

Children's rights and toxics

“We just don't understand it: why do adults tell us the environment is so important and still treat it so badly? They care about other things like money and their possessions but it seems they don't care about destroying nature.”

*Children addressing the Committee on the Rights of the Child, 2016.*¹

Introduction

Under the Convention on the Rights of the Child (CRC) children are entitled to live, learn and grow in a physical environment that facilitates health, play, and education, and is free from undue risk. These rights are violated daily by toxic substances – especially in the air, water, soil, and consumer products – that harm millions of children worldwide.

This briefing outlines the causes and extent of the problem, and proposes an approach towards effective remedy and prevention.

Susceptibility

All humans are vulnerable to the effects of exposure to toxic substances (hereafter toxics), but children are more susceptible than adults on account of their smaller bodies and particular behavioural habits. . Children consume more food and water relative to their weight, absorb toxics more readily, and are less able to excrete them afterwards.² For example, young children absorb between four and five times as much lead as adults.³ Contact with toxics also impairs development, particularly of the lungs, brain, the immune system, and fertility, which are especially vulnerable to environmental influences in childhood.⁴

These risks affect all children, including in economically developed countries. However, the problem is magnified by factors associated with poverty and other forms of marginalisation. The poorer health associated with economic deprivation reduces children's resilience to the effects of toxics, particularly when children are malnourished,⁵ while the weaker regulation of industry and agriculture in poorer countries allows conditions of high toxicity to persist in places where children live, learn and play.

¹ Translated from the Spanish: 'Simplemente no lo entendemos: ¿por qué los adultos nos dicen que el medio ambiente es tan valioso y luego lo tratan tan mal? Cuidan otras cosas como el dinero o sus pertenencias pero parece que no les preocupa destruir la naturaleza.' International Youth Network of *terre des hommes*, 'Day of General Discussion on Children's Rights and the Environment: Opening statement', 2016. Available at http://www.ohchr.org/Documents/HRBodies/CRC/Discussions/2016/18.InternationalYouthNetworkTerredesHommes_OpeningStatementbyChildren.docx.

² World Health Organization (WHO), *Don't pollute my future! The impact of the environment on children's health*, 2017, p. 1. Available at <http://apps.who.int/iris/bitstream/handle/10665/254678/WHO-FWC-IHE-17.01-eng.pdf>. Human Rights Council (HRC), *Report of the Special Rapporteur on the right to food [pesticides]*, 2017. Available at <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G17/017/85/PDF/G1701785.pdf?OpenElement>.

³ WHO, *Exposure to lead: A major public health concern*, 2010. Available at <http://www.who.int/ipcs/features/lead..pdf>.

⁴ WHO Europe, *Effects of air pollution on children's health and development: A review of the evidence*, 2005. Available at http://www.euro.who.int/data/assets/pdf_file/0010/74728/E86575.pdf. UNICEF, *Danger in the air: How air pollution can affect brain development in young children*, 2017. Available at https://www.unicef.org/environment/files/Danger_in_the_Air.pdf.

⁵ Kordas K, Lönnnerdal B, Stoltzfus R J, 'Interactions between Nutrition and Environmental Exposures: Effects on Health Outcomes in Women and Children', *Journal of Nutrition*, 2007, 137(12), pp. 2794–2797.

Children have higher levels of exposure and are also more sensitive to it, which makes them more vulnerable than adults. Such impacts can be irreversible and can even be passed down from one generation to the next.⁶

Exposure

The greatest global medium of toxic exposure is polluted air, of which the main causes are: burning fossil fuels for energy, manufacturing, and transport; burning solid fuel in the home such as coal or wood; second-hand cigarette smoke; and airborne agricultural chemicals such as pesticides. Nine out of ten people on the planet are now breathing unsafe ambient air, according to the World Health Organization (WHO), and four out of ten cook using open fires in the home, which produce high concentrations of pollutants.⁷ For these reasons, air pollution is responsible for five percent of all deaths annually, according to the WHO.⁸ Air quality is worsening in affluent countries, but people in poorer countries still suffer by far the worst conditions.⁹

In certain localities, the air, water, and soil are particularly polluted, such as in industrial zones, areas of industrial agriculture, and derelict sites of war, where children may be exposed continuously to hazardous concentrations of contaminants. For example, 60 percent of child labourers worldwide work in agriculture, where pesticides are known to harm the health of millions of farmworkers every year.¹⁰ Children working on tobacco farms in the United States suffer symptoms of pesticide exposure and nicotine poisoning.¹¹ Similarly, street children who collect electronic waste from rubbish dumps inhale a cocktail of toxics when they burn off the plastics to harvest scraps of saleable metals.¹² Whereas middle- and high-income households are likely to move away from highly polluted localities, poorer families cannot, and so their children bear the brunt of the exposure.

