

## **Honorable Delegates, Distinguished Guests, and Esteemed Colleagues,**

It is a great privilege to stand before you today as both a young person navigating the complexities of our world and as a junior researcher dedicated to understanding the long-term effects of multiple pollutants exposure, socioeconomical, sociodemographic and occupational factors on human health since an exposome approach. I come from a generation that is both hopeful and concerned—hopeful because of the scientific advancements at our disposal, yet concerned because the challenges we face are urgent and complex in a context of emerging contaminants expected to increase with climate change effect.

My research focuses on the impact of low-level, long-term exposure to pesticides, particularly in children and young mothers living in industrialized areas where agriculture depends on intensive chemical use to support food security. We now recognize that such exposures can contribute to non-communicable diseases like asthma, allergic reactions, and mental health—conditions that, while not immediately life-threatening, significantly affect the quality of life and long-term health outcomes.

To move forward, we must prioritize investment in scientific initiatives that help us better understand and predict these health risks. Modern technology, particularly artificial intelligence, provides us with unprecedented opportunities to analyze complex datasets, identify trends, and develop innovative solutions. As young researchers, we embrace these tools with fresh perspectives and out-of-the-box thinking. But to fully harness these capabilities, we need support—support in the form of grants, collaborative platforms, and spaces that encourage multidisciplinary approaches. Multiple contaminants and their mixtures implies more research if we want a healthier environment as a human right.

Our generation is resourceful. We have learned to do a lot with limited funding, driven by creativity and a commitment to making meaningful contributions. But we need policymakers to recognize and invest in our work, not just for our benefit but for the benefit of societies worldwide. SDG 3 calls for ensuring healthy lives and promoting well-being for all at all ages. Achieving this requires us to look beyond single-exposure models and adopt exposome risk assessments—because our generation is not exposed to just one pollutant at a time, but rather to a mixture of agents, climate stressors, and socio-economic pressures that may put us in vulnerable conditions.

This is particularly relevant to the UNECE region, where upcoming environmental changes will lead to increased exposures in settings that lack the natural self-purification processes. Such exposure to complex pollutant mixtures does not only affect physical health but may also contribute to mental health challenges, especially for vulnerable populations. Factors such as income disparities, food insecurity, excessive working hours amplify these risks, making it essential that we develop not only explanatory but also predictive models to ensure health systems based on preventive approaches.

In this context, we must be guided by the precautionary principle—acting on early warnings rather than waiting for irreversible damage. Investing in young researchers means investing in better health predictors, stronger preventive measures, and more resilient health systems. It means trusting in a generation that is eager to collaborate, innovate, and bring fresh energy to long-standing challenges.

We are here today not only to share our concerns but to propose solutions. We call upon policymakers, institutions, and funding bodies to recognize the potential of young scientists and to provide the resources necessary to turn groundbreaking ideas into tangible outcomes. By working together, we can build a future where science informs policy, and policy safeguards health.

Thank you.

three minutes:

It is a privilege to stand before you today as a rep of United Nations Group for Children and Youth, also as a young researcher dedicated to understand the long-term health effects of multiple pollutants, socioeconomic, and occupational factors using an exposome approach. My generation is both hopeful and concerned—hopeful because of scientific advancements, yet concerned about the increasing impact of emerging contaminants, especially in the context of climate change.

My research focuses on the effects of low-level, long-term pesticide exposure, particularly in children and young mothers in industrialized agricultural areas. These exposures contribute to non-communicable diseases like asthma, allergies, and mental health conditions—issues that, while not immediately life-threatening, profoundly affect quality of life.

To address these challenges, we must invest in research that moves beyond single-exposure models to assess the real-world complexity of pollutant mixtures. Artificial intelligence offers unprecedented opportunities to analyze data and develop innovative solutions, but young researchers need support—grants, collaborative platforms, and multidisciplinary spaces—to fully harness these tools. Environmental health is a human right, and achieving **SDG 3** requires predictive models that account for not just pollutants but also climate stressors and socio-economic pressures.

This is especially relevant in the **UNECE region**, where upcoming environmental changes will increase exposures in areas lacking natural self-purification processes. These exposures impact both physical and mental health, particularly for vulnerable populations facing income disparities, food insecurity, and excessive working hours. Preventive, data-driven policies are essential to safeguarding public health.

We must act on **early warnings** rather than waiting for irreversible damage. Investing in young researchers means investing in better health predictors, stronger preventive measures, and more resilient health systems. We call upon policymakers and institutions to recognize our potential and provide the necessary resources to turn groundbreaking ideas into action.

By working together, we can ensure that science informs policy and that policy protects health.

**Thank you.**

