *Restrictions applied to Goods*

Despite a joint statement from WHO, FAO, OIE and WTO stating that pork products cannot transmit the H1N1 virus,²⁹⁴ at least 20 countries, including China, Russia and the Republic of Korea banned or restricted pork imports from the United States, Canada and Mexico during the outbreak.²⁹⁵ American, Canadian and Mexican officials moved quickly to condemn these various restrictions.²⁹⁶

Countries that restricted trade during the H1N1 outbreak contravened Article 43(2) of the IHR by failing to base their trade measures on the available scientific evidence as well as the available information from relevant/competent international organizations (in this case, the WHO, FAO, OIE and WTO). Moreover, as per the H1N1 Review Committee's post-outbreak analysis, no country had voluntarily provided public health rationales for additional health measures implemented,²⁹⁷ constituting a clear violation of the obligation under Article 43(3) to provide public health rationales for such measures.

Legality is less clear when health measures are applied on a purely national level. Egyptian authorities, for instance, ordered the mass slaughter of between 250,000 and 400,000 pigs, despite no reported H1N1 outbreak in humans or pigs in the country.²⁹⁸ This health measure was applied at significant cost to local farmers who were not paid for their losses.²⁹⁹ The IHR prohibits the imposition of charges for health measures applied to travellers, but it remains silent on whether health measures resulting in losses to local populations would

293 Margaret K Lewis, 'China must stop making a mockery of the rights treaties it signs', *The Washington Post* (30 October 2018) <https://www.washingtonpost.com/news/global-opinions/wp/2018/10/30/china-must-stop-making-a-mockery-of-the-rights-treaties-it-signs/?noredirect=on&utm_term=.1f38b7c40646>.

294 Jennifer B Nuzzo, Anita J Cicero and Thomas V Inglesby, 'Travel Bans Will Increase the Damage Wrought by Ebola' (2014) 12(6) *Biosecurity and Bioterrorism* 306, 307.

295 Renee Johnson, 'Potential Farm Sector Effects of 2009 H1N1 'Swine Flu': Questions and Answers' (Washington, DC: Congressional Research Service, 2009) 6 ; MacInnis, above n 155.

296 Lin, above n 146, 528.

297 *H1N1 Review Committee*, above n 153, 80.

298 Kamradt-Scott and Rushton, above n 7, 66.

299 Hodge, above n 284, 608.

similarly be impermissible.³⁰⁰ Nevertheless, it is highly unlikely that such measures would be classified as being ‘commensurate with public health risks.’

7 Conclusion

The central purpose of the IHR is to balance a public health response to the international spread of disease while avoiding any unnecessary interference with international traffic and trade.³⁰¹ This balancing exercise is especially apparent in Article 43, which permits states to implement additional health measures in response to specific public health risks or PHEICs provided that such measures are, in the first instance: (1) in full respect for the dignity, human rights and fundamental freedom of persons; (2) in accordance with their national law and other relevant international obligations; (3) otherwise consistent with the IHR; and (4) not more intrusive or invasive of persons, nor more restrictive of international traffic, than reasonably available alternatives that would achieve an appropriate level of health protection.

Having met these baseline criteria, states that seek to implement an additional health measure must further determine whether the measure is based on: (1) scientific principles; (2) scientific evidence, and where scientific evidence is insufficient, available information including from the WHO and other competent intergovernmental organizations and international bodies; and (3) specific guidance or advice from the WHO. Two obligations are triggered for states that decide to implement an additional health measure: the obligation to report within 48 hours to the WHO the public health rationale and relevant scientific information underpinning an additional health measure that interferes significantly with international traffic; and the obligation to review within three months any additional health measure imposed in light of the science and the WHO advice.

As a legally binding instrument of international law, the provisions of the IHR aptly lend themselves to interpretation as per the general and supplementary rules outlined in the *Vienna Convention*. We have demonstrated that, beyond examining the ordinary meaning of Article 43, relevant sources of interpretation per the *Vienna Convention* are (1) subsequent practice in the application of Article 43 by parties and (2) other sources of international law which influence any understanding of the current text and offer further insight on the meaning of ambiguous terms.

300 IHR, above n 4, art 40.

301 Ibid art 1.

Subsequent state practice, as observed through the actions taken by states during two controversial but retrospectively examined PHEICs, provides little assistance in identifying consensus among parties on the implementation of Article 43. The most that can be discerned from state practice is that most states follow most of the rules most of time. On the other hand, state practice, as expressed through consensus-building sessions and resolutions of the WHA, reveals that the 196 parties to the IHR remain firmly committed to restricting the use of additional health measures to those instances where it is clearly warranted and scientifically justified and where it does not cause harm or disproportionately impact affected populations.

It is clear the IHR was conceived to be closely intertwined with international human rights law and international trade law. With respect to human rights law, Article 43 sets limitations to additional health measures by deferring to the rights contained in the UDHR, ICCPR and other international and regional human rights treaties. This symbiosis suggests that in cases where an additional health measure may curtail the rights and freedoms of individuals, states should at minimum apply the principles of legitimacy, necessity and proportionality to guide them in understanding the limited circumstances under which they may legally deviate from their human rights obligations.

As a further relevant source of international law, decisions of the WTO Panel and Appellate Body under GATT and the SPS Agreement shed greater clarity on the scientific assessment, including the need for a rational relationship between the measure being implemented and the scientific principles and available scientific evidence cited to support them, while also creating space for scientific evidence which may be derived from minority or non-dominant scientific experts (though representing more than just opinion). The measure may be deemed necessary where it contributes substantially to a stated objective – and ‘reasonably available’ alternatives to the measure may be identified if they practically serve the level of health protection chosen by a state (and are not simply alternatives ‘in theory’). Finally, a process of risk assessment is not merely a formality; states can err on the side of caution during risk assessment, but the exercise of risk assessment itself – prescribed in parallel by Article 43(2)(b) of the IHR – must be undertaken and must withstand scientific scrutiny.

The world’s capacity to respond to public health crises like the COVID-19 pandemic depends on having clear and established rules, and assuring compliance with them. The IHR’s Article 43 is an important provision in an important international legal instrument. Yet recent experience highlights that too many states violate it, putting global health at risk and undermining the global governance system by which the world manages public health risks. Given apparent

ambiguities and past misinterpretations, we believe that clarity on what Article 43 requires is a helpful starting point for promoting greater compliance with the IHR. This consensus statement, which aimed to provide such clarity, should be useful in guiding legal state responses to public health risks and in holding states accountable for doing so. Any dissatisfaction with Article 43's requirements will need to be addressed by states through negotiation of a revision or subsequent agreement to the IHR.

Acknowledgements

This research was supported by the Canadian Institutes of Health Research (Grant #312902) and the International Collaboration for Capitalizing on Cost-Effective and Life-Saving Commodities (i4C) that is funded through the Research Council of Norway's Global Health & Vaccination Programme (GLOBVAC Project #234608). S. J. Hoffman conceived the idea for this effort, led its development, supervised the background research, chaired the consensus conference at which its content was agreed, and finalized the statement. R. Habibi led the background research, initial writing and subsequent revisions and also finalized the statement, with research support from M. Cinà. All authors participated in numerous preparatory teleconferences, attended the consensus conference in Stellenbosch, provided successive rounds of comments on earlier drafts of the manuscript, and made important intellectual contributions throughout. L. Gostin and G. Ooms additionally helped lead the project as steering committee members; G. L. Burci and S. Negri additionally supervised parts of the background research; and D. Chirwa additionally supported the hosting of the consensus conference. Thank you to Brooke Campus for project coordination.