Children's behavioural habits, combined with their heightened susceptibility to toxics, increase the impact of exposure. Unlike adults, children play on the ground, and often in watercourses, exploring their physical world through touch and taste. On account of their age, children are also less able to appreciate and evaluate risks, or to read and pay attention to written warnings. For all these reasons, younger children are especially vulnerable. Exposure even begins before children are born; one study found an average of 200 hazardous substances in the blood of umbilical cords in a group of US-born babies, due to their mother's exposure to polluted environments.¹³ This example illustrates well one of the challenges that toxics present: except for acute exposure to high doses, harmful exposure is not immediately evident. In fact,

⁶ HRC, *Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, 2016, para. 2. Available at <https://www.crin.org/sites/default/files/childrensrightstoxics.pdf>.

⁷ WHO, 'Ambient air pollution: a major threat to health and climate', n.d. Available at <http://www.who.int/airpollution/ambient>.

⁸ 3.3 percent of deaths worldwide are attributable to indoor smoke from solid fuels, and 2.0 percent are due to urban ambient air pollution. WHO, *Global health risks: Mortality and burden of disease attributable to selected major risks*, p. 24, 2009. Available at http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf.

⁹ WHO, 'Global ambient air pollution', 2018. Available at <http://maps.who.int/airpollution>; and 'Household air pollution and health', 2018. Available at <http://www.who.int/en/news-room/fact-sheets/detail/household-air-pollution-and-health>.

¹⁰ HRC, *Report of the Special Rapporteur on the right to food*, 2017, op. cit.; Abdel Rasoul A, Abou Salem ME, Mechael AA, Hendy OM, Rohlman DS, & Ismail AA, 'Effects of occupational pesticide exposure on children applying pesticides', *Neurotoxicology*, 2008, 29(5).

¹¹ Human Rights Watch, 'Teens of the tobacco fields', 2015. Available at <https://www.hrw.org/report/2015/12/09/teens-tobacco-fields/child-labor-united-states-tobacco-farming>.

¹² WHO, 'Electronic waste', n.d. Available at <http://www.who.int/ceh/risks/ewaste>.

¹³ Among the substances found were 'pesticides, consumer product ingredients, and wastes from burning coal, gasoline, and garbage'. Environmental Working Group, 'Body burden: The pollution in newborns', 14 July 2005. Available at <https://www.ewg.org/research/body-burden-pollution-newborns>.

paediatricians refer to the present state of the impacts of pollution and contamination on children's health as a "silent pandemic".¹⁴

In London, United Kingdom, a study revealed that tens of thousands of children at more than 800 schools, nurseries and colleges were being exposed to illegal levels of air pollution that risk causing lifelong health problems.¹⁵

The health impact of toxics leads to secondary effects that engage children's other fundamental rights. Sickness can prevent children from attending school and, later, going to work, for example, while exposure to certain substances, such as lead, can irreversibly impair brain development and thus retard children's learning. Children may also be prevented entirely from playing outside, such as on days when air pollution reaches hazardous levels.

Known toxics and their effects

The actual and potential toxic effects of synthesised compounds and chemical elements released artificially from industrial processes are still not well understood. Hundreds of common substances are now known to be biologically or ecologically toxic, most of them previously believed to be safe. Three now-ubiquitous substances are especially harmful to humans, especially children on account of their heightened susceptibility.

Asbestos. Asbestos has been used extensively all over the world, particularly as a building material. Its microscopic fibres are the cause of debilitating respiratory conditions including the aggressive lung cancer, mesothelioma. The WHO estimated in 2004 that 125 million people are exposed to asbestos risks at work, leading to a high global burden of disease and 107,000 deaths annually.¹⁶ Asbestos is banned in the European Union but, in general, not elsewhere.¹⁷

Pesticides. Most of the global population has been exposed to pesticides to differing degrees, mainly by inhaling airborne compounds, consuming them in food, and drinking contaminated water. Exposure has been linked to neurological diseases, degraded cognitive function, cancer, loss of fertility, and, particularly in children, impaired brain development.¹⁸ Each year, pesticides affect the health of as many as 41 million people and are responsible for 200,000 deaths through acute poisoning.¹⁹ Even low doses can be harmful, the effects typically not becoming apparent until years later.²⁰

Lead. A heavy metal, lead is used all over the world for a wide range of industrial applications: in batteries, water pipes and cisterns, paints, petroleum, and cable sheaths, for example. It becomes airborne through heating, can also contaminate soil and water, accumulates in organisms, and does not break down in the environment. Lead negatively affects the development of intelligence in children, even at low levels, and has been associated with behavioural problems and blood diseases.²¹ In 2009 the WHO estimated that lead

¹⁴ Report of the Special Rapporteur on toxic wastes on the impact of toxics and pollution on children's rights, A/HRC/33/41, 2 August 2016, p. 3. Available at: http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/33/41.

