

# COMARE – Annual Report 2024

## What we do / our role

The Committee on Medical Aspects of Radiation in the Environment (COMARE) is an expert scientific advisory committee for the Department of Health & Social Care (DHSC) that provides independent advice to the UK Government and the Devolved Administrations on a wide range of public health issues associated with radioactivity and radiation.

The main Committee meets three times a year, either online or in-person, and the minutes of these meetings are published on the [COMARE webpage](#). Observers are welcome to attend the in-person meetings, as detailed in the [procedures for open meetings](#). COMARE's working groups, subgroups and specialist subcommittees meet more often to consider evidence and prepare materials to support the main Committee. Much of the work is done outside the formal meetings.

The main Committee hears, considers, questions and discusses reports from the UK Health Security Agency (UKHSA), the Environment Agency (EA), and the Scottish Environment Protection Agency (SEPA) among others. The Committee also receives submissions from third parties.

## Membership

At the close of 2023, the Committee comprised of sixteen expert members and two lay members.

During 2024 three members retired from the Committee: Professor Frank de Vocht, Dr Jane Barrett and Dr Teik Chooi Oh.

Seven members were reappointed for a further term: Professor John Harrison, Professor Mireille Toledano, Professor Graham Smith, Dr Richard McNally, Professor David Read, Professor Lesley Rhodes and Dr Susan McCready-Shea.

Five new members were appointed to the Committee: Dr Samantha Terry, Professor Amy Berrington de Gonzalez, Professor Russell Foster, Dr Geoff Heyes and Dr Mark Little.

At the close of 2024, the Committee membership comprised of eighteen expert members and two lay members.

Expert members are drawn from a broad range of scientific and medical disciplines to support COMARE's technical work. Lay members have a specific role to represent the public interest aspects of the Committee's work and to advise accordingly. All members have equal status on the Committee.

## COMARE Meetings

In 2024, the main Committee meetings were:

- 137<sup>th</sup> meeting – 6<sup>th</sup> March
- 138<sup>th</sup> meeting – 10<sup>th</sup> July
- 139<sup>th</sup> meeting – 13<sup>th</sup> November

The 137<sup>th</sup> and 138<sup>th</sup> meetings were held using an online platform. A hybrid format was used for the 139<sup>th</sup> meeting.

### Subcommittees, working groups and subgroups:

[Details](#) of the various subcommittees, working groups and subgroups can be found on the COMARE webpage.

The Cardio-/Cerebrovascular Effects Subcommittee (CCES) held one online meeting in 2024.

- 7<sup>th</sup> CCES meeting – 9<sup>th</sup> May

The Contaminations Working Group (CWG) completed its two annual meetings. The first was held using an online platform and the second used a hybrid format.

- 23<sup>rd</sup> CWG meeting – 28<sup>th</sup> February
- 24<sup>th</sup> CWG meeting – 12<sup>th</sup> November

Representatives from the CWG also held a joint meeting with members of the Committee on Radioactive Waste Management (CoRWM) on 12<sup>th</sup> February.

The ICRP Recommendations Subgroup (IRS) and the EMF and Health Subgroup (EAHS) each held three meetings in 2024, which were conducted using an online platform.

- 5<sup>th</sup> IRS meeting – 1<sup>st</sup> February
- 6<sup>th</sup> IRS meeting – 19<sup>th</sup> June
- 7<sup>th</sup> IRS meeting – 16<sup>th</sup> October
- 5<sup>th</sup> EAHS meeting – 1<sup>st</sup> February
- 6<sup>th</sup> EAHS meeting – 11<sup>th</sup> June
- 7<sup>th</sup> EAHS meeting – 15<sup>th</sup> October

The Authorisations Working Group (AWG) conducted its work via electronic correspondence. No meetings were held by the group.

## Progress on COMARE's work programme

### Subcommittees:

#### *Cardiovascular effects of ionising radiation*

There is increasing evidence of cardiovascular effects resulting from exposure to ionising radiation. The subcommittee established by COMARE continued to review evidence of potential health impacts, focusing on risks from low dose exposures. The report will be completed during 2025 and will advise DHSC on implications for the UK.

## Working groups:

### *Contaminations*

The Contaminations Working Group (CWG) met twice in 2024 and considered updates on two beach monitoring programmes: at Dounreay in Scotland and Sellafield in Cumbria, noting the radioactive particles detected at each site. The CWG also considered the monitoring work following the completion of the remediation programme at Dalgety Bay in the Firth of Forth.

A small group from the CWG met with a group from CoRWM in February to discuss areas of mutual interest. Future meetings will be considered.

### *Authorisations*

The Authorisations Working Group (AWG) is responsible for COMARE's standing commitment to advise on discharges of radioactive materials when applications are received for new or revised authorisations. The Working Group responds to relevant consultations on draft authorisations and keeps the main Committee aware of its proceedings. The AWG continued to conduct its work online throughout the year.

