

AMAP: Pollution Issues: Chemicals of Emerging Arctic Concern

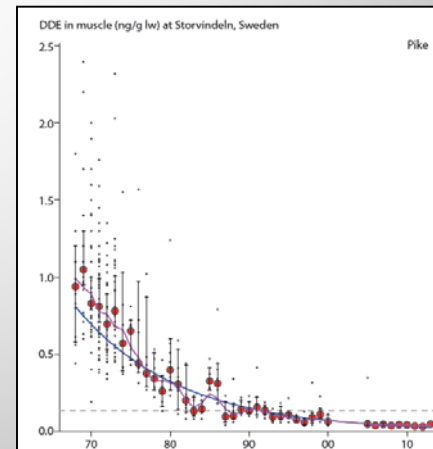
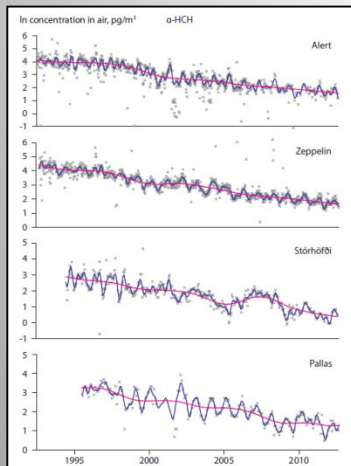
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AMAP
Arctic Monitoring and
Assessment Programme

So far so good

- Over the past 25-years AMAP assessments have contributed to significant progress in reducing exposure of Arctic humans and wildlife to contaminants such as PCBs and DDT (documented in the AMAP (temporal trends) results presented to the AC in 2015)
- This work has been instrumental in establishing global initiatives to reduce environmental pollution by harmful chemicals, such as the Stockholm Convention.
- AMAP information continues to provide important science-based evidence for listing new chemicals under such arrangements



This might convey the impression that 'chemicals' are a 'solved problem' ... however ...

Chemicals of Emerging Arctic Concern

- Thousands of new chemicals are introduced into society each year – many as replacements for chemicals that are banned/phased-out
- New **chemicals of emerging concern (CEC)** have been identified in the Arctic. AMAP's new assessment documents evidence of the occurrence of 16 major groups of 'emerging chemicals' as well as micro-plastics in the Arctic.
- Some have POPs-like characteristics; some have been found to accumulate in Arctic wildlife
- Some (including CECs used in consumer products and pharmaceuticals) have been associated with local sources in Arctic communities
- Some have been identified for action at the national but not yet global level

NEW AMAP ASSESSMENT

Chemicals of Emerging Arctic Concern

Arctic Monitoring and Assessment Programme (AMAP)

Since 1998, the Arctic Monitoring and Assessment Programme (AMAP) has produced a series of comprehensive scientific assessments of Persistent Organic Pollutants in the Arctic. These assessments provide important information for policy-making in relation to chemical management, including further development of the Stockholm Convention.

A new AMAP assessment of **Chemicals of Emerging Arctic Concern** will be published during the second half of 2016, with policy findings communicated to the Arctic Council in 2017.

The assessment has been prepared by the AMAP POPs Expert Group under the leadership of Cjirithia de Wit (Stockholm University, Sweden), Derek Muir (Environment and Climate Change Canada), Katrin Verkamper (University of Aarhus, Denmark) and Jennifer Balmer (USA). Its main focus is Arctic occurrence of 17 main groups of chemicals/substances of emerging Arctic concern:

- Pharmaceuticals and personal care products (PPCPs)
- Polychlorinated naphthalenes (PCNs)
- Hexachlorobutadiene (HCBd)
- Current-use pesticides (CUPs)
- Pentachlorophenol (PCP) and pentachloroanisole (PCA)
- Organotin
- Polycyclic aromatic hydrocarbons (PAHs)
- New unintentionally generated PCBs
- Halogenated natural products (HNPs)
- Marine Plastics and Microplastics

Additional sections of the assessment address Toxicology, Contaminants of potential concern, Screening and Chemical properties, Policy-relevant Conclusions and Recommendations

Presentations of some of the key scientific results of this work will be made at the **DIOXIN2016** conference



AMAP-NO AMAP

Presence of new environmental contaminants in the Arctic means that this issue should continue to be a priority for AMAP and the Arctic Council

Deliverables and outreach

Chemicals of Emerging Arctic Concern (CEC)

Delivery to Arctic Council:

- Summary for policy-makers (April 2017)

Outreach targeting international scientific community:

- Scientific background report (end-2016)
- Dioxin2016 conference, August 2016
- International Conference on Arctic Science: Bringing Knowledge to Action, April 2017

Communication of results to relevant national agencies and international bodies

- Stockholm Convention (POPs review committee)
- UN ECE LRTAP Convention (relevant groups)
- Nordic Council (e.g. Nordic chemicals screening community)
- National governments and other relevant organizations (Online database of chemical properties; distribution of reports through national channels, EU-REACH, etc.)

Other POPs assessment components ongoing

Update on Biological effects of POPs and Mercury (completion in 2017)

Update on Climate Change and POPs (completion in 2018)

AMAP WG meeting and scientific conference

- **AMAP 30th Working Group meeting and 25 years Anniversary Seminar**
Nov 28 – Dec 1, 2016, Helsinki (Anniversary Seminar Nov 29)
- **International Conference on Arctic Science: Bringing Knowledge to Action**
April 24-27, 2017, Reston, Virginia, USA

Day 1: Keynote presentations

Showcasing scientific key findings from recent AC WG assessments / projects, etc.

Day 2: Science - knowledge – action

Parallel sessions with regional focus to enable multi-disciplinary interaction; presentations selected following open call for abstracts (ongoing)

Day 3: Science - policy dialog focus

Improving provision of scientific input to policy- decision-making fora; stakeholder engagement; educational component, etc.

Second announcement will be sent out within the next 2 weeks

Contributions also from CAFF and SDWG

www.amap.no

