

Table 3. Change point (CP) analyses for temporal trends of POPs in milk sampled from primiparous women in Uppsala in 1996-2016. Possible outliers are included. TEQs based on 2005 WHO TEFs⁹.

Compound	Period	Change point (CP, year)	n	p
BDE-47	1996-2016	2000	454	0.294
BDE-153	1996-2016	2002	454	0.01
BDE-209	2009-2016	-	149	ns
HBCD	1996-2016	2003	355	0.008
CB-28	1996-2016	-	503	ns
CB-153	1996-2016	2012	503	<0.001
di-ortho PCB ^a	1996-2016	2012	503	<0.001
mono-ortho PCB TEQ ^b	1996-2016	2002	503	0.003
non-ortho PCB TEQ ^c	1996-2016	-	369	ns
PCDD TEQ	1996-2016	-	332	ns
PCDF TEQ	1996-2016	-	332	ns
PCDD/F TEQ ^d	1996-2016	2002	332	0.022
Total-TEQ ^e	1996-2016	-	331	ns

^asum of CB-153, -138, and -180. ^bsum of CB-105, 118, 156, and 167. ^csum of CB-77, -126, and -169 TEQs. ^dsum of PCDD and PCDF TEQs. ^esum of mono-ortho PCB TEQs, non-ortho PCB TEQs, PCDD TEQs, and PCDF TEQs.

agreement with results from Swedish market basket studies performed in 1999, 2005, 2010 and 2015 showing declining exposure to these substances from food^{10,11}.

It is important to continue following concentrations of POPs in human milk from Swedish mothers in order to further investigate the temporal trends of PBDEs and HBCD and if the concentrations of PCBs and PCDD/Fs are stabilizing at current levels or continue to decrease.

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References:

- Lignell S, Aune M, Darnerud PO, Cnattingius S, Glynn A. (2009); *Environ Res* 109: 760-7
- Lignell S, Aune M, Glynn A, Cantillana T, Fridén U. (2014); Report to the Swedish Environmental Protection Agency, 2014-05-06
- Gyllenhammar I, Glynn A, Fridén U, Cantillana T, Aune M, Lignell S. (2017); Report to Swedish Environmental Protection Agency, 2017-11-01
- Aune, M, Fridén, U, Lignell, S. (2012); Report to Swedish Environmental Protection Agency, 2012-01-10
- Lignell s, Aune M, Darnerud, PO, Soeria-Atmadja D, Hanberg A, Larsson S, Glynn A. (2011); *J Environ Monit* 13:1607
- Glynn A, Aune M, Darnerud PO, Cnattingius S, Bjerselius R, Becker W, Lignell S. (2007); *Environ Health*, 6:2
- Sturlurdottir E, Gunnlaugsdottir H, Nielsen OK, Stefansson G. (2015); *PhD thesis*, School of Engineering and Natural Sciences, Reykjavik
- Lignell S, Aune M, Glynn A, Cantillana T, Fridén U. (2015); Report to Swedish Environmental Protection Agency, 2015-11-20
- van der Bergh M, Birnbaum LS, Dension M, De Vito M, Farland W, Feeley M et al. (2006); *Toxicol Sci* 93: 223-241
- National Food Agency. (2012); Report 7 (2012)
- National Food Agency. (2017); Report 26 (2017)