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## On the Brink: The Climate and Nature Crisis and Risks of Nuclear War

**The Russian military** invasion of Ukraine on February 24, 2022, and Hamas' terror attack on Israel on October 7, 2023, signaled the beginning of two of the most recent wars to make international headlines. To date, over 110 armed conflicts are taking place: over 45 in the Middle East and North Africa (Cyprus, Egypt, Iraq, Israel, Libya, Morocco, Palestine, Syria, Turkey, Yemen, Western Sahara); over 35 in Africa (Burkina Faso, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Ethiopia, Mali, Mozambique, Nigeria, Senegal, Somalia, South Sudan, Sudan); 21 in Asia (Afghanistan, India, Myanmar, Pakistan, the Philippines); seven in Europe (Russia, Ukraine, Moldova, Georgia, Armenia, Azerbaijan); and six in Latin America (three each in Mexico and Colombia); with two more international armed conflicts (between India and Pakistan, and between India and China) in Asia.<sup>1</sup> This list does not even include such problematic situations as those involving China and the South East Asia region.

As though these situations of armed violence were not enough, mankind has already passed or is on the verge of passing several climate tipping points – a recent review lists nine Global core tipping elements (and their tipping points) - the Greenland Ice Sheet (collapse); West Antarctic Ice Sheet (collapse); Labrador-Irminger Seas / SPG Convection (collapse); East Antarctic Subglacial Basins (collapse); Amazon Rainforest (dieback); Boreal Permafrost (collapse); Atlantic M.O. Circulation (collapse); Arctic Winter Sea Ice (collapse); and East Antarctic Ice Sheet (collapse); and seven Regional impact tipping elements (and their tipping points) – Low-latitude Coral Reefs (die-off); Boreal Permafrost (abrupt thaw); Barents Sea Ice (abrupt loss); Mountain Glaciers (loss); Sahel and W. African Monsoon (greening); Boreal Forest (southern dieback); and Boreal Forest (northern expansion).<sup>2</sup> Closer to home, how can we forget the disaster and devastation wrought by Super Typhoon Haiyan (Yolanda) 10 years ago to date?

Whether international or non-international, armed conflicts raise the risk of nuclear war. Russia has already "rehearsed its ability to deliver a 'massive' nuclear strike," conducting "practical launches of ballistic and cruise missiles," and stationed a first batch of tactical nuclear weapons in Belarus,<sup>3</sup> and the possibility of nuclear escalation in Ukraine cannot be overestimated.<sup>4</sup> Meanwhile, in a rare public announcement, the U.S. Central Command revealed that an Ohioclass submarine (560 feet long, 18,750 tons submerged and carrying as many as 154 Tomahawk cruise missiles) had arrived in the Middle East on November 5, 2023.<sup>5</sup> Indeed, "the danger is great and growing," as "any use of nuclear weapons would be catastrophic for humanity."<sup>6</sup>

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But this would be no less catastrophic than the "overall environmental crisis" that is "now so severe as to be a global health emergency."7 Because climate change and biodiversity loss are two sides of the same coin, they must be addressed together to "preserve health and avoid catastrophe."7 The 28th Conference of the Parties (COP) on climate change is being held in Dubai from 30 November to 12 December 2023, while Turkey has withdrawn its hosting of the 16th COP on biodiversity in 2024 in the wake of three devastating earthquakes. Although the evidence for the two COPs were separately generated, the two research communities concluded in a joint 2020 workshop that: "only by considering climate and biodiversity as parts of the same complex problem ... can solutions be developed that avoid maladaptation and maximize the beneficial outcomes."8 Current responses "to the climate crisis and the nature crisis as if they were separate challenges" are "a dangerous mistake."7 Because "the natural world is made up of one overall interdependent system," "damage to one subsystem" can damage another, just as "restoring one subsystem can help another."7 Both the "climate crisis" and "nature crisis" comprise an "indivisible planetary crisis" that will have major effects on, and can directly damage, human health.

Our two guest editorials, on "Reducing the Risks of Nuclear War the Role of Health Professionals"<sup>6</sup> and "Time to Treat the Climate and Nature Crisis as One Indivisible Global Health Emergency"<sup>7</sup> address these dual potentially catastrophic concerns that both place us on the brink. One or the other – with the hands of the Doomsday Clock moved forward to 90's before midnight reflecting the growing risk of nuclear war,<sup>9</sup> and the Earth possibly having "left a safe climate state beyond 1°C global warming (a significant likelihood of passing multiple climate

## tipping points exists above ~1.5°C, particularly in major ice sheets)"<sup>2</sup> – leave us on edge; take your pick.

By co-publishing these guest editorials, the *Philippine Journal of Otolaryngology Head and Neck Surgery* joins the call for the World Health Organization to "declare the indivisible climate and nature crisis as a global health emergency,"<sup>7</sup> as they meet the three pre-conditions for WHO to declare a Public Health Emergency of International Concern,<sup>10</sup> that it: 1) is serious, sudden, unusual, or unexpected; 2) carries implications for public health beyond the affected State's national border; and 3) may require immediate international action.

We also join the call for "health professional associations to inform their members worldwide about the threat to human survival and to join with the International Physicians for the Prevention of Nuclear War (IPPNW) to support efforts to reduce the near-term risks of nuclear war."<sup>6</sup> As enumerated in the editorial,<sup>6</sup> three immediate steps should be taken by nuclear-armed states and their allies: 1) adopt a no first use policy;<sup>11</sup> 2) take their nuclear weapons off hair-trigger alert; and 3) urge all states involved in current conflicts to pledge publicly and unequivocally that they will not use nuclear weapons in these conflicts.

As health professionals, we cannot be bystanders. Whether as individuals, or through our organizations, we must work "with renewed energy to reduce the risks of nuclear war and to eliminate nuclear weapons,"<sup>6</sup> as well as "be powerful advocates for both restoring biodiversity and tackling climate change for the good of health" ... recognizing "this crisis for what it is: a global health emergency."<sup>7</sup>

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