1. At the 59th Session in May 2017, the Governing Council expressed “its support to the Director in his effort to work with senior leadership at WHO to further enhance cooperation” and “encouraged the development of a standard operating procedure to optimize communication and coordination in relation to cancer hazard identification and risk assessment” (Resolution GC/59/R2).

2. At the 70th Session in May 2017, the World Health Assembly requested the WHO Director-General “to enhance the coordination between IARC and other parts of WHO on assessments of hazards and risks, and on the communication of those assessments” (WHA Resolution WHA70.12).

3. The Director met with the WHO Director-General in August 2017 to agree on a way forward in relation to cancer hazard identification and risk assessment. In response the Director prepared a draft IARC-WHO Standard Operating Procedure (SOP) for the Monographs and Handbooks of Cancer Prevention which was sent to WHO/HQ in November 2017. Since that time the draft SOP has been developed through consultation between IARC and WHO/HQ, coordinated by the Deputy Director-General/Programmes, to produce the agreed version for implementation contained in Annex 1.

**Underlying principles**

4. Unlike WHO, IARC does not conduct normative work, for example by producing guidelines, recommendations or policies. However, WHO Member States and other stakeholders may be unaware of the distinctions in roles, responsibilities and underlying methodologies for the generation of the different documents of WHO and IARC. As a consequence the SOP provides for a close cooperation between IARC and WHO/HQ on the nature, meaning and interpretation of their respective carcinogen hazard identification and risk assessment activities.

5. The SOP ensures transparency and coordination between IARC and WHO/HQ in the selection of agents and timing of evaluations; permits an extended period in which to prepare jointly for the dissemination and communication of evaluations; and maintains clear lines of responsibility for the Monograph and Handbook programmes in line with IARC’s governance.

6. Given the overall responsibility for the Monograph and Handbook programmes rests with the IARC Director, the final decision on the agents to be evaluated and the timing of those evaluations are his/her responsibility. The Scientific Council at its 54th Session reiterated this by emphasizing that “the selection of agents and timing of their evaluations should continue to be solely science
driven and decided by the Director of IARC” (Document GC/60/4). However, the SOP ensures that such decisions are taken in full consultation with WHO/HQ including with the WHO Director-General’s Office. The IARC Director is responsible for his/her decisions to the Governing Council, of which the WHO Director-General is a member.

7. The conduct of carcinogen hazard identification by IARC and of risk assessment by the Joint FAO/WHO Meeting on Pesticide Residues in Food (JMPR) and the Joint FAO/WHO Expert Committee on Food Additives (JECFA) could on occasion result in the perception of there being two different evaluations arising from within WHO. IARC and WHO/HQ are in agreement that future evaluations must be coordinated to avoid this perception. Therefore in the specific case of carcinogenic risks in food (domains covered by JMPR and JECFA), the IARC Monographs will conduct an evaluation only if the IARC Director and WHO Deputy Director-General/Programmes agree this does not duplicate work or present a risk of contradictory evaluations across the hazard identification and risk assessment programmes.

8. The Monographs and Handbooks have well-established methodologies as precisely defined in the Monograph Preamble and Handbook Working Procedures of the two programmes respectively. These procedures are regularly updated as the underlying science evolves.

9. The Director has decided that both the Preamble (in November 2018) and the Working Procedures (Screening) (February/March 2019) will be revised over the next year by external Advisory Groups comprised of independent scientific experts. WHO/HQ will be invited to both Advisory Groups as a part of the IARC-WHO/HQ secretariat. Both processes will involve wide and transparent consultation, for example with the scientific community, governments, regulatory agencies, civil society and private sector entities.

10. The current SOP (see Annex 1) agreed by IARC and WHO, will be implemented forthwith recognizing that it will be updated jointly based on further consultation and experience gained in its application.

**Additional areas of collaboration between IARC and WHO**

11. While there has been an understandable focus recently on addressing the areas of hazard identification and risk assessment, it is important to recognize the many productive areas of collaboration between IARC and WHO, across all three levels of the organization. The collaboration encompasses joint research projects and technical cooperation, participation in expert groups as well as contributions to more strategic agendas, notably in relation to noncommunicable diseases.

12. In order to illustrate to the Governing Council the extent of the many positive areas of collaboration between IARC and WHO, a brief overview is provided by topic area in Annex 2.
Requests to the Governing Council

13. The Governing Council is requested to note the progress made in terms of the collaboration between IARC and WHO to enhance coordination on assessments of hazards and risks, and on the communication of those assessments.

14. The Governing Council is requested to endorse the interim SOP (in Annex 1) as a basis for implementing coordination between IARC and WHO on assessments of hazards and risks, recognizing the expectation that the SOP will be updated based on further consultation and experience gained in its application.