¹⁵ The Guardian, "Revealed: thousands of children at London schools breathe toxic air", 24 February 2017; available at: <https://www.theguardian.com/uk-news/2017/feb/24/revealed-thousands-of-children-toxic-air-london-nitrogen-dioxide>

¹⁶ WHO, 'Asbestos: elimination of asbestos-related diseases', 2017. Available at

<http://www.who.int/en/news-room/fact-sheets/detail/asbestos-elimination-of-asbestos-related-diseases>.

¹⁷ Asbestos Nation, 'Asbestos bans around the world', 2018. Available at

<http://www.asbestosnation.org/facts/asbestos-bans-around-the-world>.

¹⁸ HRC, *Report of the Special Rapporteur on the right to food*, 2017, op. cit.

¹⁹ Ibid.; Abdel Rasoul A et al., 2008, op. cit.

²⁰ Ibid.

²¹ WHO, *Exposure to lead*, 2010, op. cit.

exposure was responsible for 143,000 deaths annually and accounted for 0.6 percent of the world's entire burden of disease.²²

Two further chemical elements—mercury and cadmium—are present in hazardous concentrations in certain localities, particularly near heavy industry and especially mines. Cadmium is also released through cigarette smoke, and mercury is released into the atmosphere when fossil fuels are burned. Like lead, mercury is dangerous even in small quantities, builds up in the food chain, and impairs brain development in children.²³ Cadmium is carcinogenic and harms the kidneys and respiratory system.²⁴

According to the WHO, the five substances described above are among the nine chemicals that pose the greatest risks to public health (besides air pollution). The others are arsenic dissolved in drinking water, benzene in petrochemical products and tobacco, dioxins in food, and excessive (or insufficient) fluoride, all of which pose similar health risks, and especially to children.²⁵

Most children's exposure is typically at a low daily level, but chronic, and involves a 'cocktail' of hundreds of common hazardous substances. The pollution in urban ambient air is likely to include lead, cadmium, mercury, benzene, carcinogenic silicates, and various toxic gases, which combine to magnify the harm to children, as well as to unborn children who are "pre-polluted" through expectant mothers' exposure. In industrial and agro-industrial areas, hazardous chemicals are found in stronger concentrations, greatly increasing the risks.

The ecological dimension

Alongside the direct impact of toxics on human health, they also poison and degrade the ecosystem on which children and their families depend for food and work. Heavy metals like lead, cadmium and mercury, are readily distributed in watercourses and the soil, where they accumulate in animals and plants, including the human food chain. The build-up of mercury in fish stocks has exceeded safe levels in 66 countries, for example, particularly affecting coastal communities that depend on fish for protein.²⁶ On land, repeated use of pesticides can exhaust and poison the soil and rivers, and kill off ecologically crucial organisms such as wild bees.²⁷ In China, one-fifth of farmland is now contaminated by pesticides and heavy metals and 35,000 square kilometres of previously productive land is now unusable.²⁸ Such damage to the life of the land, rivers and sea undermines access to sufficient healthy food, which particularly affects children's development, while creating economic pressures on families whose income depends on a healthy ecosystem, such as farm workers.

In addition to harming children's health, ecological degradation caused by toxic substances jeopardises the food security and long-term economic prospects of millions of children around the world.

²² WHO, *Global health risks*, 2009, p. 29, op. cit.

²³ WHO, *Exposure to mercury: A major public health concern*, 2007. Available at <http://www.who.int/ipcs/features/mercury.pdf>.

²⁴ WHO, *Exposure to cadmium: A major public health concern*, 2010. Available at <http://www.who.int/ipcs/features/cadmium.pdf>.

²⁵ WHO, 'Ten chemicals of major public health concern', 2018. Available at http://www.who.int/ipcs/assessment/public_health/chemicals_phc.

²⁶ Lavoie RA, Boufard A, Maranger R & Amyot M, 'Mercury transport and human exposure from global marine fisheries', *Nature*, 2018.

²⁷ HRC, *Report of the Special Rapporteur on the right to food*, 2017, op. cit.

²⁸ Cited in *The Economist*, 'The most neglected threat to public health in China is toxic soil', 8 June 2017. Available at <https://www.economist.com/briefing/2017/06/08/the-most-neglected-threat-to-public-health-in-china-is-toxic-soil>.

Quantifying the impact

The WHO estimated in 2017 that 1.7 million annual deaths of children aged under five—a quarter of all infant deaths worldwide—are attributable to their physical environment, particularly air and water pollution, and poor sanitation.²⁹

More than half a million infant children die from respiratory problems, mainly attributable to polluted air—a greater toll even than that caused by malaria.³⁰ The WHO estimates that children under five suffer 161 million person-years of illness due to causes associated with their physical environment.³¹ In addition, an unquantifiable number of children suffer subtle degradations in health, such as diminished intelligence due to low levels of lead exposure, for example.³² Children who survive exposure suffer retarded development and a burden of disease that can last into adulthood, jeopardising their economic prospects for the rest of their lives. Clearly, the impact of toxics in the environment has a sweeping, severe—and according to the WHO, entirely preventable—impact on children, particularly in the world’s poorest regions.³³

