

Perspectives on the use and communication of biomonitoring data

**Workshop on Understanding
Human Biomonitoring**

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Andrew Gilman, PhD

agilman@sustainable-solutions.ca

Uses of Human Biomonitoring Data

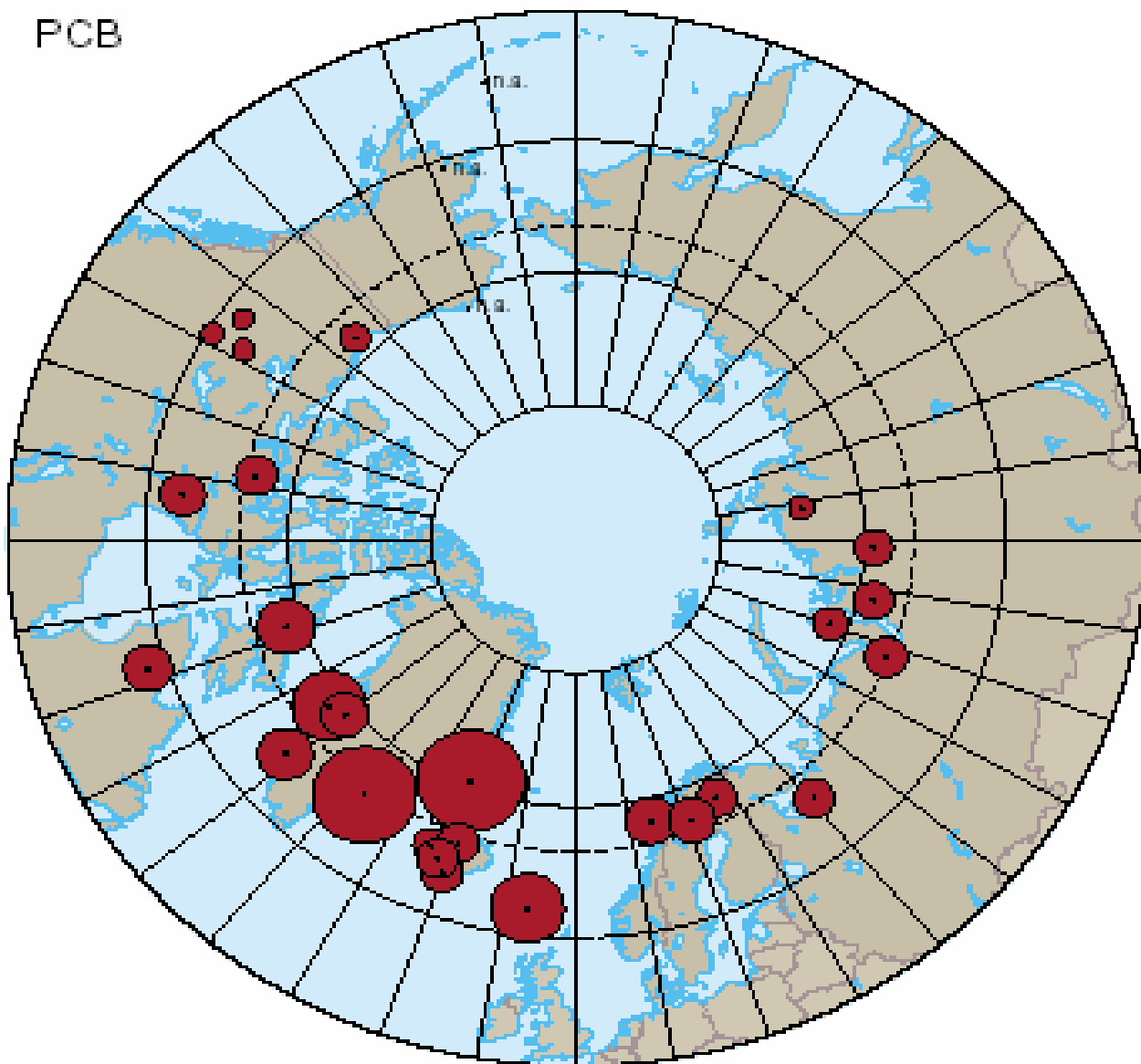
Some Key Issues....

- Powerful tools for POPs and metals
- Tracking increases and decreases (regional and local trends)
- Identifying unusual patterns (Russian DDT example, AMAP I Report)
- Identifying new/emerging POPs (e.g., PFOS, PBDE)

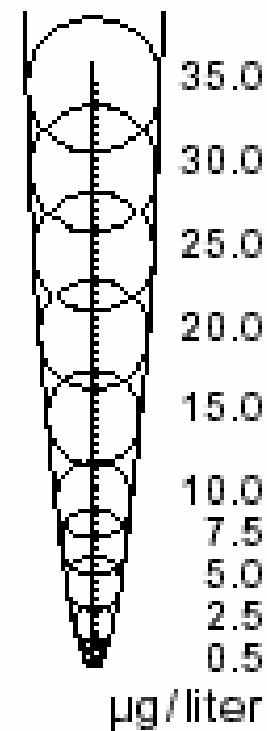
Regional PCB survey in 8 Arctic countries

Maternal blood values in ppb (AMAP, 2003)

