

Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* **MH** *clinical question-answering service*

Question

“In adults who have had prolonged exposure to heavy metals, specifically lead, what is the risk of developing cognitive problems and dementia?”

Clarification of question using *PRO* structure

Patients: Adults who have had prolonged exposure to heavy metals
Risk: Experienced prolonged exposure to heavy metals
Outcome: Cognitive problems; dementia

Clinical and research implications

No relevant systematic reviews, randomised controlled trials, or cohort/case control studies were found to answer this question.

What does the evidence say?

Number of included studies/reviews (number of participants)

N/A

Main Findings

N/A

Authors Conclusions

N/A

Reliability of conclusions/Strength of evidence

N/A

What do guidelines say?

Neither National Institute for Health and Care Excellence (NICE) nor Scottish Intercollegiate Guidelines Network (SIGN) guidelines discuss prolonged exposure to heavy metals or lead and risk of cognitive problems or dementia.

Date question received: 08/10/2014

Date searches conducted: 13/10/2014

Date answer completed: 15/10/2014

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
<i>SRs and Guidelines</i>			
NICE	(metal or lead) AND dementia	53	0
<i>Primary studies</i>			
PsycINFO	<p>PsycINFO; exp METALS/; 15182 results.</p> <p>PsycINFO; TOXICITY/ OR HAZARDOUS MATERIALS [+NT]/; 3052 results.</p> <p>PsycINFO; "heavy metal*".ti,ab; 303 results.</p> <p>PsycINFO; "LEAD (METAL)"/ OR LEAD POISONING/; 851 results.</p> <p>PsycINFO; "metal toxicity".ti,ab; 17 results.</p> <p>PsycINFO; "toxic metal".ti,ab; 9 results.</p> <p>PsycINFO; 1 OR 2 OR 3 OR 4 OR 5 OR 6; 18567 results.</p> <p>PsycINFO; exp DEMENTIA/; 53562 results.</p> <p>PsycINFO; COGNITIVE IMPAIRMENT/ OR MEMORY DISORDERS [+NT]/; 26250 results.</p> <p>PsycINFO; "cognitive decline".ti,ab; 6286 results.</p> <p>PsycINFO; 8 OR 9 OR 10; 74538 results.</p> <p>PsycINFO; 7 AND 11; 912 results.</p>		

	<p>PsycINFO; 12 [Limit to: (Methodology 0830 Systematic Review or 1200 Meta Analysis or 2000 Treatment Outcome/Clinical Trial)]; 28 results.</p> <p>PsycINFO; (lead adj3 exposure).ti,ab; 689 results.</p> <p>PsycINFO; 4 OR 14; 1091 results.</p> <p>PsycINFO; 8 AND 15; 13 results.</p>		
Embase	<p>EMBASE; "LEAD (METAL)"/ OR LEAD POISONING/; 10679 results.</p> <p>EMBASE; exp DEMENTIA/; 231354 results.</p> <p>EMBASE; (lead adj3 exposure).ti,ab; 7486 results.</p> <p>EMBASE; 22 OR 24; 15778 results.</p> <p>EMBASE; 23 AND 25; 103 results.</p>		
Medline	<p>MEDLINE; "LEAD (METAL)"/ OR LEAD POISONING/; 10413 results.</p> <p>MEDLINE; exp DEMENTIA/; 127837 results.</p> <p>MEDLINE; (lead adj3 exposure).ti,ab; 6880 results.</p> <p>MEDLINE; 17 OR 19; 15144 results.</p> <p>MEDLINE; 18 AND 20; 46 results.</p>		
Summary	NA	NA	

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