Children’s rights

Toxic exposure materially and unambiguously violates a wide range of children’s rights set out in the UN Convention on the Rights of the Child and other treaties. In view of children’s elevated susceptibility relative to adults, the Convention imposes enhanced obligations on States to safeguard them from harmful toxic exposure, as follows:

Rights related to children’s exposure. First among these are the rights to life, to “the highest attainable standard of health” and to develop as persons “to the maximum extent possible”.³⁴³⁵ Exposure to toxics is also likely to breach several other rights under the Convention, including: to recreation and play,³⁶ to education (when sickness, or the risk of it, caused by toxic exposure prevents children from going to school),³⁷ and to information³⁸ (about toxicants and their effects).³⁹

²⁹ WHO, *Don’t pollute my future!*, 2017, op. cit.

³⁰ Malaria is responsible for 300,000 infant deaths annually. The main causes of fatal respiratory infection in the age group are household air pollution (from cooking on open fires using solid fuels), ambient air pollution (particularly in urban areas) and second-hand tobacco smoke. Ibid., p. 2.

³¹ Disability-adjusted life years (DALYs) measure the illness and disability of a population in person-years. Ibid., p. 13.

³² WHO, International lead poisoning week of action’, 2013. Available at http://www.who.int/phe/features/lead_video_statement.

³³ Ibid., p. 15.

³⁴ CRC arts 6, 19, 24.

³⁵ As early as 2000, the Committee on the Rights of the Child has been concerned “at the high levels of pollution in industrialized areas, particularly air pollution and water and food contamination caused by nitrates, pesticides and heavy metals.” In light of article 24 (c) of the Convention, the Committee recommended that “the State party take all appropriate measures to prevent and combat the dangers and risks to the health of children posed by environmental pollution.” CRC Concluding observations to Slovakia, CRC/C/15/Add.140, para. 39-40, October 2000.

³⁶ CRC art 31.

³⁷ CRC art 28.

³⁸ CRC art 17.

³⁹ CRC General Comment No. 17, on the right of the child to rest, leisure, play, recreational activities, cultural life and the arts has highlighted the need for “an environment sufficiently free from waste, pollution, traffic and other physical hazards to allow (children) to circulate freely and safely within their local neighborhood”; on the right to information, see SR on toxics, report to the HRC; op. cit. paras 57 to 61.

UN Special Rapporteur on toxics Baskut Tuncak also refers to the right to physical and mental integrity in his report on children's rights and toxics, explaining that this right encapsulates the right of each human being, including children, to autonomy and self-determination over his or her own body. He further develops that a non-consensual physical or mental intrusion against the body constitutes a human rights violation and concludes that this right is implicated by human exposure to toxics, whether this is acute poisoning or low-level exposure to toxic substances.⁴⁰

According to the Special Rapporteur, the right to be heard is also inextricable from public health and environmental threats such as toxics and pollution. Article 12 of the Convention on the Rights of the Child prescribes that every child capable of forming his or her own views has a right to be heard and to influence decision-making processes that may be relevant in his or her life. This right is closely linked with the question of consent, explains the Special Rapporteur, and with the phenomenon of children being born "pre-polluted". He urges States to prevent childhood exposure, in recognition of the right of present and future generations to be heard.⁴¹

In addition, children who encounter toxics through work are engaged in hazardous labour, which is unlawful.⁴² Notably, these include nearly 100 million agricultural child labourers worldwide, most of whom are exposed to pesticides, and one million children working in mines.⁴³

Rights related to maternal exposure. Although the CRC's definition of the child does not include the developing foetus, the treatment of a pregnant woman and the care of her foetus can have an impact on the right of the child once he or she is born. The Committee on the Rights of the Child has been clear that: "The care that women receive before, during and after their pregnancy has profound implications for the health and development of their children."⁴⁴ Accordingly, States have an obligation to prevent children's exposure to toxics, as well as that of women of reproductive age.⁴⁵

"The Convention on the Rights of the Child makes it clear that States have an obligation to prevent exposure to toxics by children, as well as by women of reproductive age."⁴⁶ In his report to the Human Rights Council, which focuses on children's rights, the UN Special Rapporteur on human rights and toxics gives a full analysis of children's rights that are impacted by toxic chemicals, including the best interests of the child.

Rights related to ecological damage. The ecological harm of toxics further threatens children's rights: to healthy food and water,⁴⁷ to an adequate standard of living⁴⁸ (when ecological degradation jeopardises children's carers' income), and to adequate housing (where lead paints or pipes, or asbestos are present).⁴⁹

Freedom from discrimination. The right to be free from discrimination⁵⁰ is engaged by the disproportionate harm of toxics on children relative to adults, and particularly of children in poverty. If it is possible to reduce

⁴⁰ Report of the Special Rapporteur to the HRC, op. cit. para. 29 and 34.

