**Lipid-adjusted concentrations (ng/g lipid) of polybrominated diphenyl ethers (PBDEs) in serum samples collected in 2011-2013 from 517 women, a subset of the California Teachers Study (results as of 6/15/2013)**

| PBDE[a, b] | Geometric Mean (95% Confidence Interval) | Selected Percentiles | | | | Detection Frequency | Limit of Detection (LOD) range[c] |
|---|---|---|---|---|---|---|---|
| | | 25th | 50th | 75th | 95th | | |
| **BDE 28** | * | *<LOD* | *<LOD* | 1.93 | 4.56 | 44.3% | 0.618 – 1.78 |
| **BDE 47** | **14.5** (13.4 – 15.6) | 8.00 | 13.9 | 25.0 | 69.8 | 90.9% | 1.94 – 5.33 |
| **BDE 99** | * | *<LOD* | *<LOD* | 5.33 | 15.6 | 40.2% | 1.27 – 3.89 |
| **BDE 100** | **2.25** (2.06 – 2.45) | 1.02 | 2.10 | 4.14 | 11.6 | 82.4% | 0.298 – 1.78 |
| **BDE 153** | **5.44** (4.97 – 5.96) | 2.67 | 4.99 | 9.47 | 42.3 | 86.3% | 0.738 – 2.66 |

a. See page two for full names of PBDEs.
b. See page three for explanation of terms.
c. LOD range is reported for lipid-adjusted values.

* Geometric mean was not calculated because the chemical was found in less than 65% of the study group.

**Abbreviations, full chemical names, and Chemical Abstracts Service Registry Numbers (CASRNs) of polybrominated diphenyl ethers (PBDEs)**

| Abbreviation | Full Name | CASRN[a] |
|---|---|---|
| **BDE 28** | 2,4,4'-Tribromodiphenyl ether | 41318-75-6 |
| **BDE 47** | 2,2',4,4'-Tetrabromodiphenyl ether | 5436-43-1 |
| **BDE 99** | 2,2',4,4',5-Pentabromodiphenyl ether | 60348-60-9 |
| **BDE 100** | 2,2',4,4',6-Pentabromodiphenyl ether | 189084-64-8 |
| **BDE 153** | 2,2',4,4',5,5'-Hexabromodiphenyl ether | 68631-49-2 |

a. See page three for explanation of CASRN.

## Explanation of Terms

| | |
|---|---|
| **Lipid-adjusted concentrations** | Some chemicals measured in an individual's blood are affected by his or her levels of cholesterol and related substances (known collectively as lipids). A lipid-adjusted concentration takes this effect into account and is reported as, for example, nanograms per gram of blood lipid (ng/g). |
| **ng/g lipid** | Nanograms of the chemical per gram of blood lipid. |
| **Geometric mean** | The geometric mean is an estimated middle value of a set of numbers. This is different than the average, also called the "arithmetic mean". A geometric mean is sometimes calculated when the set of numbers contains some extreme values. For example, the geometric mean of the set of numbers "1, 2, 2, 3, 4, 5, 5, 6, 10, 100" is calculated by *multiplying* all ten numbers together and then *raising to the 1/10$^{th}$ power*, giving 4.8. To compare, the arithmetic mean is calculated by *adding* all ten numbers and *dividing by 10*, giving 14. |
| **95% confidence interval** | A *sample* is a subset of a larger *population*. A confidence interval for a statistical measure is a range of values estimated from *sample* data. This interval is likely to include the true value of the statistical measure, such as a geometric mean, for the larger *population*. A 95% confidence interval for a statistical measure implies that we are 95% confident that the range includes the true *population* value for this measure. |
| **Detection frequency (percent detected)** | The percentage of study participants with a measurable level of a chemical in their blood or urine. |
| **Percentiles** | Percentiles are best explained by an example: if the 75$^{th}$ percentile is 1.5 μg/L, this means that 75% of participants had levels less than or equal to 1.5 μg/L. |
| **Limit of detection (LOD)** | The LOD is the lowest level of a chemical that the laboratory can measure in blood or urine. |
| **Limit of detection (LOD) range (for lipid-adjusted levels)** | For lipid-adjusted chemicals, there is a range of LODs rather than a single value. This is because the laboratory LOD is divided by each participant's blood lipid level. Since the participants' blood lipid levels differ from one another, these calculations produce a range of LODs. |
| **Below the limit of detection (<LOD)** | Below the LOD means that the laboratory could not detect the chemical. This may have been because the chemical was not present at all or because it was present at such a low level that the laboratory could not measure it. |
| **CASRN - Chemical Abstract Services Registry Number** | The CASRN is a unique identification number assigned to individual chemicals by the Chemical Abstract Services division of the American Chemical Society. |