

Prioritised substance group: Lead

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Short overview of results of the activities carried out within HBM4EU in 2020 to answer the policy questions with reference to corresponding deliverables.

Policy Question	Short Summary of Results
1. What is the concentration of lead in the human blood nowadays (after phasing out leaded petrol) in the countries of Europe?	The work is progress in WP10. The first draft protocol has been elaborated for the statistical analysis. The relevant data and publications were collected.
2. Do blood lead levels of both adults and children still indicate permanent existence of lead exposure?	The work is progress in WP10. The first draft protocol has been elaborated for the statistical analysis. The relevant data and publications were collected.
3. What are the sources of still existing lead exposure in different countries of Europe?	The work is progress in WP10. The first draft protocol has been elaborated for the statistical analysis. The relevant data and publications were collected.
4. What kind of exposure sources are the most important for the children of various age groups and the younger or older adult population?	The work is progress in WP10. The first draft protocol has been elaborated for the statistical analysis. The relevant data and publications were collected.
5. Taking the hazard from transplacental lead exposure of the unborn child into consideration, what are the blood lead levels of pregnant women?	The work is progress in WP10. The first draft protocol has been elaborated for the statistical analysis. The relevant data and publications were collected. Unfortunately, there is only a few relevant studies.

AD5.4 - Reporting for first and second set of substances	Security: Public
WP5 - Translation of results into policy	Version: 1.1
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<p>6. Taking the presumably low concentration of lead in blood, is it feasible to measure blood lead levels in children from as small amount of blood as it can be gained from capillary samples? What criteria should be applied in order to avoid contamination from outside sources?</p>	<p>As lead is not investigated in the HBM4EU studies this question could not yet be addressed.</p>
<p>7. As it is difficult to connect later outcomes with exposures, which biomarkers of effects can be used in relation to effects caused by lead exposure?</p>	<p>A review on the biomarkers of effect associated with lead exposure and neurodevelopment is in progress. The literature has already been checked and 24 eligible studies were identified. The investigation of other health effects might be interesting; however, neurodevelopment is the major health effect related to exposure to lead.</p>