⁴¹ Ibid. para. 22 to 26.

⁴² CRC art 32; ILO Convention 182 on the Worst Forms of Child Labour art 3(d).

⁴³ International Labour Organisation, 'Mining and quarrying', n.d. Available at <http://www.ilo.org/ipec/areas/Miningandquarrying/lang--en/index.htm>.

⁴⁴ CRC General Comment no. 15: *The right of the child to the enjoyment of the highest attainable standard of health*, 2013. Available at http://www2.ohchr.org/english/bodies/crc/docs/GC/CRC-C-GC-15_en.doc.

⁴⁵ The SR on Human Rights and hazardous substances and wastes noted the increasing evidence that exposure by males to toxic chemicals can also affect their children: Report to the HRC, 2016, op. cit., para. 18.

⁴⁶ Ibid.

⁴⁷ CRC art 24.2(c); see also International Covenant on Economic, Social and Cultural Rights (ICESCR) art 11. Food containing pesticides or other toxics is not deemed to be 'adequate' to meet human rights standards; see HRC, *Report of the Special Rapporteur on the right to food*, 2017, op. cit.

⁴⁸ CRC art 27.

⁴⁹ ICESCR art 11.

⁵⁰ CRC art 2.

children's exposure to toxics in affluent countries, then children in poorer countries are entitled to the same protection.

The overarching right to a healthy environment. Separately and together, these fundamental rights of children clearly preclude all toxic exposure, including chronic low-level exposure. Where the effects of substances are not well known, an abundance of caution should prevail, with a presumption against exposure. A clear implication of children's legal rights is therefore that toxics should be progressively reduced and eliminated from the environment, rather than that children's freedom to engage with their environment should be restricted. Since this can only be achieved by protecting ecology as a whole, children's rights collectively indicate an overarching right to a healthy environment in which to live, learn and grow. This should be the cardinal principle of a rights-based approach to the problem.⁵¹

Duty-bearers. In international law the duty to safeguard children's rights is borne by States. Businesses, the activities of which account directly and indirectly for most childhood exposures,⁵² bear a "corresponding responsibility" to children, according to the UN Guiding principles on Business and Human Rights.⁵³ The same principle has been elaborated by the Committee on the Rights of the Child.⁵⁴ Where corporate impunity and political apathy persist, children suffer and die. States are legally obliged to ensure that businesses fulfil their responsibility to prevent toxic exposure, and States must be held to account for this in turn.

Challenges and ways forward

As with many problems facing the world, the toxification of our environment is economically driven. To minimise costs, corporations capitalise on corruption and weak governance. Meanwhile communities, especially in impoverished areas, are denied the right to shape decision-making that will affect them. At the same time, economic necessity entices poor families to service the very industries that pollute them and their children. Corporations are further aided by the complicity of consumers, particularly in economically developed countries. Compounding the problem are various factors that multiply the risk, including urbanisation, the drive for economic growth, and an expanding global population. Meanwhile, children most exposed to toxics are largely invisible and all but voiceless, lacking effective avenues for prevention and redress.

⁵¹ The Special Rapporteur on human rights and the environment advocates for such recognition of a human rights to a healthy environment. HRC, *Report of the Special Rapporteur on the issue of Human Rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, A/HRC/37/59. January 2018, para. 11-16. Available at: http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/37/59.

⁵² HRC, *Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, 2016, para. 62. Available at <https://www.crin.org/sites/default/files/childrensrightstoxics.pdf>.

⁵³ Available at: http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.

⁵⁴ The Committee's *General Comment no. 16 on the impact of the business sector on children's rights* (para 28) elaborates: 'States have an obligation to protect against infringements of rights guaranteed under the Convention and the Optional Protocols thereto by third parties. This duty is of primary importance when considering States' obligations with regards to the business sector. It means that States must take all necessary, appropriate and reasonable measures to prevent business enterprises from causing or contributing to abuses of children's rights. Such measures can encompass the passing of law and regulation, their monitoring and enforcement, and policy adoption that frame how business enterprises can impact on children's rights. States must investigate, adjudicate and redress violations of children's rights caused or contributed to by a business enterprise. A State is therefore responsible for infringements of children's rights caused or contributed to by business enterprises where it has failed to undertake necessary, appropriate and reasonable measures to prevent and remedy such infringements or otherwise collaborated with or tolerated the infringements.' Available at <http://www.refworld.org/docid/51ef9cd24.html>. Also see CRIN's guide to the CRC's General Comment on business and children's rights available at: <https://www.crin.org/en/guides/advocacy/guide-crcs-general-comment-business-and-childrens-rights>.