15. The Governing Council is requested to note the many positive collaborations between IARC and WHO and to support the Director to engage in strategic discussions with the senior leadership at WHO to enhance cooperation in areas of mutual priority.
Annex 1

Interim Standard Operating Procedure (SOP):¹

International Agency for Research on Cancer (IARC) Monographs and Handbooks

Background

1. The World Health Organization (WHO) and IARC are science- and evidence-based organizations with a focus on public health. Their respective risk assessment and carcinogen hazard identification programmes rely on scientific data and their evaluation by credible scientists, free from vested interests, who conduct systematic reviews of such information to produce authoritative documents to advance knowledge.

2. IARC differs from WHO in that it does not conduct normative work, for example by producing guidelines, recommendations or policies. Rather, IARC conducts a wide range of research on the occurrence, causes and prevention of cancer as well as producing the WHO Classification of Tumours, the IARC Monographs and IARC Handbooks of Cancer Prevention. The IARC Monographs Programme, by convening interdisciplinary working groups of expert scientists, provides a scientific evaluation of carcinogenic hazards based on a precisely defined methodology (described in the "Monograph Preamble"). The IARC Handbooks of Cancer Prevention follow a similar approach to the Monographs but evaluate evidence on preventive interventions. Each working group meeting may include one or more individual agents or evaluations.

3. WHO, in analogous manner to IARC, follows precisely defined procedures for conducting risk assessments and for the production of guidelines in the context of its normative and standard-setting work, provided in response to requests for guidance on specific topics from WHO Member States, WHO country offices or other public entities. The Guideline Review Committee was established to ensure that WHO guidelines are of high methodological quality and are developed through a transparent, evidence-based and conflict of interest free decision-making process (as per WHO Handbook on Guideline Development).

4. WHO Member States and other stakeholders may be unaware of the distinctions in roles, responsibilities and underlying methodologies for the generation of the different documents of WHO and IARC. As a consequence there needs to be clear separation of mandates as well as a close cooperation and coordination in planning and communication of Monograph and Handbook conclusions and evaluations to provide an integrated and coherent message to all stakeholders.

5. The current document provides a standard operating procedure (SOP), which aims to manage and coordinate work between WHO/HQ and IARC, with key participants, clear timelines and responsibilities as well as relevant information on strategic planning, notification, evaluation and dissemination.

6. The SOP will be implemented notwithstanding the ongoing discussion between the WHO Guideline Review Committee and IARC in relation to the Monograph and Handbook methodologies. The SOP will be updated as experience is gained in its application and in consultation with WHO/HQ.

¹ The interim SOP, agreed by IARC and WHO, will be implemented forthwith recognizing that it will be updated jointly based on further consultation and experience gained in its application.
Key participants
7. At IARC, the Section of Evidence Synthesis and Classification (ESC) is responsible for both the Monographs and Handbooks, each being handled by a Group within ESC, namely the IARC Monographs (IMO) and IARC Handbooks (IHB) Groups. For each evaluation meeting there is an assigned Responsible Officer.

8. The technical counterparts in WHO (Clusters/Departments) to those at IARC (in ESC/IMO and ESC/IHB) will depend on the particular agent(s) under evaluation at each Monograph or Handbook meeting. For each agent under evaluation a WHO Liaison (Department Director or nominee) may be appointed by the WHO Deputy Director-General/Programmes (DDG/P). Although this is an essential component of this SOP it is recognized that for some agents under evaluation WHO may prioritize and decide its participation based on the merits of the case.

9. Coordination in the communication of Monograph and Handbook evaluations is a core aim of this SOP and will be conducted in light of the WHO Strategic Framework for Communication. In this context, the IARC Communications Group (COM), within the IARC Director’s Office, works directly with the WHO Department of Communications (DCO). Within Regional Offices, the Regional Directors, noncommunicable disease and/or cancer leads, as well as the communication offices are key stakeholders who should be fully aware of planned and completed evaluations.

Strategic planning
10. An “Advisory Group to Recommend Priorities” made up of external scientific experts meets every five years in relation to the Monographs programme. An analogous process is anticipated for the Handbooks. IARC provides the secretariat to the meeting but does not participate in the recommendation of priority agents for evaluation.

11. The Advisory Group considers the results of a public call for nominations of agents and is responsible for recommending the priorities for the programme. All agents on the final retained list are priorities for evaluation, even though the Advisory Group may make an additional sub-classification of “high, medium or low”. To be efficient, IARC may evaluate several priority agents in a single Monograph meeting, for example where chemicals belong to the same class of compounds.

12. As specified in the Preamble to the IARC Monographs, agents are selected for review by the Advisory Group on the basis of two main criteria: (a) evidence of human exposure and (b) some evidence or suspicion of carcinogenicity. Accordingly, in recommending priorities, the Advisory Group assesses the nature and level of human exposure (“exposure profile”) to the different agents as well as the overall state of scientific evidence pointing to potential carcinogenicity.

