



The Stockholm Convention

PART I: Objectives, Obligations and Structure



2021

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Introduction

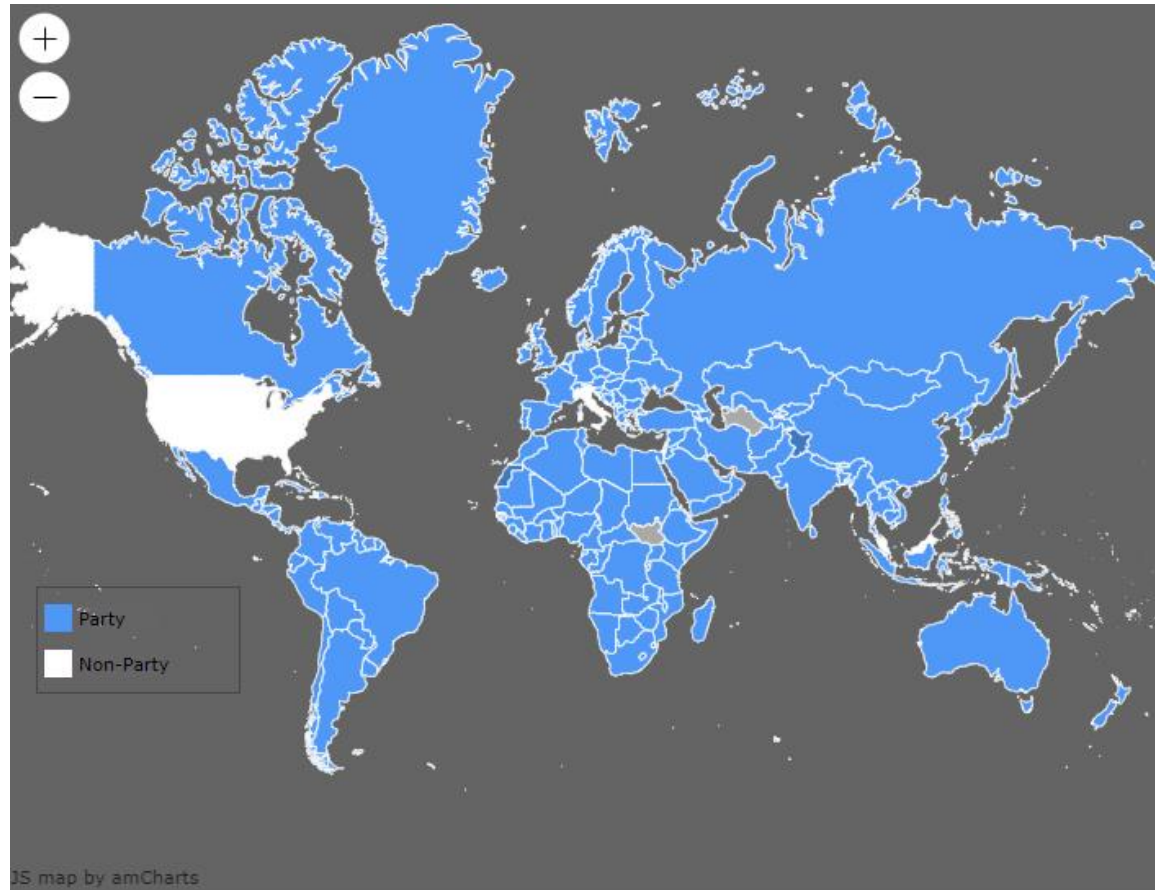
The Stockholm Convention is a global treaty to protect human health and the environment from highly dangerous persistent organic pollutants (POPs).



The Stockholm Convention – almost universal

The Convention was adopted at a Conference of Plenipotentiaries on 22 May 2001 in Stockholm, Sweden.

- Entered into force on 17 May 2004
- Now 184 Parties are bound to it



The Stockholm Convention is important...

... to reach for example the Sustainable Development Goals in the 2030 Agenda



Persistent organic pollutants (POPs)



POPs are organic chemicals.

Many POPs are beneficial in a wide range of applications and were therefore widely used in pest and disease control, crop production, and industry.

However...