This sobering picture is nonetheless marked by some signs of progress. The use of lead in petrochemical products has almost been abolished,⁵⁵ and the Minamata Convention promises to phase out the industrial use of mercury, although the existing presence of both elements in the soil and water will remain, potentially forever. Seventy percent of national constitutions now include environmental duties or rights,⁵⁶ and the UN Human Rights Council may now formally recognise a human right to a healthy environment.⁵⁷ In economically developed regions such as the European Union, the legislative framework has been progressively strengthened, often in the face of strong opposition by major corporations. As chemical manufacturers have been required to test and label products, some hundreds of toxics have had to be withdrawn for falling short of safety standards.⁵⁸ All these developments point to growing awareness of the inescapable link between human rights and the ecology of our environment, but progress is slow. As one youth activist, Rheka Dillon-Richardson,⁵⁹ has put it, changing laws is not enough; our relationship to nature must also change.

Following the recommendations formulated by the Special Rapporteur (SR) on human rights and toxics, Baskut Tuncak, an approach incorporating both preventive and remedial actions should be the way to make the change happen.⁶⁰ This new approach should include:

1. A focus on prevention in the first instance: this is the best and often only means of ensuring access to an effective remedy. As the SR says in his report, “the violation of a child’s physical integrity from toxics cannot be undone.” States and businesses have a shared responsibility to prevent childhood exposure to toxics.

Good practices should include legal prescriptions for precautionary or preventive measures in children’s best interests instead of prioritising businesses’ profits by using industrial chemicals that have not been tested. In cases where preventive steps have not been taken, States should be held liable and victims of violations should be allowed to access complaint procedures.

Companies must also focus on the prevention of exposure. This will require the modification, cessation or relocation of certain activities that present unmanageable or simply unknown risks to children. States should encourage innovative businesses dedicated to ensuring the safety of consumer products for children.⁶¹

⁵⁵ Bulletin of the World Health Organization 2002, 80 (10)

“The worldwide problem of lead in petrol”; available at: [http://www.who.int/bulletin/archives/80\(10\)768.pdf](http://www.who.int/bulletin/archives/80(10)768.pdf)

⁵⁶ HRC, *Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, 2016, op. cit.

⁵⁷ The Special Rapporteur (SR) on human rights and the environment, John Knox, while presenting his final set of reports to the HRC, argued that it was time for the UN to formally recognise a human right to a healthy environment, as many States have already done so in their national laws and constitutions or through regional agreements; see his statement to the Human Rights Council on 5 March 2018, p. 6:

<https://crin.us12.list-manage.com/track/click?u=76b57aa44a860d071c2e9bf2f&id=659820588e&e=d251fd891b>

⁵⁸ HRC, *Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, 2016, op. cit.

⁵⁹ Cited in Committee on the Rights of the Child, *Report of the 2016 Day of General Discussion*, 2016, p. 5. Available at <http://www.ohchr.org/Documents/HRBodies/CRC/Discussions/2016/DGDOutcomereport-May2017.pdf>.

⁶⁰ See in particular the SR’s report on the [Rights of the child and Toxics](#), as well as the [Guidelines to good practices](#); both are available on <http://www.srtoxics.org/>

⁶¹ The Committee on the Rights of the Child recognises in its General Comment No. 15 (2013) that most mortality, morbidity and disabilities among children could be prevented if there were political commitment and sufficient allocation of resources directed towards the application of available knowledge and technologies for prevention, treatment and care; CRC/C/GC/15, April 2013, para. 1. See an example of good practice in China where a father has launched a startup dedicated to ensuring the safety of products for children:

<https://www.crin.org/en/home/what-we-do/crinmail/week-childrens-rights-1503>

2. Laws and policies must prioritise the protection of children: States parties to the Convention on the Rights of the Child have a duty to take legislative and administrative measures to do this.

As an example, safeguarding children in and around high-risk localities—particularly industrial and intensive agricultural areas—should be achieved by reforming production methods and preventing all toxic emissions into the ecological and human environment.

Containing the economic drivers of environmental toxification—with or without the support of the businesses that profit from it—by means of legislation and mechanisms for effective enforcement and accountability should also be a national priority.

3. Strengthening global and national controls on highly toxic substances: this particularly concerns, but is not exclusive to, heavy metals and asbestos, and supporting economically underdeveloped countries to incorporate such controls in full. The global nature of the challenge, including the transnational nature of corporate structures and business relationships, requires strong international cooperation.
4. Holding businesses accountable: all businesses have a responsibility, as do the financiers and investors, to prevent childhood exposure. Directly and indirectly, business activities account for most childhood exposures to toxics. Most businesses sectors are directly or indirectly involved in the production, use, release or disposal of hazardous substances. Businesses must undertake children's rights due diligence as required by General Comment No. 16 of the Committee on the Rights of the Child. Failure to conduct a reasonable degree of human rights due diligence for toxic chemicals can subject corporate executives to criminal charges.⁶²
5. Access to justice: access to complaints procedures and redress when rights violations have occurred is crucial and must be part of the framework. As long as polluters can act with impunity, they will; the cost to polluters of outsourcing the harm of their activity to children must outweigh the benefits. Above all else, therefore, children and their advocates must be provided, as is their legal right,⁶³ with accessible and effective avenues to hold polluters to account before the law. In particular, children must be able to litigate, to ensure that victims are medically rehabilitated and paid adequate compensation, and that reoccurrence is prevented.