13. The composition of the Advisory Group and the result of its deliberations are published in a full report on the IARC internet site and in summary form in an open access article, currently in The Lancet Oncology journal (for the Monographs).

14. WHO/HQ staff have been invited to participate in previous Advisory Groups but there has not been a systematic, organization-wide preparation prior to the meetings. To strengthen future participation, the IARC Director (IARC DIR) will issue an invitation to the WHO DDG/P to assign one or more WHO/HQ staff to be a part of the IARC-WHO/HQ secretariat of the Advisory Groups six months prior to the scheduled meeting. The names of the WHO secretariat staff nominated by the WHO DDG/P should be received at IARC a minimum of three months prior to the meeting.
15. IARC will send to the WHO secretariat staff the list of agents to be discussed following the public call for nominations. WHO/HQ may propose additional agents to the Advisory Group as priorities for evaluation. WHO/HQ will make IARC aware of existing or planned WHO risk assessments, policies, guidelines or recommendations for the agents under discussion by the Advisory Group a minimum of one month prior to the meeting. This information will be provided to the Advisory Group to be taken into account in recommending the priority agents.

16. In the same manner as for IARC secretariat participants, the WHO/HQ secretariat will not be responsible for recommending the priority agents for evaluation, which remains the responsibility of the Advisory Group.

17. Within one month after the meeting of the Advisory Group\(^2\) (Monographs or Handbooks), the IARC DIR will send the full report (covering a five-year period) to the WHO DDG/P listing potential future agents for evaluation.

18. IARC will also provide to WHO/HQ its short-list of agents proposed to be evaluated within the next two and a half years, with its rationale for the selections to enable consultation within WHO/HQ.

19. Within two months of receipt of the above documents, the WHO DDG/P will provide to the IARC DIR the collective input of Department Directors and respective Assistant Director-Generals on the agents scheduled for evaluation and, where appropriate, nominate a WHO Liaison assigned to the specific agents under consideration.

20. The collective input from WHO may include, for example, proposals on the prioritization of evaluations among those agents recommended by the Advisory Group; the schedule of evaluations; an assessment of the potential impact on the work programmes of WHO, including the possible need for development or revision of WHO guidelines and recommendations; the implications for existing public health guidance; and the policy implications of the evaluations.

21. An updated short-list (covering the two and a half-year period) will be prepared by the IARC DIR based on the recommendations of the Advisory Group and taking account of the additional input from WHO/HQ. If required, the WHO DDG/P and IARC DIR will meet to discuss any unresolved issues prior to finalization of the list. In the specific case of carcinogenic risks in food (the domains covered by the FAO/WHO Joint Meeting on Pesticide Residues and the Joint FAO/WHO Expert Committee on Food Additives) the IARC Monographs Programme will only conduct an evaluation if the IARC DIR and WHO DDG/P agree this does not duplicate work or present a risk of contradictory evaluations across the hazard identification and risk assessment programmes.

22. On occasion there is the need to rapidly evaluate an emerging carcinogenic hazard; in such cases IARC will consult with WHO/HQ about the planned evaluation.

23. Given that the final responsibility for the Monograph and Handbook programmes rests with the IARC DIR (including accountability for the extrabudgetary funds to each programme), the final decision on the agents to be evaluated and the timing of those evaluations are his/her responsibility. The IARC DIR is responsible for his/her management of the programme to the IARC Governing Council, of which the WHO Director-General (WHO DG) is a member.

\(^2\) NB: the next Advisory Group meeting for the Monographs is envisaged for March 2019.
24. The IARC DIR sends the final list of agents and planned timings for evaluations to the WHO DG for dissemination across WHO. The WHO Global Policy Group will be informed on an annual basis about the agents to be evaluated, at a meeting to which the IARC DIR is invited.

25. The above consultation process will ensure transparency and coordination between WHO/HQ and IARC in the selection of agents, clearly assign responsibility to a WHO Liaison for a given agent, and allow an extended period in which to prepare for the dissemination and communication of evaluations. The consultation process also maintains clear lines of responsibility reflecting the governance structure of IARC.

26. The above strategic planning provides the general framework within which IARC and WHO/HQ will liaise in preparation for and conduct of specific Monograph or Handbook evaluations.

**Notification**

27. IARC maintains a list of key stakeholders to notify in relation to forthcoming Monographs/Handbooks. This list is updated with support from IARC's Governing and Scientific Council members to include stakeholders within IARC Participating States.

28. WHO/HQ and Regional Offices will annually provide to IARC/ESC an updated list of contact points in order to maintain the Monograph/Handbook key stakeholder list.