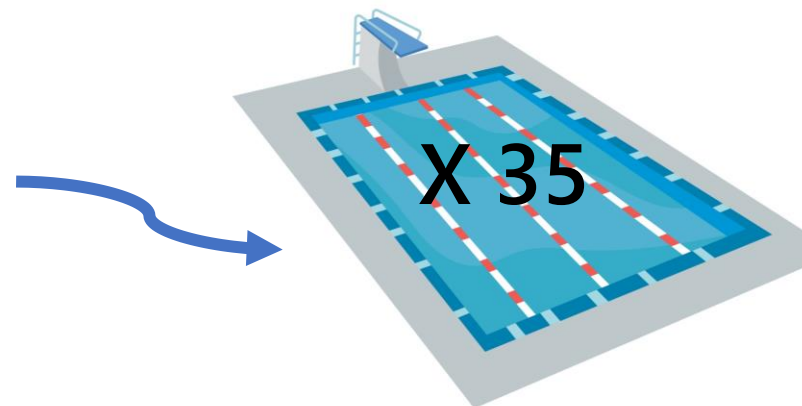
... once released in the environment, they:

- are persistence in the environment
- travel long distances
- bioaccumulate in humans and wildlife
- have harmful effects for humans and wildlife

Two important remarks:

- POPs can be detected everywhere
- POPs can have adverse effects for humans and wildlife at very low concentration!!
→ at parts per billion (ppb) or trillion (ppt) level

That is equivalent to 1 grain of sugar *



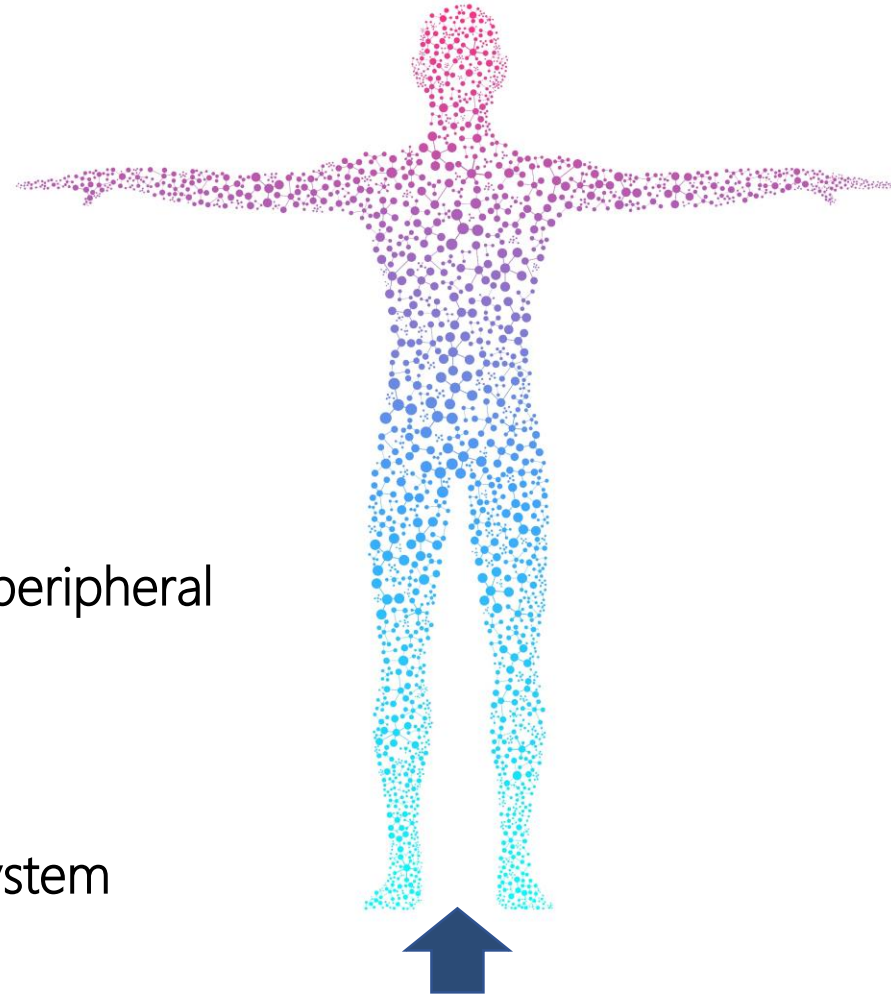
dissolve in 35 Olympic pools

POPs - Linked health effects*

Exposure to high levels of POPs may cause serious adverse health effects.