States have a duty to ensure that children have access to an effective remedy for violations of their rights, including those due to exposure from toxics. However, taking legal action for victims of hazardous substances and wastes brings up numerous challenges, especially for children, because of their special and dependent status. Barriers include:⁶⁴

- The lack of awareness among victims that their diseases could have been caused by childhood exposure to toxic chemicals or pollution;
- The burden of proof placed on children, including the need to establish causation: this burden is placed on victims to prove that a toxic chemical was the cause of their injuries, not on the businesses that profit from these activities to prove that they do no harm;
- Fundamental information that has not been generated or is confidential about the hazards and uses of substances;

⁶² Report of the Special Rapporteur on Human Rights and Toxics on The rights of the Child and Toxics, A/HRC/33/41 (2016), para. 75

⁶³ CRC art 4; International Covenant on Civil and Political Rights art 2. See also Committee on the Rights of the Child, *General Comment no. 5: General measures of implementation*, 2003, para 24. Available at <http://www.refworld.org/docid/4538834f11.html>.

⁶⁴ Report of the Special Rapporteur on Human Rights and Toxics on The rights of the Child and Toxics, A/HRC/33/41 (2016), para.

- The challenges of identifying perpetrators;
- Weak or non-existence of legislation preventing childhood exposure to pollution and toxic chemicals as well as providing access to an effective remedy for exposure and environmental contamination;
- The costs of legal representation for plaintiffs.

Different types of actions and practicalities should be developed in order to allow child victims to obtain remedies but also for preventing violations' recurrence by ensuring future laws and policies respect rights. Different tools are particularly relevant in the context of environmental damage:⁶⁵

Collective litigation and public interest litigation: these allow a number of claimants or victims to bring a case or a complaint together, are an effective way of challenging widespread or large scale violations such as those resulting from environmental damage while reducing the burden on any given child victim.⁶⁶ Yet, less than half of States around the world allow collective litigation in some settings and only around 15 percent allow collective action across the board.⁶⁷

Intergenerational justice: this concept is also key in ensuring the protection of vulnerable groups, particularly children. In essence, the principle states that there should be distributive justice between generations and that the rights of different generations should be equal over time. The concept has been underdeveloped in national law, but has played an important role in litigation in several countries, including the Philippines, where it has been used to allow class actions for the enforcement of benefits to future generations.⁶⁸ The principle takes on particular importance in the context of issues related to natural resources contamination by hazardous substances, to mitigate against short-termist policy that will affect the realisation of the rights of future generations.

Public interest cost protection: one of the most serious barriers to children accessing justice is the financial burden. Justice can be expensive but no one should be prevented from seeking justice for rights violations suffered because of an inability to finance their case. As legal aid is practically nonexistent for the kinds of civil or public interest administrative cases that are likely to be used to bring environmental cases, other mechanisms should exist to encourage such collective actions of public interest.

The general principle is often that a losing party to litigation should pay the winner's reasonable legal costs. To remove this burden in cases that are in the public interest, one of the mechanisms available to the Court to ensure access to justice in public interest litigation is the grant of a protective costs order.⁶⁹ Consisting of excluding or limiting the liability in expenses of public interest litigants, this mechanism is already available in some countries for environmental cases,

⁶⁵ For further discussion of children's access to justice, see CRIN, Rights, Remedies and Representation: A global report on access to justice for children, 2016. Available at: www.crin.org/node/42383. See more relevant legal actions brought to defend children's right to a clean environment:

<https://www.crin.org/en/library/publications/environment-childrens-right-clean-environment>

⁶⁶ A group of children brought a petition to Washington's Department of Ecology, asking them to adopt a rule to limit carbon emissions in their state. Read more in CRIN's case study 'United States: combatting climate change with the public trust doctrine' at <https://www.crin.org/en/library/publications/united-states-combatting-climate-change-public-trust-doctrine>

⁶⁷ For example, in the United Kingdom, a class action on behalf of 18 children was brought to the High court which linked the birth defects the children experienced to toxic material; available at: <http://www.bailii.org/ew/cases/EWHC/TCC/2009/1944.html>

⁶⁸ In 1994, the Supreme Court of the Philippines ruled in favour of a group of children who brought a case concerning the destruction of rainforests in the country, finding that the rights to a clean environment, to exist from the land, and to provide for future generations are fundamental; each generation has a responsibility to the next to preserve the environment, and children may sue to enforce that right on behalf of both their generation and future generations; *Minors Oposa v. Secretary of the Department of Environmental and Natural Resources* [1994] 33 ILM 173. Summary and full judgment available at: www.crin.org/node/6943.

