

Search strategy for toxicity review papers

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This is a paper for discussion. This does not represent the views of the Committee and should not be cited.

60. Preliminary searches have been undertaken to identify relevant recent authoritative review and consider the searching strategies used in these to determine whether the search approaches from a single review or combination of reviews can be used as a basis to identify new literature, or if these will only be used to inform a search approach for primary literature.

Preliminary searches

61. A preliminary search was conducted in the chemical inventory of the bibra TRACE database in order to identify potentially relevant terms for subsequent searching. The following chemicals (and associated CAS RNs) were identified:

- Fluoride (CAS RN 16984-48-8),
- Sodium fluoride (CAS RN 7681-49-4),
- Potassium fluoride (CAS RN 7789-23-3),
- Calcium fluoride (CAS RN 7789-75-5),
- Ammonium fluoride (CAS RN 12125-01-8),
- Magnesium fluoride (CAS RN 7783-40-6),
- Fluorosilicic acid (CAS RN 16961-83-4) also known as hexafluorosilicic acid,
- Ammonium monofluorophosphate (CAS RN 20859-38-5),
- Sodium monofluorophosphate (CAS RNs 7631-97-2 and 10163-15-2),
- Potassium monofluorophosphate (CAS RN 14104-28-0),
- Calcium monofluorophosphate (CAS RN 7789-74-4),
- Sodium fluorosilicate (16893-85-9) also known as disodium hexafluorosilicate or sodium hexafluorosilicate,
- Potassium fluorosilicate (CAS RN 16871-90-2),
- Ammonium fluorosilicate (CAS RN 16919-19-0),
- Magnesium fluorosilicate (CAS RN 16949-65-8),
- Calcium fluorosilicate (CAS RN 16925-39-6),
- Magnesium monofluorophosphate (no CAS RN identified) was not chemically indexed but has been suggested for further consideration for completeness.

62. A search was conducted in the bibra TRACE chemical toxicity database using the above CAS RNs, limiting the results to comprehensive or authoritative reviews published in the past 10 years (between 2015 and 2025 inclusive).

63. The list of potentially relevant reviews returned in the TRACE search was screened to identify those publications that covered one or more of the key endpoints under consideration, and which included documentation of the specific search strategy employed.

64. The following relevant publications were identified, ordered by date:

- ANSES (2025),
- EFSA (2025),
- NTP (2024),
- HRB (2022),
- CADTH (2019),
- Jack et al (2016): a report to the Australian NHMRC. This expert group is not considered further in the current proposal, since CADTH (2019) included an update to this review,
- RSNZ (2014): Although this report falls outside the selected publication window, it was referenced in a report from the New Zealand government

(OPMSCA, 2021). The latter considered new research on fluoridation and comprehensive reviews published subsequently but did not give further details on specific search strategies. This expert group is not considered further in the current proposal.

65. Details of the search strategies utilised in each review are provided in Annex A document for awareness in case Members wish to have more information.