

Letter**Letter: Chemical pollution is another ‘asteroid threat’**

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Every child born today is 'precontaminated' with hundreds of chemicals

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Steven Pinker (“[The world after tomorrow](#)”, Life & Arts, December 28) refers to the “approaching asteroid” of climate change. However, as well as climate change, there are at least two other “asteroid” threats: chemical pollution with its associated health risks, and loss of biodiversity.

Chemical pollution has now reached unprecedented levels, with every child born today “precontaminated” with hundreds of chemicals. Many of these chemicals interfere with brain development. Some, including the mixtures to which we are all exposed, have been associated not only with IQ loss (leading to learning disabilities), but also with neurocognitive and behavioural disabilities, including autism spectrum disorders, attention deficit and hyperactivity. These disorders are increasingly common with rising trends noted worldwide. Professor Pinker argues, correctly in my opinion, that we are not blank slates.

Chemical contamination of amniotic fluid is affecting the brain development of future generations. We are continually learning how the environment affects gene expression, mainly through epigenetics. The early stages of brain development can be equated with a one-way street. It is impossible to press replay and start the process again. Brain

development is the key to a child's future intellectual capacity, with adequate neurocognitive function in children being an important determinant for learning abilities, educational attainment, quality of life, and adult health.

These ideas, notably epigenetic interactions, are increasingly researched and documented, though not yet fully taken on board by regulators and policymakers dealing with chemical regulation. As for climate change, we need breakthroughs in global policies. It is encouraging that the last European Parliament proposed legislation for better regulation of chemicals affecting hormones and that the new European Commission is finally recognising the need to strive for a non-toxic environment.

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