PCB



PCB



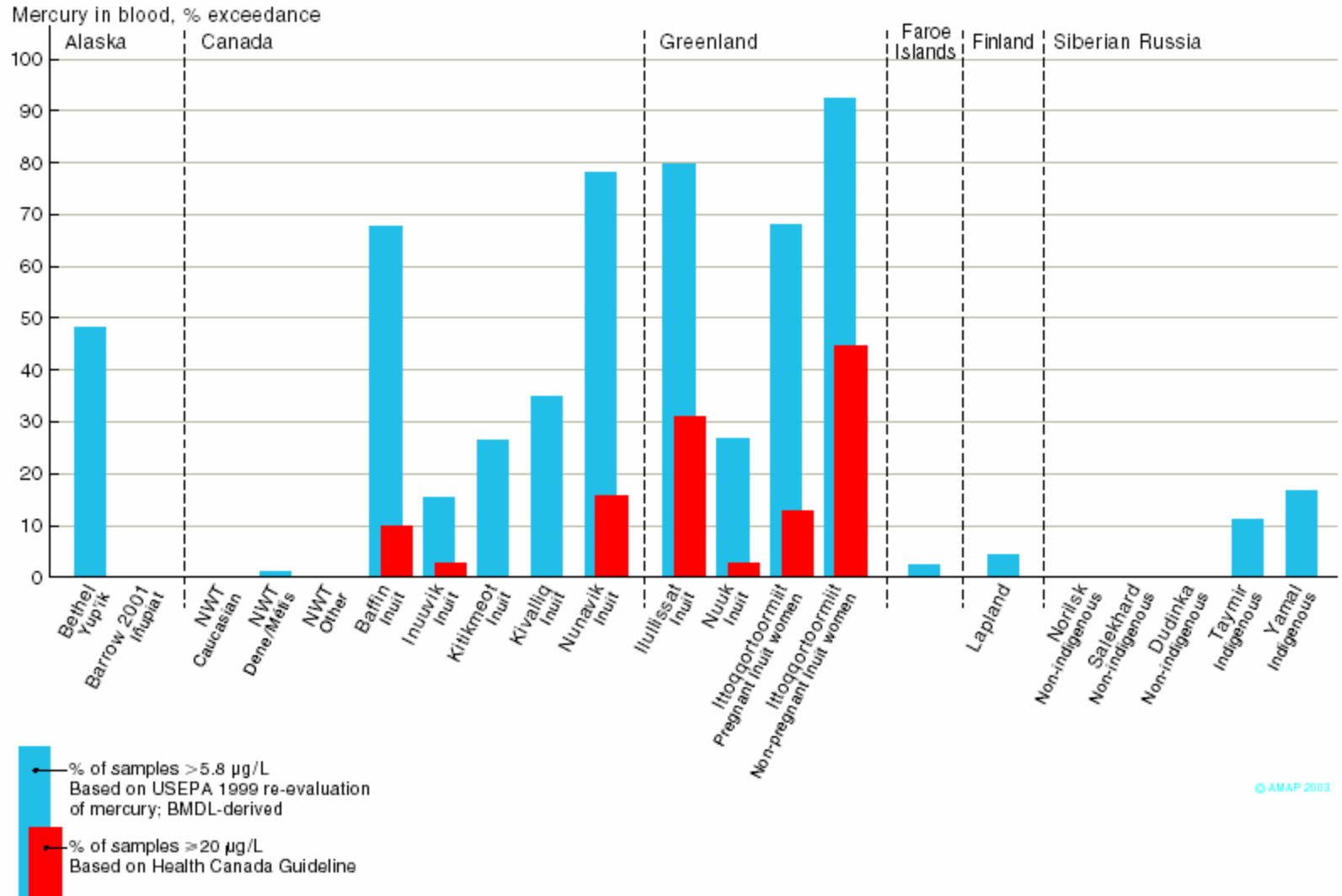
Uses of Human Biomonitoring Data

Identifying Health Risks

- Comparisons of human blood levels to guidelines or toxicokinetic study data
- Complexity in interpretation due to risks and benefits associated with diet
- Complexity in communicating results (what is the message? who is it for?)

Risk Exposure Comparisons

(Circumpolar Hg Guideline Exceedences)



Uses of Human Biomonitoring Data

Meeting needs of Stockholm Convention (Article 16: Effectiveness Evaluation)

- “Commencing 4 years after...entry into force of the Convention...evaluate the effectiveness of this Convention.”
- “...to facilitate such evaluation, the Conference of the Parties shall...(establish ways to)...provide itself with comparable monitoring data...”
- “The evaluation...shall be conducted on the basis of...reports and other monitoring information...(etc.)”

Uses of Human Biomonitoring Data

Quality and Quantity issues

- Blood (AMAP approach) *vs.* breast milk (WHO approach)....is there a problem? (detection levels, cultural acceptability, accessing remote populations, who uses the data?)
- Reporting issues (mean, geometric-mean, median; lipid weight *vs.* wet weight)
- QA/QC....essential (laboratory capacity building)
- Ability to compare inter-study results!

Communication of Data

Some Key Issues

- ‘Why are you spending \$5M per year doing this research if there is no problem?’
- Who decides to do what with the data? (role of Territorial or Federal Health Minister, Medical Officer of Health, Community/Elders, Scientist, etc.)
- Issue of generic population data vs. community/individual data (consent forms, medical interventions, individual identification)
- Individual responses to information (Broughton Island, 19830)

Communication of Data

Some lessons learned

- Set out the communication agreement up front
- Communicate as agreed
- Communicate fully, openly and in a timely fashion
- Communicate simply, using two-way tools (there are no stupid questions)
- Follow-up; get back with answers
- Involve all levels within community and institutions