29. IARC will announce each specific evaluation meeting approximately 12 months prior to the date of the meeting. The announcement will be sent to WHO DG, WHO DDGP, the relevant WHO Liaison, as well as to Regional Directors, ADGs and NCD/cancer leads in Regional Offices.

30. IARC will send a reminder about forthcoming evaluation meetings to key stakeholders via an IARC News Item, Twitter, RSS feeds, etc., two months prior to the scheduled meeting.

31. IARC will send a concise briefing document to key stakeholders two weeks prior to the start of the scheduled meeting to prompt and support preparations nationally for the outcome of the Monograph/Handbook. The briefing will specify the rationale for the evaluation, basic information on the agents, including their use, and any previous evaluation by IARC or WHO/HQ. IARC will alert key stakeholders if there is to be a press release upon completion of evaluation (see below).

**Evaluation**

32. The IMO or IHB Group Head and the IARC Responsible Officer will meet with the WHO Liaison, if one has been appointed, 8–10 months prior to the scheduled evaluation meeting. The meeting will discuss the agent(s) to be evaluated including the potential impact on WHO in the areas described in paragraph 20 above and based on additional consultation with COM and DCO, will advise whether the agent(s) are likely to attract significant media attention.

33. The WHO Liaison and their respective ADG will notify other WHO Clusters at HQ about the scheduled evaluation meeting where those Clusters are considered to have a specific technical or other interest in the agent(s).

34. The WHO Liaison notifies the Head of IARC/IMO or IHB and the IARC Responsible Officer of the WHO staff who are to be members of the IARC-WHO/HQ secretariat in the Monograph/Handbook evaluation. Such notification should be received a minimum of six months prior to the scheduled evaluation meeting. All members of the IARC-WHO/HQ secretariat commit to attending the full eight-day evaluation meeting in Lyon, where possible.
35. WHO and IARC staff assigned as part of the secretariat are asked to complete a simplified WHO Declaration of Interest (DOI) form, while all other Working Group members, Invited Specialists, Representatives and Observers complete the standard WHO DOI\(^3\). DOI forms are systematically evaluated by the IARC Bioethics and Compliance Office in the IARC DIR’s Office. In case of concern, IARC will seek the opinion from the WHO Office of Compliance, Risk Management and Ethics (CRE) prior to a decision on participation being made.

36. IARC and WHO/HQ staff, assigned as part of the secretariat, are provided with confidential access to Monograph/Handbook working papers in advance of the evaluation meeting as and when available, for use within IARC and WHO/HQ only.


**Dissemination**

38. The IARC DIR decides on a standard or enhanced media strategy taking into account the advice from the meeting referred to above (paragraph 32), with input from COM and DCO.

39. Given that the primary target audiences for Monograph and Handbook evaluations are scientists, health professionals and professional organizations, the initial means of dissemination is publication of a scientific summary in a high-impact biomedical journal (currently *The Lancet Oncology* for the Monographs and the *New England Journal of Medicine* for the Handbooks), accompanied by a News Item on the IARC website (standard media strategy).

40. On occasions where specific media interest is expected, e.g. stimulated by third parties such as the private sector, NGOs or the scientific journals publishing the summaries, or where it is deemed important to inform a wide audience for reasons of public health or high public interest, then an enhanced media strategy is envisaged, e.g. press release, press conference, etc.

41. The scientific summaries are drafted and co-authored by Working Group members and the scientific secretariat. They include the main scientific evidence for the final evaluations and any significant minority opinion, the names of the authors and their declared conflicts of interest (from the journal DOI forms). While other media materials are drafted with input from COM and DCO (see below), this is not the case for the scientific summary. However, COM shares with DCO the draft scientific summary ahead of submission.

42. If the standard media strategy is foreseen, COM manages the dissemination strategy with ESC/IMO/IHB Heads and the IARC Responsible Officer. Where necessary, COM will prepare a Q&A (or talking points) with input invited from DCO between the time of the evaluation meeting and publication of the scientific summary.

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\(^3\) The approach on DOI completion for WHO staff (IARC and HQ) will be reviewed with the WHO Office of Compliance, Risk Management and Ethics
Paragraphs 43 to 51 inclusive refer only to cases where an enhanced strategy is envisaged.

43. If an enhanced media strategy is foreseen, COM will take responsibility to draft an enhanced media strategy, in close coordination with DCO, two months prior to the evaluation meeting, in consultation with ESC/IMO/IHB Heads, the WHO Liaison and the IARC Responsible Officer.

44. COM will prepare the first draft of a press release and Q&A or talking points one month prior to the evaluation meeting and will coordinate the final versions with DCO.