Specific effects:

- Cancer
- Allergies
- Hypersensitivity
- Damage to the central and peripheral nervous systems
- Reproductive disorders
- Disruption of the immune system



*not all POPs have the same effects!

Source from WHO:

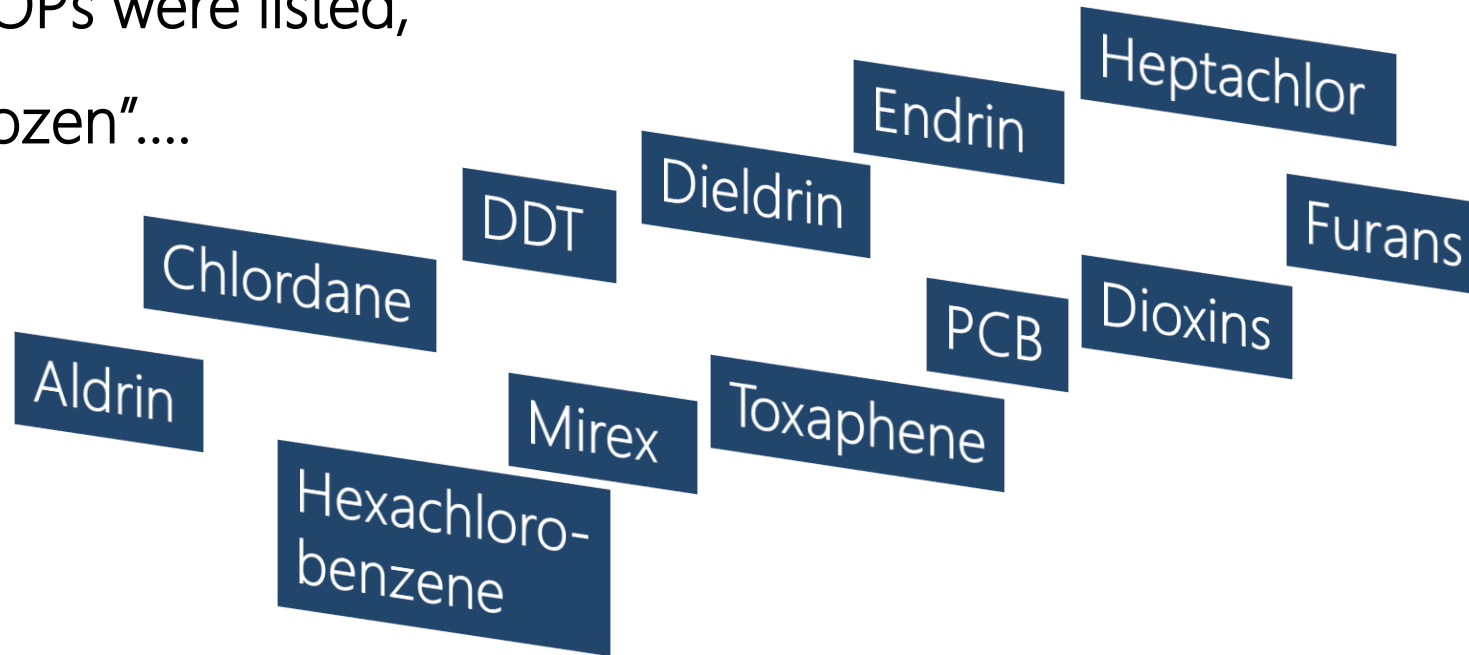
https://apps.who.int/iris/bitstream/handle/10665/44525/9789241501101_eng.pdf?sequence=1&isAllowed=y

Low level POPs exposure:

