

What's New and Different?

The *Updated Tables* in this release include chemicals that have results available from the NHANES survey periods 2005-2006, 2007-2008, 2009-2010, and 2011-2012. New chemicals measured for the first time include copper, zinc, and selenium in serum; manganese, strontium, and tin in urine; cyclohexane-1,2-dicarboxylic acid mono(hydroxy-isononyl) ester (MHNCH) which is the urinary metabolite of 1,2- cyclohexane dicarboxylic acid, diisononyl ester (DINCH), a phthalate alternative; and 29 urinary metabolites of several volatile organic compounds.

Chemicals with updated data in this release are

- urinary NNAL;
- urinary metals and arsenic species;
- urinary perchlorate, nitrate, and thiocyanate;
- urinary phthalate metabolites;
- urinary polycyclic aromatic hydrocarbon metabolites;
- serum perfluorinated compounds;
- urinary environmental phenols and parabens;
- urinary metabolites of pyrethroids, herbicides, specific organophosphorus pesticides, and other pesticide metabolites;
- serum polybrominated diphenyl ethers (pooled);
- serum organochlorine pesticides and metabolites (pooled);
- serum mono-*ortho*-substituted polychlorinated biphenyls (pooled);
- serum non-dioxin-like polychlorinated biphenyls (pooled).

Beginning with the *Updated Tables, February 2015*, we present a data table for Urinary Inorganic-related Arsenic Species. The inorganic-related arsenic species is the sum of arsenite (arsenous III acid) + arsenate (arsenic V acid) + dimethylarsinic acid + monomethylarsonic acid. The sum is calculated using the concentrations of these four arsenic-related species from each individual NHANES participant. Inorganic-related arsenic may be a more toxicologically and health relevant measure than total urinary arsenic, which includes non-toxic organic arsenic species. A description of the calculation follows ([Calculation of Urinary Inorganic-related Arsenic Species](#)).

Changes to racial/ethnic categories

NHANES made changes in oversampling of population subgroups for the 2007-2010 survey periods. Beginning in 2007, adolescents were no longer oversampled, and all Hispanics were oversampled, rather than just Mexican American persons. Beginning in 2011 non-Hispanic Asians were oversampled. As a result of these changes and starting with NHANES 2011-2012, the number of racial/ethnic categories in the *National Report* has been increased from three to five: Mexican Americans, non-Hispanic black, non-Hispanic white, All Hispanic, and non-Hispanic Asian (Asian is the term used in the data tables). The non-Hispanic Asian category includes all persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea,

Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. More information about the NHANES 2011-2012 survey design and reporting guidelines is available at: http://www.cdc.gov/nchs/data/nhanes/analytic_guidelines_11_12.pdf.

We present data starting with NHANES 2011-2012 in a new data table to accommodate the new racial/ethnic categories. These data tables are distinguished from earlier (preceding) data tables by including the NHANES survey years in the title. For example, blood lead results from 1999-2010 are shown in one data table, followed by a data table showing results for 2011-2012.

Adult Cigarette Smokers and Nonsmokers: Analysis of Selected Chemicals in a Special Sample

Beginning with the NHANES 2011-2012 survey period, a special sample of adults (age 20 years and older) was used to measure select chemical groups that are associated with tobacco smoke exposure. This special sample includes adults who reported that they currently smoke cigarettes. Results for these chemicals are provided in the section, [Adult Cigarette Smokers and Nonsmokers: Analysis of Select Chemicals in a Special Sample](#). The chemicals included in this section are urinary metals and arsenic species; urinary perchlorate, nitrate, and thiocyanate; urinary metabolites of several polycyclic aromatic hydrocarbons (PAHs); and urinary metabolites of several volatile organic compounds. Future *Updated Tables* will present additional data for the special sample as results become available.

Chemicals No Longer Being Reported

Results for several chemicals will not be reported after NHANES 2009-2010 because their concentrations have been largely undetectable in previous survey periods. These chemicals are urinary 4-*tert*-octylphenol; the urinary metals, platinum and beryllium; the urinary phthalate metabolites, mono-cyclohexyl phthalate (MCHP) and mono-*n*-octyl phthalate (MOP); and the urinary organochlorine pesticide metabolites 2,4,5-trichlorophenol and 2,4,6-trichlorophenol. The phytoestrogen group of chemicals is not reported after NHANES 2009-2010 because the largely dietary sources remain unchanged, and urine concentrations of the phytoestrogens and metabolites have been relatively stable over time.

For the information in this section, "What's New and Different," contained in previous releases of *Updated Tables*, please see the Archives from *Updated Tables* at: <http://www.cdc.gov/exposurereport/>.