⁶⁹ *Protective Costs Orders in UK Environmental and Public Law Cases*, John Litton QC, 2015 available at: <http://www.middletemple.org.uk/download/file/fid/901>

including in the United Kingdom.⁷⁰ Developing this practice would greatly facilitate access to justice to victims of hazardous substances and wastes.

The burden of proof usually lies with victims, not with governments or businesses that use, produce or release hazardous substances that eventually pollute and often harm children. Placing the burden on victims of the effects of toxic chemicals to prove the cause of their illness can be a grave injustice. In order to reduce the burden of proof on victims of hazardous substances and wastes, the Special Rapporteur on human rights and toxics recommends that States explore options to better balance the right of victims to justice and remedy.⁷¹

Indeed, an effective regulatory framework which monitors information about who manufactures, sells, uses, trades in, releases or disposes hazardous substances could reduce the barrier posed by having to demonstrate causation. The Special Rapporteur further develops that greater accountability of businesses - which have the access, the control of relevant information and the power to generate it - can help to incentivise the development and adoption of safer alternatives that carry less risk of human rights abuses.⁷² Regulatory frameworks should also provide with “safe levels” of chemicals released in the environment as well as “safe levels” of exposure for children, taking into account their special vulnerability on the bases of real-life conditions, children being exposed to multiple substances during sensitive periods of childhood development”.⁷³ With such regulations in place, it would be more difficult for perpetrators to evade accountability.

Useful resources:

- UN Special Rapporteur on Human Rights and Toxics: read more on his [website](#) and read his [children’s rights-focused report](#) as well as the [Guidelines on good practices](#).
- CRIN’s submission for the [Guidelines on Human rights and the environment](#) - (November 2017)
- CRIN’s submission for the report of the Special Rapporteur on human rights and the environment on [Children's rights and the environment](#) (September 2017)
- CRIN's submission for the [Guidelines on good practices](#) of the SR on Human Rights and Toxics (May 2017).
- CRIN's submission on [Water and Toxics](#) for the report of the Special Rapporteur on the human rights to safe drinking water and sanitation (April 2017).
- CRIN’s report: [Rights, Remedies and Representation: A global report on access to justice for children](#), 2016.
- CRIN’s [Guide to the CRC’s general comment on business and children’s rights](#).

Organisations advancing the cause of a toxic-free future:

- [IPEN](#) is a global network of public interest health and environment NGOs working to eliminate toxic chemical hazards around the world. IPEN helps build the capacity of its participating organisations to influence local policy, create greater public awareness of toxics issues, and help their governments implement international policies, such as chemicals treaties and other chemical safety policy agreements.

⁷⁰ *Protective Expenses Orders and public interest litigation*, Tom Mullen, *Edinburgh Law Review*, Volume 19 Issue 1, Page 36-65, available at: <http://www.eupublishing.com/doi/full/10.3366/elr.2015.0250>

⁷¹ Guidelines of Good practices, SR on Human Rights and Toxics, A/HRC/36/41(2017), para. 106

⁷² *Ibid.*

⁷³ Report of the Special Rapporteur on Human Rights and Toxics on The rights of the Child and Toxics, A/HRC/33/41 (2016), para. 7 and 11

- [Basel Action Network](#) (BAN) is a campaigning organization dedicated to ending toxic waste trade. They work to champion global environmental health and justice by ending toxic trade, catalyzing a toxics-free future, and campaigning for everyone's right to a clean environment.
- [Ban Toxics](#) is an NGO working on issues related to toxic chemicals and waste and environmental justice, mainly in the Philippines. They work to promote awareness about harmful chemicals and the sound management of chemicals at all levels, through policy engagement with government agencies and policy makers, projects on the ground with communities; their main focus being on the sound management of mercury.
- [Pesticide Action Network International](#) (PAN) is a network of non governmental organisations, institutions and individuals in over 90 countries working to replace the use of hazardous pesticides with ecologically sound and socially just alternatives. It is organised with five independent, collaborating Regional Centers that implement its projects and campaigns around the world.
- [Client Earth \(UK\) and the network 'Justice and environment'](#) is a network of 13 organisations throughout Europe working on a project for 'access to justice for a greener Europe' which focuses on raising awareness about the legal possibilities available for citizens and NGOs to help protect the environment through access to justice.
- [The Access Initiative \(TAI\)](#) is a network of organisations working to create a world where all people are able to meaningfully exercise rights to information, public participation and justice in decisions affecting the environment.
- [Women in Europe for a common future](#) (WECF) is an international network of women's and civil society organisations advocating for non-chemical alternatives worldwide, based on three principles: polluter pays, reversal of the burden of proof and the precautionary principle. WECF focusses in particular on the indoor environment of babies and children and engage parents, caregivers, medical personnel and decision makers in raising awareness of threats and creating safe environments, especially with reference to hazardous chemicals. One of their project is the [Safe Toys coalition](#) aiming at protecting children's health by striving for a world free of toxic and unsafe toys.

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