Section 2. Cancer in humans

Section 2 summarizes all of the pertinent epidemiological studies and identifies tumour sites for which there is sufficient, limited or inadequate evidence of carcinogenicity in humans.

Instructions at a glance

1. Section 2 is a systematic review of original research. Generally only analytical epidemiological studies (typically cohort and case–control studies) are included.

2. The literature search will be conducted using the HAWC Literature Search tool (a collaborative workspace for conducting risk assessments for human health; https://hawcproject.org/). Initial searches will be provided by the IARC secretariat and further refined by the Working Group.

3. Text is written in Word and submitted electronically via the IARC Monographs Online Publication System. Included studies are described individually, providing essential details about the study and the key results. Information given in the tables does not need to be repeated in the text.

4. Tables for Section 2 are constructed using the IARC Table Builder linked to the IARC Monographs Online Publication System.

5. Your assignment should be prepared before the meeting according to the deadline provided to you.

The Working Group conducts a systematic review of original research. Normally only analytical epidemiological studies (typically cohort and case–control studies) are included. When multiple publications are available for a single study, only the most recent or most informative publication is described in detail. Well-conducted quantitative meta-analyses may also be reviewed. Case reports and descriptive studies (correlation or ecological studies) should be reviewed only when they are the only information available or when they add materially to other evidence. Narrative reviews, commentaries and letters that do not provide relevant original data are not reviewed or cited.

Identifying the relevant information

Searching the literature

The Working Group identifies relevant peer-reviewed literature through comprehensive searches of relevant databases (e.g. PubMed). Additional studies may be identified by hand searching or from past Monographs, government documents, authoritative reviews or, expert knowledge of the literature. The HAWC Literature Search tool documents the search topics, terms, sources, and identified studies. Search
terms are drafted by the IARC secretariat and further refined by the Working Group. Further detail on these topics and associated search terms is available at https://hawcproject.org/.

Instructions on how to use the HAWC Literature Search tool can be found in this video.

**Screening and organizing the results**

The Working Group screens the retrieved literature for relevance. The IARC secretariat can assist with the initial screen focused on exclusion of studies that do not address the agent or cancer in humans. Other exclusion criteria (e.g. ecological studies and case reports) used by the Working Group are documented in HAWC (https://hawcproject.org/) using tags.

The Working Group considers all included studies. Using the literature tagging function in HAWC (https://hawcproject.org/), the Working Group organizes the studies by cancer site and/or study design, and by additional sub-topics according to the monograph outline. Studies may fall into more than one topic or category. Default tags for included and excluded studies are provided by the IARC secretariat and if necessary may be further refined by the Working Group.

Literature trees (in https://hawcproject.org/) document the number of studies identified, screened, excluded and categorized per category of evidence.

See page 8 of the Preamble to the IARC Monographs for further guidance about the types of studies included.

**Summarizing the evidence**

Once tagging is complete, the IARC secretariat reviews the results and may refine the outline and writing assignments, considering the extent of relevant evidence and needed expertise.

**Text**

Text is written in Word and uploaded electronically via the IARC Monographs Online Publication System. Included studies are described individually, providing essential details about the study (design, location, number of subjects) and the key results. The level of detail should be proportionate to the importance of the study and give only the minimum detail needed to evaluate the particular study in the context of all of the studies presented. Information given in the tables does not need to be repeated in the text unless it is especially important for interpreting the results. When there are multiple publications on a single study, previous papers may be briefly indicated in the text as Working Group comments or in the comments field of the table.

Less informative studies may be either described in a brief, summary style giving key characteristics and results of the studies or in the aggregate.
For each study or group of studies, it is important to include an expert assessment of the strengths and limitations as well as important points of interpretation, which should be indicated in square brackets [ ]. Study strengths and limitations are noted in the tables (see below).

Subsections describing a number of studies may have a brief introduction describing the included literature, the reasons for exclusions, if any, and highlighting important issues of interpretation.

**Tables**

Tables for Section 2 are constructed using the IARC Table Builder linked to the IARC Monographs Online Publication System. Please fill in all of the fields provided for descriptive information and results for each study.