45. ESC/IMO/IHB will agree one month prior to the scheduled evaluation meeting a publication date for the summary reports with *The Lancet Oncology* (currently for Monographs) and the *New England Journal of Medicine* (currently for Handbooks). The publication date should allow sufficient time to prepare the media materials and to permit an embargo as required after the evaluation meeting.

46. COM will prepare a revised draft press release within one week of completion of the evaluation meeting, together with a revised draft Q&A (or talking points), containing the final evaluation and invite comments from DCO. COM and DCO may decide to arrange a briefing of relevant WHO colleagues in HQ and Regional Offices to present and explain the evaluations one week prior to any press release.

47. The IARC DIR signs off the final version of the press release and Q&A/talking points, five working days prior to publication of the scientific summary reports and press release. DCO distributes the final version of these documents under embargo to senior WHO staff across the organization. Director DCO can also decide to distribute the embargoed material to WHO Member States through their Geneva-based missions. IARC/ESC will provide the same embargoed materials to the Working Group members and IARC/COM will do the same to the IARC Governing Council members.

48. IARC/COM will provide the embargoed press release to all remaining key stakeholders, a minimum of two working days prior to release.

49. A “no travel” arrangement will be put in place at IARC for five working days after the press release for a minimum of two of the following individuals: ESC Section Head, IMO/IHB Group Head, and IARC Responsible Officer. DCO may also alert the WHO Liaison to be available for media enquiries.

50. There might be situations where the above-mentioned timings need to be revised or adapted and these should be discussed between WHO/HQ and IARC. Notwithstanding, the steps outlined above should be followed in sequence.

51. Given the number of deadlines in the Monograph/Handbook meeting process, all documents that need to be finalized in the weeks prior and during the meeting will require time-bound responses.
Annex 2

IARC COLLABORATIONS WITH WHO

Background

1. This document presents an overview of the main recent areas of collaboration between IARC and WHO. It is not an exhaustive listing nor a detailed description of the individual projects. Rather, its primary purpose is to illustrate the full breadth and nature of collaborations between IARC and WHO.

2. The summary also provides a valuable foundation for more strategic discussions on future collaborations and to identify potential missed opportunities.

3. The research interests of IARC, set forth in its Medium-term Strategy, are driven by identifying scientifically relevant opportunities to understand the occurrence, causes and prevention of cancer that will underpin cancer control measures at the national and international levels. This relationship is predicated upon a principle of a continuum of cancer research producing evidence to inform policy; in this respect the collaborations with WHO provide one valuable opportunity for impact from IARC’s research.

4. IARC-WHO collaborations are articulated around three types of areas:
   - strategic areas where IARC can contribute the scientific evidence base to support development of reports, meetings, guidelines, recommendations and policy by WHO.
   - participation as experts on common-interest panels, working groups, etc.
   - joint research projects conducted by IARC and WHO staff.

5. The projects are grouped into themed research areas.

Noncommunicable diseases

Development of NCD policies, guidelines and tools

6. There have been and continue to be extensive collaborations between IARC and WHO/HQ on the wider noncommunicable disease (NCD) agenda, most notably with the Noncommunicable Diseases and Mental Health (NMH) Cluster. IARC’s contributions include technical expertise and participation in the preparation of key documents, meetings, etc. and contribution of research to underpin the development of WHO policies, guidelines and tools. IARC is actively involved in the preparation of the 3rd UN General Assembly High Level Meeting on NCDs in September 2018.

7. Some examples of specific contributions to key strategic events and documents are provided below:
   - “Global Status Report on Noncommunicable Diseases, 2014” – submitted to the UN General Assembly for its assessment of progress on the implementation of the 2011 Political Declaration on NCDs on 10–11 July 2014; participation of IARC staff in drafting the chapters on cancer prevention and control.
   - “Update of Appendix 3 of the Global Action Plan on NCDs 2013–2020”; participation of IARC staff in the working groups for the consultation meeting and subsequent contributions and comments on the cost-effective and affordable interventions for cancer prevention and control.
“Guide to Cancer Early Diagnosis”; participation of IARC staff in the drafting of several sections of this WHO report.

“70th World Health Assembly Resolution on Cancer Prevention and Control”; contribution of IARC staff to the draft cancer resolution prepared by the WHO Secretariat and participation in the informal consultation of Member States meetings to discuss the final text.

“Global Report on Cancer Control” - in response to the request in the Cancer Resolution approved at WHA 70 (WHA70.12, 2. (7) and (8)); joint project between WHO NMH/Department for Management of Noncommunicable Diseases, Disability, Violence and Injury Prevention (NVI) and IARC for the planning, coordination and publication of the report. In parallel, IARC is preparing the World Cancer Report 2019, as a companion to the Global Report on Cancer Control.