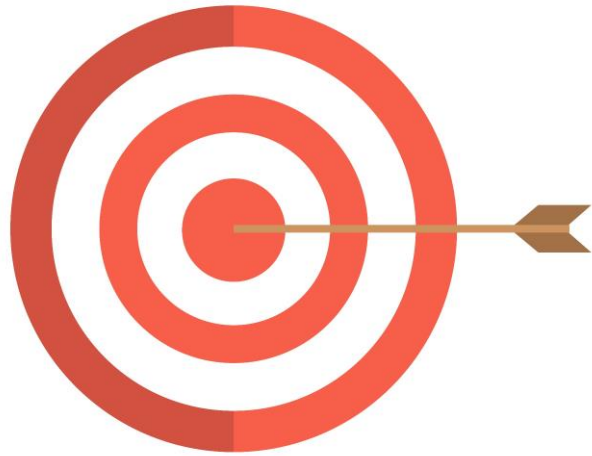
- Neurodevelopmental effects in children
- Effect on the hormone system (endocrine effects)
- Diabetes
- Immunologic effects
- Cancer

POPs listed in the Stockholm Convention

Initially 12 POPs were listed,
the "Dirty dozen"....



.... by now 18 new POPs were added,
resulting in 30 POPs listed (status 2021).



Each Party is required to:

- Eliminate or restrict the production and use, as well as the import and export, of the intentionally produced and used POPs
- Reduce or eliminate releases of unintentionally produced POPs
- Reduce or eliminate releases from stockpiles and wastes
- Identify additional POPs based on proposals from Parties

Structure of the Convention

In total 30 articles and 7 annexes.

- Objectives
- Definitions
- Measures to reduce/eliminate releases, specific exemptions
- Listing of chemicals
- Implementation plans
- Information
- Technical assistance
- Financial resources and mechanism
- Reporting, effectiveness evaluation

Article 1

Article 2

Article 3, 4, 5, 6

Annex A, B, C

Annex A, B, C

Article 7

Article 9, 10, 11

Article 12

Article 13, 14

Article 15, 16

Article 3

Article 3 covers releases from intentional production and use.

According to article 3 1A) each Party must take measures to:

- eliminate production, use, import and export of the chemicals listed in Annex A
- restrict its production and use of the chemicals listed in Annex B.
- Article 3 regulates export and import chemicals listed in Annexes A and B

Article 4

In Article 4 establishes a publicly available register to identify Parties that have specific exemptions listed in Annex A or B and the expiry dates of those exemptions.

Article 5

Unintentional production:

Article 5 requires Parties to take measures to reduce the total releases derived from anthropogenic sources of chemicals listed in Annex C.

The goal is their continuing minimization and, where feasible, ultimate elimination.

Article 6

Stockpiles and wastes:

Article 6 covers the measures to reduce and eliminate releases from stockpiles that contain chemicals from Annex A and B and wastes consisting of, containing or contaminated with POPs, including products and articles on becoming wastes.

Parties must take measures to eliminate the production and use of the chemicals listed under Annex A:

<u>Aldrin</u> ●	<u>Chlordane</u> ●	<u>Chlordecone</u> ●
<u>Decabromodiphenyl ether (commercial mixture, c-decaBDE)</u> ▲	<u>Dicofol</u> ●	<u>Dieldrin</u> ●
<u>Endrin</u> ●	<u>Heptachlor</u> ●	
<u>Hexabromobiphenyl</u> ▲	<u>Hexabromocyclododecane (HBCDD)</u> ▲	<u>Hexabromodiphenyl ether and heptabromodiphenyl ether</u> ▲
<u>Hexachlorobenzene (HCB)</u> ● ▲	<u>Hexachlorobutadiene</u> ▲	<u>Alpha hexachlorocyclohexane</u> ●
<u>Beta hexachlorocyclohexane</u> ●	<u>Lindane</u> ●	<u>Mirex</u> ●
<u>Pentachlorobenzene</u> ● ▲	<u>Pentachlorophenol and its salts and esters</u> ●	<u>Polychlorinated biphenyls (PCB)</u> ▲
<u>Polychlorinated naphthalenes</u> ▲	<u>Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds</u> ▲	<u>Short-chain chlorinated paraffins (SCCPs)</u> ▲
<u>Technical endosulfan and its related isomers</u> ●	<u>Tetrabromodiphenyl ether and pentabromodiphenyl ether</u> ▲	<u>Toxaphene</u> ●

Annex A

Parties must take measures to restrict the production and use of the chemicals listed under Annex B:

