Supplementary

Table S1 Search strategy in PubMed

Search	Query
#1	(((((Diabetes Mellitus[Title]) OR (DM[Title])) OR (T2DM[Title])) OR (Diabetes[Title])) OR (Type 1 diabetes[Title])) OR (Type 2 diabetes[Title])
#2	((("Mercury"[Mesh]) OR (Mercury)) OR (methylmercury)) OR (Hg)
#3	#1 AND #2

Table S2 Search strategy in Embase

Search	Query
#1	“diabetes mellitus”:ti OR dm:ti OR t2dm:ti OR diabetes:ti OR “type 1 diabetes”:ti OR “type 2 diabetes”:ti
#2	“mercury”/exp
#3	mercury OR methylmercury OR hg
#4	#2 OR #3
#5	#4 AND #1

Table S3 Search strategy in Cochrane Library

Search	Query
#1	MeSH descriptor: [Mercury] explode all trees
#2	(mercury) OR (Hg) OR (methylmercury)
#3	#1 OR #2
#4	(diabetes mellitus):ti OR (dm):ti OR (t2dm):ti OR (diabetes):ti OR (type 1 diabetes):ti OR (type 2 diabetes):ti
#5	#3 AND #4

Table S4 Search strategy in Web of Science

Search	Query
#1	TI=(''Diabetes Mellitus'' OR ''DM'' OR ''T2DM'' OR ''Diabetes'' OR ''Type 1 diabetes'' OR ''Type 2 diabetes'')
#2	TS=(''Mercury'' OR '' methylmercury'' OR ''Hg'')
#3	#1 AND #2

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Table S5 Agency for healthcare research and quality (AHRQ) checklist (cross-sectional) (28) for six studies included in this meta-analysis

Item	I	II	III	IV	V	VI
1) Define the source of information (survey, record review)	1	1	1	1	1	1
2) List the inclusion and exclusion criteria for exposed and unexposed subjects (cases and controls) or refer to previous publications.	1	1	1	1	1	1
3) Indicate the period used for identifying the patients.	0	1	1	1	1	1
4) Indicate whether or not the subjects were consecutive if not population-based.	1	1	1	1	1	1
5) Indicate if the evaluators of the subjective components of study were masked to other aspects of the status of the participants.	1	1	1	1	1	1
6) Describe any assessments undertaken for quality assurance purposes (e.g., test/retest of primary outcome measurements).	1	1	1	1	1	1
7) Explain any patient exclusions from the analysis.	1	0	0	0	0	0
8) Describe how confounding was assessed and/or controlled	0	1	1	1	1	1
9) If applicable, explain how missing data were handled in the analysis.	0	0	0	0	0	0
10) Summarize patient response rates and completeness of data collection.	0	0	0	0	0	0
11) Clarify what follow-up, if any, was expected and the percentage of patients for which incomplete data or follow-up was obtained.	0	0	0	0	0	0
Total score	6	7	7	7	7	7

Studies: I=6; II=7; III=7; IV=7; V=7; VI=7.

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Table S6 Newcastle-Ottawa Scale (NOS) (case-control) (28) for one study included in this meta-analysis

Item	Options	I
Was the case definition adequate	a. Yes, with independent validation*;	1
	b. Yes, for example, record linkage or based on self-reports;	
	c. No description.	
Representativeness of the cases	a. Consecutive or obviously representative series of cases*;	1
	b. Potential for selection biases or not stated.	
Selection of controls	a. Community controls*;	1
	b. Hospital controls;	
	c. No description.	
Definition of controls	a. No history of disease (endpoint)*;	1
	b. No description of source.	
Comparability	a. Study controls for_ _ _ (selecting the most important factor) *; b. Study controls for any additional factor* (these criteria could be modified to indicate specific control for a second important factor.)	1
Ascertainment of exposure	a. Secure records (e.g., surgical records) *;	1
	b. Structured interview blinded to case/control status*;	
	c. Interview not blinded to case/control status;	
	d. Written self-report or medical record only;	
	e. No description.	
Same method of ascertainment for cases and controls	a. Yes*; b. No.	1
Non-response rate	a. Same rate for both groups*;	0
	b. Non-respondents described;	
	c. Rate different and no designation.	
Total score		7

Study: I=7; *One point.

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Table S7 Newcastle-Ottawa Scale (NOS) (cohort) (28) for one study included in this meta-analysis

Item	Options	I
Representativeness of the exposed cohort	a) Truly representative of the average __(describe) in the community#;	1
	b) Somewhat representative of the average __in the community#;	
	c) Selected group of users e.g., nurses and volunteers);	
	d) No description of the derivation of the cohort.	
Selection of the non-exposed cohort	a) Drawn from the same community as the exposed cohort#;	1
	b) Drawn from a different source;	
	c) No description of the derivation of the non-exposed cohort.	
Ascertainment of exposure	a) Secure record (e.g., surgical records)#;	1
	b) Structured interview#;	
	c) Written self-report;	
	d) No description.	
Demonstration that the outcome of interest was not present at start of study	a) Yes# b) No.	1
Comparability of cohorts on the basis of the design or analysis	a) Study controls for __ (select the most important factor)#; b) Study controls for any additional factor# (These criteria could be modified to indicate specific control for a second important factor.)	1
Assessment of outcome	a) Independent blind assessment#;	1
	b) Record linkage#	
	c) Self-report;	
	d) No description.	
Was follow-up long enough for outcomes to occur	a) Yes (select an adequate follow-up period for outcome of interest)#; b) No.	1
Adequacy of follow-up of cohorts	a) Complete follow-up - all subjects accounted for#;	1
	b) Subjects lost to follow-up unlikely to introduce bias—small number lost - >__% (select an adequate%) follow-up, or description provided of those lost)#;	
	c) Follow-up rate <___% (select an adequate%) and no description of those lost;	
	d) No statement.	
Score		8

Study: I=8; #One point.

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