“Ivestment cases for cancer”; collaboration between WHO/NMH/NVI and IARC to develop estimates of the overall costs of cancer, including direct and indirect costs, presented in a modular platform to facilitate country- and facility-specific analysis of proposed interventions including results on impact, costs and return on investment.

**Participation in high-level meetings on NCDs**

8. IARC staff have participated in a number of meetings related to NCDs:

- 68th World Health Assembly, Technical Briefing “Cancer prevention and control: which policies and programmes have best driven progress?“; participation of IARC staff in the preparation of this meeting and presentation given by the IARC Director.

- “Strategic technical meeting on management of cancer” Geneva, 27–28 April 2015; participation of IARC staff in the working groups charged with advising WHO MND/NVI, on future priority actions on cancer management.

- “First WHO Global Meeting of National NCD Programme Directors: Moving from commitments to achievements” Geneva, 15–17 February 2016; participation of IARC staff in the internal steering committee organizing this meeting.

- “Global Conference on NCDs, NCDs and Sustainable Development – Promoting Policy Coherence” Montevideo, Uruguay, 18–20 October 2017; participation of IARC staff in the internal steering committee organizing the meeting, and in Montevideo where the IARC Director spoke at the closing plenary session.

- “Technical Consultation on New Bold Ideas for NCDs” Geneva, 20–21 March 2018 to inform the work of the **WHO Independent High-level Commission on NCDs before the UN High-level meeting of September 2018**; participation of IARC staff in the technical consultation.

**Participation in joint NCD projects with WHO and other UN Agencies**

9. IARC has been an active member of the UN Interagency Task-Force (UN IATF) on NCDs (coordinated by WHO) since its establishment in 2013 following a resolution from the UN Economic and Social Council (UN ECOSOC). More specifically, IARC is a participant in two of the four Joint Programmes of the UN IATF:

- Joint Programme on Cancer Prevention and Control (with WHO and IAEA) including participation as experts in the situation assessment missions and national planning workshops in the priority countries.
• Joint Programme on Cervical Cancer (coordinated by WHO with six other UN Agencies) where IARC has participated since the planning stage as part of the Secretariat and Steering Committee as well as being part of the inception missions undertaking situation assessment and planning in the priority countries.

Supporting normative work by WHO

Cancer risk factors and primary prevention - infections

10. IARC has had an extremely close and productive cooperation with the Department of Reproductive Health and Research (RHR) within the Community Health Cluster (FCH) [now Family, Women, Children and Adolescents Cluster (FWC)] as well as the Immunization, Vaccines and Biologicals (IVB) Department and the Global Hepatitis Programme (GHP). Some examples of the types of collaboration that involve participation of IARC staff on WHO guidelines, recommendations and policies for infection-related cancers include:

- Development of WHO guidelines and recommendations on comprehensive introduction of HPV vaccination and testing.
- In 2016, WHO updated its “Recommendations to assure the quality, safety and efficacy of recombinant human papillomavirus virus-like particle vaccines, Annex 4” – WHO Technical Report Series 999; IARC contributed through the production of the Working Group Report “Primary end-points for prophylactic HPV vaccine trials” 2014, and through the contribution of IARC staff to the draft updated WHO recommendations.
- Participation in revision of the WHO manual on “Comprehensive Cervical Cancer Control: A guide to essential practice”.
- Participation in the expert group advising WHO on HPV vaccine research priorities.
- Participation in the WHO/IARC working group on cervical cancer elimination.
- Technical consultation on modelling of HBV vaccine.

Cancer risk factors and primary prevention - environment and lifestyle

11. The IARC Monographs programme on carcinogenic hazards frequently benefits from participation of WHO staff from, for example, the WHO European Centre for Environment and Health (ECEH, Bonn) of the EURO region, the WHO/NMH Cluster with contributions from the Departments of Food Safety and Zoonoses (FOS) and Nutrition for Health and Development (NHD) (see also below, interactions with Public Health, Environmental and Social Determinants of Health (PHE)). WHO staff have served as Secretariat or in a Representative capacity on those evaluation Working Groups.

12. The IARC Monographs Group (IMO) and the Section of Environment and Radiation (ENV) investigate cancer risk factors related to environmental, lifestyle, occupational or radiation-related exposures and have therefore a natural synergy with some of the core activities of the Department of PHE as well as more widely across WHO. A number of examples are given below:

- Participation in the WHO EMF International Advisory Board and WHO EMF Project.
• Participation in the International Expert Groups on Indoor Air Quality Guidelines, on the Presence of Hexavalent Chromium in Drinking Water (both organized by WHO/EURO) and on the WHO DDT Risk Assessment Consultation.
• Participation in the Interagency Working Group on sound management of industrial chemicals with special emphasis on asbestos in the Asia-Pacific region.
• Participation in a number of expert meetings of the WHO’s “International Programme on Chemical Safety” (IPCS) including hosting several “International Chemical Safety Cards” (ICSC) peer-review meetings.
• Participation in the WHO international Meeting on Global Collaboration in Chemical Risk Assessment, Capacity Building and Networking.
• Participation on the WHO consultations on PIP (Poly Implant Protheses) Breast Implants Outbreak Group.
• Participation in the WHO Circular Economy and Health Meeting.
• Participation in the Joint WHO/ILO Global Burden of Occupational Diseases project.
• Participation in the WHO meeting on setting research priorities in environment and health.
• Participation in the WHO Steering Committee for Global Air Quality Guidelines.

