INFORMATION FIELDS COLLECTED FROM EACH SOURCE

The input template contains 76 information fields with 26 parameters that potentially determine the exposure (d):

- Coding of the data source
  - Reference identification
  - Document type
  - Quality score for the determinant description
  - Quality score for sampling and analytical methods
- Description of the occupation titles, tasks, etc., as described in the document
  - Sampling year (d)
  - Sample ID
  - Occupation/workstation title
  - Task
  - Tool
  - Tool make and model
  - Material
  - Percentage of silica specified in the document
  - % silica (type not specified) in the material
  - % quartz in the material (d)
  - % cristobalite in the material (d)
  - % tridymite in the material (d)
  - % tripoli in the material
  - Analytical method used to identify the bulk material
- Coding of occupation titles, tasks, material and tools
  - Occupation title standardized for Québec (d)
  - Task standardized for Québec (d)
  - Material standardized for Québec (d)
  - Tool standardized for Québec (d)
- Coding of construction sites
  - Class of construction site (d)
  - Type of construction site (d)

- Description of the quantitative exposure parameters
  - Number of samples (n)
  - Arithmetic mean (if n > 1)
  - Arithmetic standard deviation (if n > 1)
  - Geometric mean (if n > 1)
  - Geometric standard deviation (if n > 1)
  - Minimum value (if n > 1)
  - 5^{th} percentile (if n > 1)
  - 10^{th} percentile (if n > 1)
  - Median (if n > 1)
  - 90^{th} percentile (if n > 1)
  - 95^{th} percentile (if n > 1)
  - Maximum value (if n > 1)
  - Other statistical value 1 (if n > 1)
  - Other statistical value 1 - definition (if n > 1)
  - Gross value of the measurement (if n=1)
  - Calculated value based on the measurement objective
  - Sampling duration (minutes) (d)
  - Permissible exposure value (PEV) for quartz in Québec (Québec has only one PEV – TWAEV for quartz, namely a "Time-weighted average exposure value" over a period of 8 hours)
  - Adjusted average exposure value (AAEV) for quartz in Québec (calculation based on the sampling duration)
- Coding of the exposure characteristics
  - Contaminant measured
  - Measurement objective (d)
  - Type of sample (d)
  - Method used for sampling (d)
  - Method used for analyzing the sample (d)
  - Specific method used for analyzing the sample
  - Details of the specific method if it is not referenced
  - Analytical measurement unit
  - Limit of detection of the specific analytical method
  - Origin of the sampling duration value
  - Origin of the exposure value based on the measurement objective from the raw data or the statistical parameters
  - Contribution of a source near the exposure (d)
  - Nature of this exposure source
  - Details about the other polluting task

    - Nature of the sampling site (d)
    - Employee training in the risks associated with silica (d)
    - Association of the measurement with another measurement in the database
    - Nature of the association
    - Details about this association
- Coding of the control methods
    - Use of a means of prevention other than a respirator (d)
    - General ventilation (d)
    - Local exhaust ventilation near the tool (d)
    - Local exhaust ventilation built into the tool (d)
    - Wet process (spraying) (d)
    - Wet process built into the tool (d)
    - Isolation of the source (d)
    - Other control (d)
    - Details about the control methods
- Coding of respirators
    - Use of a respirator
    - Type of respirator used
    - Comments about the respirators
- General information
    - Availability of photographs
    - General comments

ADDITIONAL INFORMATION ABOUT THE FIELDS

IN THE

SILICA DATABASE

Document type

Quality score for the determinant description

Quality score for sampling and analytical methods

Analytical method used to identify the bulk material

Occupation titles standardized for Québec

Tasks standardized for Québec

Materials standardized for Québec

Tools standardized for Québec

Class of construction site

Type of construction site

Measured contaminant

Objective of the measurement

Type of sampling

Method used for sampling

Method used for sample analysis

Specific method used for sample analysis

Analytical measurement unit

Origin of the sampling duration value

Origin of the exposure value based on the measurement objective from the raw data or statistical parameters

Contribution from a source near the exposure

Nature of this source of exposure

Nature of the sampling site

Association of the measurement with another measurement in the database

Employee training on the risks associated with silica

Identification of measurements whose value is below the limit of detection

For the “Arithmetic mean,” “Arithmetic standard deviation,” “Geometric mean,” “Geometric standard deviation,” “Minimum value,” “5th percentile,” “10th percentile,” “Median,” “90th percentile,” “95th percentile,” “Maximum value,” “Other statistical value,” “Gross value of the measurement” fields:

If the value reported in the document was “below the limit of detection” or “between the limit of detection and the limit of quantification” the value entered in the field was -1.

Use of a means of prevention other than a respirator

- If the choice of this column is “Not specified (1)” on one line, the content of the 7 following columns, “VentGen / ventAspP / ventAspO / procHAr / procHO / isoSrc / MaitrA,” is necessarily “Not applicable (2)”
- If the choice of this column is “No (4)” on one line, the content of the 7 following columns, “VentGen / ventAspP / ventAspO / procHAr / procHO / isoSrc / MaitrA,” has to be “No (4)”
- If the choice of this column is “Yes (5)” on one line, the content of the 7 following columns, “VentGen / ventAspP / ventAspO / procHAr / procHO / isoSrc / MaitrA,” can be either “NS (1),” “No (4),” or “Yes (5).”

General ventilation (VentGen**)**

Local exhaust ventilation near the tool (ventAspP**)**

Local exhaust ventilation on the tool (ventAspO**)**

Wet process (Spraying) (procHAr**)**

Wet Process integrated into the tool (procHO**)**

Insulation of the source (isoSrc**)**

Other control method (MaitrA**)**

Use of a respirator

- If the choice in this column is “Not specified (1)” on one line, the content of the following column has to be “Not applicable (2)”
- If the choice of this column is “No (4)” on one line, the content of the following column, “APR_T,” has to be “Not applicable (2)”
- If the choice in this column is “Yes (5 to 7)” on one line, the content of the following column, “APR_T,” can be all the choices except “Not applicable (2).”

Type of respirator used (APR_T**)**