<u>DDT</u> ●	<u>Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride</u> ● ▲
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Annex B

Parties must take measures to reduce the unintentional release of chemicals listed under Annex C:

<u>Hexachlorobenzene (HCB)</u> 	<u>Hexachlorobutadiene (HCBD)</u> 	<u>Pentachlorobenzene</u> 	<u>Polychlorinated biphenyls (PCB)</u> 
<u>Polychlorinated dibenzo-p-dioxins (PCDD)</u> 	<u>Polychlorinated dibenzofurans (PCDF)</u> 		<u>Polychlorinated naphthalenes</u> 

Annex C

What and when does each Party need to transmit specific information to the Conference of the Parties?

General reporting:

Every four years, each Party reports on measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention.

Every 4 years

National implementation plan:

Parties shall develop and endeavour to implement a plan for the implementation of its obligations under this Convention.

- 2 years after entering
- after decided by COP, Art. 7

Action Plans:

- to identify, characterize and address the release of the chemicals listed in Annex C and to facilitate implementation of Article 5.
- Part of the NIP

- 2 years after entering
- review every 5 years

Review on specific POPs Art. 15:

Each Party reports about progress made in the elimination of specific POPs for example PCB
- e.g., DDT, PCBs, PBDE, PFOS

- When – depends on substance
- E.g., PCB every 5 years



The Stockholm Convention is a dynamic, global treaty that has made much progress in paving the way towards a POPs-free future.



about the Stockholm Convention under www.pops.int.



Thank you for your attention !

<https://www.pcb.unitar.org/>



Annex

Definition of selected terms in the Stockholm Convention



Pollutant

Pollutant means any substance whether liquid, solid or gas which directly or indirectly:

- alters the quality of any part of the receiving environment so as to affect its beneficial use adversely, or
- produces toxic substances, diseases, objectionable odour, radioactivity, noise, vibration, heat, or any other phenomenon that is hazardous or potentially hazardous to human health or to other living things.

Waste

Basel Convention Article 2:

“Wastes” are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.

Article 3(1) of EU Directive 2008/98/EC:

... (waste) means any substance or object which the holder discards or intends or is required to discard.

Stockpile

A supply stored for future use, usually carefully accrued and maintained.

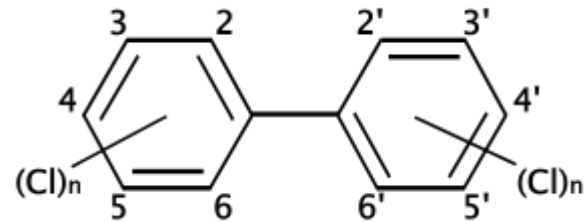
Articles (Equipment/ Product)

- The (Stockholm) Convention allows notification of POPs in articles in use, i.e. for chemicals occurring as constituents of articles manufactured or already in use before or on the date of entry into force of the obligation with respect to these chemicals.
- An article with POPs could be a fire extinguisher with PFOS-based aqueous foam or an allowed pharmaceutical containing a POPs chemical (e.g. lindane in the control of head lice).
- This usage seems to indicate that 'articles' could be either equipment: a transformer containing PCBs, a fire extinguisher with PFOS; or a product (window sealant made from a mixture including a PCB plasticizer, foam with a POP component).
- A key distinction important in implementation is that the POPs could be drained or otherwise extracted from equipment without 'harming' the equipment but could not be separated from a product except (perhaps) by destroying the product in some physical or chemical process.

PCB

Annex C Part IV (a)

“Polychlorinated biphenyls” means aromatic compounds formed in such a manner that the hydrogen atoms on the biphenyl molecule (two benzene rings bonded together by a single carbon-carbon bond) may be replaced by up to ten chlorine atoms.



Dioxins / Furans

Annex C Part IV (b)

“Polychlorinated dibenzo-p-dioxins” and “polychlorinated dibenzofurans” are tricyclic, aromatic compounds formed by two benzene rings connected by two oxygen atoms in polychlorinated dibenzo-p-dioxins and by one oxygen atom and one carbon-carbon bond in polychlorinated dibenzofurans and the hydrogen atoms of which may be replaced by up to eight chlorine atoms.