13. In relation to the Tobacco Free Initiative, IARC through the IMO Group and the ENV Section has contributed as follows:

• Joint WHO/TFI-IARC Working Group on mandated lowering of tobacco toxicants.
• 2011 Conference of the Parties to the WHO Framework Convention on Tobacco Control, invited an IARC expert to represent the Agency’s work in this area.
• Participation in the development of the WHO Tobacco Knowledge Summaries.

14. IARC’s Section of Nutrition and Metabolism (NME) has been part of the Steering Committee of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) whose role is to produce evidence-based recommendations in micronutrients intake and nutrition policies.

Cancer screening and early detection

15. Collaborations in this area involve a number of IARC groups who provide evidence and expertise supporting the development of recommendations and policies for the implementation of screening and early detection in a range of healthcare settings, focusing primarily on cervical and breast cancer. Examples include the following:

• Participation in production of the WHO position paper on mammography screening; in turn WHO/HQ staff participated in the IARC/WHO secretariat for the IARC Handbooks of Cancer Prevention on breast and colorectal cancer screening.
• Collaboration with the WHO Global HPV Laboratory Network (HPVLabNet) with the aim of harmonizing laboratory testing procedures worldwide for HPV screening and monitoring the impact of HPV vaccinations.
16. In addition to the activities listed here there are a substantial number of collaborations in this area with some of the WHO regional offices that are described below.

Implementation research on cervical cancer control measures

17. IARC has an extremely productive collaboration with RHR in the area of implementation research linked to cervical cancer control. Some of the cooperation is described under the Regional Offices (see below). Examples in this area include:

- Collaboration on monitoring the impact of HPV vaccination programmes through HPV surveys embedded in screening programmes and through registry-based monitoring of cervical cancer incidence rates; special programmes following the introduction of HPV vaccination programmes for adolescent girls in Bhutan and Rwanda.
- Participation in implementation and scaling up of visual inspection with acetic acid (VIA) and screen and treat programmes in sub-Saharan Africa, with a specific contribution to training, infrastructure, service delivery models and information systems.

Global cancer statistics

18. The IARC Section of Cancer Surveillance (CSU) provides the global reference statistics on the burden of cancer. This includes data on incidence, mortality and prevalence (GLOBOCAN), survival (SURVCAN), as well as other more sophisticated metrics such as Disability-Adjusted Life-Years (DALYs) and the fractions of cancer attributable to specific risk factors. Data on these indicators at the national, regional and global level are available through IARC’s Global Cancer Observatory (http://gco.iarc.fr) which is accessible directly from the WHO Cancer webpages.

19. The CSU Section has a number of important collaborations with WHO/HQ groups, including with the Mortality and Burden of Disease Group in the Health Systems and Innovation Cluster:

- Participation in the Global burden of Disease (GBD) Cancer Expert Group.
- Participation of senior scientists from the GBD in GLOBOCAN meetings and publications.
- GBD provides advice on the application and calculation of disability weightings to produce estimates of DALYs based on GLOBOCAN data.
- Collaborations and exchanges on aligning estimation methodologies and resolving discrepancies in cancer data.

Classification of cancer

20. The WHO Classification of Tumours (“Blue Books”) are produced by the WHO/IARC Classification of Tumours Group (WCT) Group, working in close collaboration with Data Standards and Informatics (HQ/HIS/IER/DSI) at HQ within Information, Evidence and Research (HQ/HIS/IER).

21. IARC senior scientists participate in the development of the neoplasms chapter of the International Classification of Diseases (ICD-11) and joint update of the third edition and revisions of the ICD for Oncology (ICD-O3).
22. There are substantial collaborations between IARC and WHO regional offices as well as with country offices. The Agency provides the scientific evidence-base and technical support in cancer information systems, cancer screening and early diagnosis in the context of regional initiatives, and national cancer control initiatives in selected countries. Below is a summary of just some of the main projects carried out in collaboration with WHO regional offices.

