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IPEN (International POPs (Persistent Organic Pollutants) Elimination Network)

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CHEMICAL CORRUPTION

Fast consumption of goods is everywhere. Awareness of toxic chemicals in them is not. Toxic chemicals creep into almost every major product you can think of, cosmetics, electronic devices and much more. Toxic chemicals are frighteningly overlooked, yet they have drastic societal and health consequences. Without a unifying body to investigate and remove these chemicals, everyday objects become a lethal weapon before our very eyes. The International Pollutants Elimination Network (IPEN) is fighting to make sure this does not happen. The network is made up of a strong community of international not-for-profits including Householders' Options to Protect the Environment. These organisations are committed to stopping the production of toxic chemicals that have dangerous and damaging impacts on our health and environment[1]. IPEN works extremely hard to protect us by providing an information resource hub that disseminates knowledge on toxic priorities like nanotechnology, mercury pollution and ocean pollutants. Beyond this, they spread powerful campaigns and policies like the Stockholm Convention across local, regional and global communities all around the world.

Stop
Reduce
Promote
Build

1 IPEN is fighting hard to **reduce** the world's most hazardous chemicals through key initiatives like the Stockholm convention, banning lethal chemicals. They use sound scientifically backed research to trace lethal chemicals that still exist today[1].

2 The network **promotes** extremely strong international chemical standards to make sure global attention is given on toxic chemicals astonishingly ignored. They expose dangerous chemicals and are dedicated to increasing funding towards projects creating safer environments for all[1].

3 IPEN has tried to **stop** the mass spread of highly toxic chemicals and metals like lead and mercury through engaging campaigns[1].

4 They are **building** an international toxic-free movement ensuring not-for-profits, governments and scientific researchers all have access to a global information hub on toxic chemicals[1].

THE STOCKHOLM CONVENTION

This convention represents an international treaty to eradicate chemical pollution that occurs during production, use and emissions[2]. The treaty has been signed by hundreds of countries globally and it is the backbone intervention on preventing harmful environmental impacts created from pollutants.

In 2004, Australia formally signed the Stockholm convention[3]. The department of Agriculture states that it will 'control measures to apply to the import, export, production, disposal and the use of POPs'[3]. However, this hasn't always been the case with Australia exporting mass plastic waste containing POP's and discarding it in countries like Indonesia[4]. There have been statements regarding a complete ban on exports however we are yet to see this come into fruition given it will be done as soon as 'practicable' which could be months or even years[5]. A chain of events can spread an epidemic of POP's problems if countries are not united in efforts to destroy pollutants. The interdependent nature of the issue shows we must act together.

TOXIC PRIORITIES

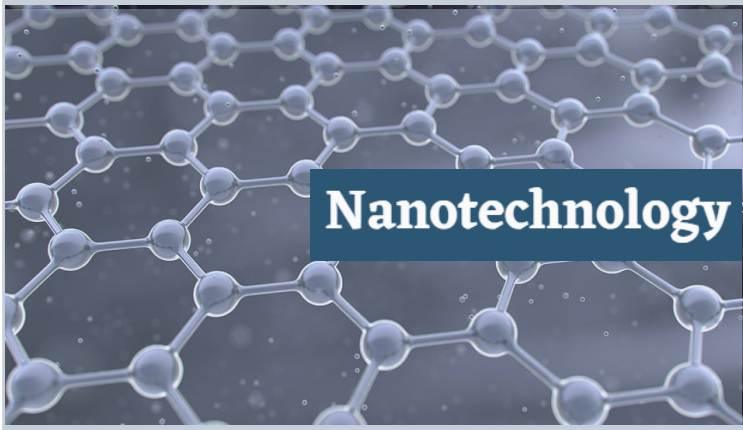

Figure 1

What many people don't know is that nanotechnology is increasingly posing a threat to human health. Numerous animal studies show that it can lead to cancer and asbestos poisoning[6].

Nanotechnology can be defined as materials, systems or processes working on a tiny scale[7]. Many everyday items we use and consume can contain nanomaterials like food additives and household appliances. Manufacturers commonly make nanomaterials like zinc, zinc oxide and silver[6].

With the next generation of nanotechnology set to grow rapidly, we urgently need to investigate and ensure that we are not only informed of the risk posed by consuming certain nanotechnology products but that the dangerous chemicals that get in them never happen in the first place. IPEN has developed various resources around their danger through their information hub which can be accessed on their website.

Mercury Pollution

We need to take urgent action to solve mercury pollution because of the devastating consequences it has on people's health and lives. To do this, we must first understand how mercury pollution starts and what effects it has on humans and the environment (refer to figure 3).

The Mercury Campaign

IPEN is addressing mercury pollution through the power of education. Informing others on its harmful effects and what alternatives exist as a major call for action based on sound knowledge[8]. IPEN is working hard to engage public organisations to advocate for mercury-free policies with local and national governments[8]. IPEN is also carrying out a range of activities supporting a mercury-free environment. This ranges from mercury product surveys and creation of educational materials to sparking conversations on improving mercury policy[8].

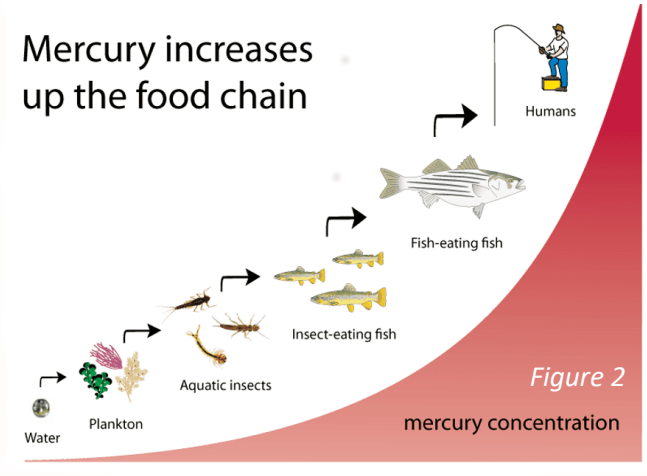

Figure 2

Figure 3

Ocean Pollutants

Soaking up the sun on a lush island and spending time snorkeling underwater to see a rainbow of tropical fish sounds like a perfect getaway. However, what we are heading towards is nothing like this. All around the world a huge plethora of plastic waste is swarming into mounds known as ‘plastic islands’. These plastic ocean pollutants include persistent organic pollutants and endocrine disruptor compounds (EDC’s) [9]. An example of where EDC’s have been found is in nail polish where traces could absorb past the nail cuticle, change gene expression and interfere with hormonal activity[10]. IPEN has been working hard to educate communities about these harmful ocean pollutants so we can avoid harmful health impacts in products before they make it on our store shelves.

Summary

On the global level, the problem of toxic chemicals in products is interdependent ranging from Australian plastic exports to Indonesia to mercury pollution and plastic islands in the sea. It affects countries internationally and with shared resources like the ocean. Thus, the International Pollutant Elimination Network is a vital body that unifies global communities and helps us to remain protected against toxic chemicals in everyday products. On the individual level, we need to educate ourselves about these chemicals and stop purchasing products that contain them to prevent a severe detriment to our health. To find out more information about the work of IPEN visit their website: **https://ipen.org/**.

References

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Nanotechnology figure 1
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Mercury Concentration figure 2
https://inhabitat.com/mercury-found-in-california-fog-may-threaten-the-food-chain/mercury-contamination-through-food-chain/

Plastic island figure 4
https://www.ladbible.com/community/interesting-this-lad-surfed-to-a-plastic-waste-island-and-it-was-grim-20180515

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