

**Question on notice no. 261**

**Portfolio question number: SQ18-000687**

**2018-19 Budget estimates**

**Community Affairs Committee, Health Portfolio**

**Senator Stirling Griff:** asked the Department of Health on 30 May 2018—

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( ) The NHMRC review of The Effects of Lead on Human Health conducted in parallel to the NT Review not only assessed systematic reviews, but also retrieved and assessed original trials not fully captured by systematic reviews and when information was missing, the researchers who conducted the original trials were contacted for the missing information. In response to SQ18-000206 which effectively asked why similar procedures were not applied in respect of the NT Review in circumstances where not doing this resulted in an insufficient evidence base to demonstrate the efficacy or otherwise of a natural therapy, the answer given included "selectively retrieving information from some primary studies but not others would also introduce bias into the review process". Was the answer to SQ18-000206 formulated by a person with higher degree qualifications and experience in experimental science?

(b) If upon further reflection and consideration of SQ18-000206 by a person with appropriate scientific training, the Department nevertheless considers the previous response to SQ18-000206 to be the appropriate answer to the question that was asked, what does this say about the reliability of, or bias in, the findings of the NHMRC Review of The Effects of Lead on Human Health?

(c) Alternatively, please provide an answer that appropriately responds to SQ18-000206.

**Answer —**

Please see the attached answer.

**Senate Community Affairs Committee**

**ANSWERS TO ESTIMATES QUESTIONS ON NOTICE**

**HEALTH PORTFOLIO**

**Budget Estimates 2018 - 2019, 29 & 30 May 2018**

**Ref No:** SQ18-000687

**OUTCOME:** 1 - Health System Policy, Design and Innovation

**Topic:** Natural Therapies Review

**Type of Question:** Written Question on Notice

**Senator:** Stirling Griff

**Question:**

a) The NHMRC review of The Effects of Lead on Human Health conducted in parallel to the NT Review not only assessed systematic reviews, but also retrieved and assessed original trials not fully captured by systematic reviews and when information was missing, the researchers who conducted the original trials were contacted for the missing information. In response to SQ18-000206 which effectively asked why similar procedures were not applied in respect of the NT Review in circumstances where not doing this resulted in an insufficient evidence base to demonstrate the efficacy or otherwise of a natural therapy, the answer given included “selectively retrieving information from some primary studies but not others would also introduce bias into the review process”. Was the answer to SQ18-000206 formulated by a person with higher degree qualifications and experience in experimental science?

b) If upon further reflection and consideration of SQ18-000206 by a person with appropriate scientific training, the Department nevertheless considers the previous response to SQ18-000206 to be the appropriate answer to the question that was asked, what does this say about the reliability of, or bias in, the findings of the NHMRC Review of The Effects of Lead on Human Health?

c) Alternatively, please provide an answer that appropriately responds to SQ18-000206.

**Answer:**

The NHMRC’s evidence review on the Effects of Lead on Human Health included two distinct research questions, comprising:

- 1) an Overview (systematic review of systematic reviews) to evaluate the health effects associated with low blood lead levels <5 µg/dL and 5 to 10 µg/dL in children and adults, with supplementary searches conducted to identify recently published evidence; and
- 2) a systematic review to evaluate the effectiveness of intervention strategies aimed at reducing blood lead levels at an individual level, in children and adults.

It is not correct to state that the Overview (conducted to inform question 1) retrieved and assessed those primary studies that were already reported in the included systematic review/s.

Rather, the Overview methodology comprised:

- An Overview of systematic reviews, focusing primarily on two comprehensive systematic reviews which considered the same or very similar questions as those addressed in the NHMRC's overview. Reporting of included primary studies was as per that of the systematic review/s; and
- Identifying and evaluating any additional studies (primary or systematic reviews) that had not already been considered in the abovementioned two systematic reviews by:
  - conducting a literature search to identify studies (including systematic reviews and primary studies) published between 2004 and 2013 that evaluated the health effects associated with low blood lead levels <5 µg/dL and 5 to 10 µg/dL in children and adults, and
  - checking the results of the literature search with those studies included in the two systematic reviews above, to identify any studies that had not already considered.

While the 'Evaluation of evidence related to exposure to lead' report does state that "where key information was missing... study authors were contacted", this statement pertains to the systematic review of primary studies conducted to inform question 2, and does not relate to the Overview component of the review.

The Cochrane Handbook for Systematic Reviews of Interventions details the process of preparing Cochrane systematic reviews. Chapter 22 of the handbook states that Overviews do not aim to repeat the evidence searches, study selection and analysis conducted by the included reviews, and they do not typically aim to identify systematically any additional studies or to extract additional outcomes from studies. This is not to imply that overviews of systematic reviews that undertake a more detailed analysis, including new searches and new analyses, (such as those undertaken in the lead review) are inappropriate, but they are not what the Cochrane handbook envisages for Cochrane Overviews.

As noted in the response to SQ18-000206, the Natural Therapies Review Advisory Committee considered supplementary information in addition to the overview reports for each in-scope therapy, including:

- submitted literature provided by stakeholders; and
- the results from supplementary searches conducted by NHMRC where few, or no, relevant systematic reviews were identified.

In relation to NHMRC's response to SQ18-000206, this question asked why primary literature was not retrieved in those cases "where evidence from the literature reviews was excluded or characterised as low quality". NHMRC stands by its comment that the selective retrieval of information from primary studies in this context would have introduced bias into the review process.