**Regional Office for Africa (AFRO)**

23. Collaboration to increase the coverage and improve the quality of cancer registration in the region through the Regional Hub for Africa of the Global Initiative for Cancer Registry Development (GICR), in partnership with the African Cancer Registry Network. IARC and international experts in collaboration with AFRO coordinate the provision of technical support and capacity building, both at regional level and in specific priority countries. A substantial number of training courses in English, French and Portuguese have been organized in the region.

24. Joint provision of technical support to national screening programmes in selected countries, for the implementation of cervical cancer screen-and-treat services in primary care centres using VIA, including the training of human resources for testing, diagnosis and treatment of cervical precancerous lesions, and aspects of monitoring and evaluating the programme.

25. Participation of IARC staff in various activities of the AFRO 10 project, coordinated by AFRO in partnership with IAEA. The project aims to improve screening and prevention of cervical cancer in ten selected high burden countries in sub-Saharan Africa (Ghana, Guinea, Kenya, Madagascar, Malawi, Nigeria, Senegal, Sierra Leone, Zambia and Zimbabwe), through situation assessments, development of standardized tools and guidance documents, and capacity building for cervical cancer prevention and control.

**Regional Office for the Eastern Mediterranean (EMRO)**

26. Establishment of two successive agreements, the “IARC-WHO EMRO Action Plan” for 2013–2014 and 2015–2016, detailing the joint workplans for collaborations in the areas of cancer surveillance, cancer screening and research, with the goal of ensuring progress by countries in the region in the development of sustainable and high quality cancer prevention and control programmes. These highly successful workplans included a series of country visits and situation assessments on cancer surveillance capacity, technical support missions and training courses on cancer registration, technical support to national screening programmes, development of an evidence-based assessment of resource-appropriate public health policies for early detection of cancer in the EMR countries, and a joint research project on producing estimates of attributable fractions of cancer due to the main risk factors in the region.


28. Discussions are underway for the establishment of a third “IARC-WHO EMRO Action Plan” to continue the joint activities in the three priority areas.
Regional Office for Europe (EURO)

29. A first cancer registration course for Russian-speaking participants organized jointly by IARC and WHO EURO in 2014 in Kazakhstan, resulted in the development of a set of recommendations to enhance the availability and quality of population-based cancer registration in CIS countries, the Asthana Recommendations. A second cancer registration course in the Russian language, targeting participants from the Russian Federation and held in Saint Petersburg in 2015, was co-organized by IARC/GICR, WHO-EURO and the European Network of Cancer Registries (ENCR).

30. Development of a programme of collaboration between the CSU Section and WHO EURO, to provide technical support and training to countries in central and eastern Europe in the area of cancer registration. The activities are coordinated by IARC through the GICR Regional Hub in Izmir, Turkey, and involve a series of country visits and situation assessments on cancer surveillance capacity, technical support missions and training courses on cancer registration.

31. Technical assistance and collaboration on the implementation and evaluation of national screening programmes for cervix, breast and colorectal cancers in central and eastern European countries, building on IARC’s experience of coordinating the report assessing cancer screening in the European Union (HQ/FWC/RHR-IARC/CSU).

32. IARC provides technical expertise and support to the planning and implementation and scale-up of cervical and breast cancer screening programmes in Belarus, in the context of a comprehensive cancer control programme coordinated by EURO, as part of a large national programme with support from the EC, UNDP and the Russian Federation.

33. Discussions on potential collaborations in the area of nutritional surveillance in the context of the European GloboDiet consortium coordinated by IARC.

Regional Office for the Americas (PAHO)

34. Discussions are ongoing to develop a programme of collaboration between the CSU Section and WHO PAHO, to provide technical support and training to countries in central and south America and the Caribbean in the area of cancer registration. The activities are coordinated by IARC through the GICR Regional Hub in Buenos Aires, Argentina, and involve a series of country visits and situation assessments on cancer surveillance capacity, technical support missions and training courses on cancer registration.

35. Collaboration on a large multi-centric study of cervical cancer screening and triage with HPV testing in ten Latin American countries (ESTAMPA), coordinated by IARC’s PRI Group in collaboration with WHO’s RHR and PAHO’s Department of Chronic Disease Prevention and Control. This is a key study that will test the feasibility, cost, and effectiveness of introducing HPV-based screening using the infrastructure and human resources available in low- and middle-income countries (LMICs), which is expected to improve the quality and coverage of cervical cancer screening programmes.

36. Collaboration between the IARC ENV Section and PAHO on the development of a Code Against Cancer for Latin America and the Caribbean (LAC), building upon IARC’s experience of coordinating the development of the European Code Against Cancer, which promotes 12 evidence based messages to raise population awareness and understanding about how individuals can reduce their cancer risk. PAHO and IARC will work together with a scientific committee and expert working groups, composed of researchers and public health practitioners from LAC to update the literature and evidence base and develop cancer prevention recommendations relevant to the LAC context.