The AWG responded to one consultation from SEPA, regarding the building of a new facility at Rosyth Royal Dockyard which required a variation to the existing permit.

Two COMARE representatives (one from the CWG, one from the AWG) attended a 'Meet the Regulator' Meeting arranged by EA on 16<sup>th</sup> September.

## Subgroups:

### *ICRP Recommendations*

The ICRP Recommendations Subgroup (IRS) met three times in 2024 to consider ICRP developments towards new recommendations and ICRP public consultations on reports in preparation for publication. A [submission](#) was made to the ICRP consultation on a report on Radiological Protection in Areas Contaminated by Past Activities.

The IRS also maintains awareness of responses to ICRP that are being formulated by other international and national groups.

### *EMF and Health*

COMARE continues to recognise public health concerns regarding exposures to electromagnetic fields (EMF). The EMF and Health Subgroup met three times in 2024 and reviewed available evidence on the public health impact of radiofrequency radiation in the UK, with consideration of both existing and new technologies.

## Additional items under consideration by the committee

- The Committee received and considered an update on EMF and health issues from the UK Health Security Agency (UKHSA) at its 139<sup>th</sup> meeting on 13<sup>th</sup> November.

- Updates were provided on the work done by the Small Area Health Statistics Unit (SAHSU), based in Imperial College, London, on the surveillance of childhood cancer incidence in the vicinity of nuclear installations in Great Britain, following several recommendations from COMARE (11<sup>th</sup> COMARE report, recommendation 5; 14<sup>th</sup> COMARE report, recommendation 1; 17<sup>th</sup> COMARE report, recommendation 1). This study has been submitted for publication.
- The Committee received updates on the DHSC-commissioned epidemiological study set up following a recommendation of the 17<sup>th</sup> COMARE report to investigate thyroid cancer incidence in Cumbria and any association with Sellafield discharges, in particular the accidental releases resulting from the Windscale nuclear reactor fire in 1957. The study was published in August and COMARE posted a [statement](#) welcoming the findings of the study.

## Publications

COMARE members identified a need for clarity on definitions of what constitutes a low dose of radiation, noting that the term is used differently according to context. The paper, [Low doses of ionising radiation: definitions and contexts](#), was published in the Journal of Radiological Protection in October to encourage a more coherent and consistent use of descriptors when communicating the significance of given levels of exposure in different circumstances. A [statement](#) was also posted on the COMARE website highlighting the paper.

## Correspondence

The Committee received and responded to correspondence regarding public concerns on issues of relevance to COMARE's work. In 2024 there were five emails that required a response. The secretariat took primary responsibility for the responses, referring to the Chair as necessary and keeping the Committee informed. The Committee also received one official enquiry email from the Ministry of Justice Science Office regarding independent scientific advice on radon exposure legislation and how it applies to prisons. The request was forwarded to colleagues in UKHSA and HSE.

The Committee received and responded to four Freedom of Information requests in 2024. Three were generic requests for information which were sent to multiple organisations. None were targeted at COMARE's work and COMARE did not hold the information for any of these requests. The fourth request asked questions on several areas of COMARE's work.

COMARE received a letter of support from the German Commission on Radiological Protection (SSK) expressing its appreciation for the scientific evidence on radiation health effects that the Oxford Survey of Childhood Cancers (OSCC) database has provided in the past.

A letter of support for the 7<sup>th</sup> European Congress of the International Radiation Protection Association in Liverpool in 2026 was sent to the Society of Radiological Protection from Professor John Harrison as Chair of COMARE.

## Items of published information provided to members

In addition to the primary papers circulated for discussion at each meeting, COMARE members are provided with copies of relevant peer-reviewed publications and digital links to reports from professional bodies and other scientific committees. In 2024, information papers and links were provided to Committee members for the following topics:

Ionising radiation (IR)	21 items
Non-ionising radiation (NIR)	14 items
Ultraviolet radiation (UV)	12 items

## Future meetings and work programme

The meetings dates for 2025 were agreed by the Committee.

- 140<sup>th</sup> meeting – 6<sup>th</sup> March
- 141<sup>st</sup> meeting – 8<sup>th</sup> July
- 142<sup>nd</sup> meeting – 11<sup>th</sup> November

The Committee will continue with the major themes of its work during 2025, supported by the CWG, AWG, IRS and EAHS. Updates from UKHSA will be considered, including regular items on EMFs and radon, as will peer-reviewed papers and reports published during the year.

COMARE agreed to establish two subcommittees to undertake scoping exercises in 2025. The first will consider the available evidence on the effects of artificial light on human health and advise on requirements for further scientific review. The second will consider UV sunbeds in the UK and advise on options for updating the COMARE 13<sup>th</sup> Report.

The Committee expects that its report on cardiovascular effects will be submitted to DHSC during the year.