

# COMARE – Annual Report 2025

## 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). COMARE 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 met three times in 2025, 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 detailed scientific 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 2024, the Committee membership comprised of eighteen expert members and two lay members.

During 2025 three members finished their terms on the Committee: Dr Colin Martin, Professor Stewart Martin and Professor Lesley Rhodes.

Two members were reappointed for a further term: Professor David Sutton and Dr Ray Kemp.

At the close of 2025, the Committee membership comprised of fifteen 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 2025, the main Committee meetings were:

- 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 140<sup>th</sup> and 142<sup>nd</sup> meetings were held using a hybrid format. The 141<sup>st</sup> meeting was held online.

### Subcommittees, working groups and subgroups:

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

The Contaminations Working Group (CWG) completed its two annual meetings. Both meetings used a hybrid format.

- 25<sup>th</sup> CWG meeting – 5<sup>th</sup> March
- 26<sup>th</sup> CWG meeting – 10<sup>th</sup> November

The ICRP Recommendations Working Group (IRWG) and the EMF and Health Working Group (EAHWG) each held three meetings in 2025, which were conducted using an online platform.

- 8<sup>th</sup> IRWG meeting – 13<sup>th</sup> February
- 9<sup>th</sup> IRWG meeting – 12<sup>th</sup> June
- 10<sup>th</sup> IRWG meeting – 16<sup>th</sup> October
- 8<sup>th</sup> EAHWG meeting – 10<sup>th</sup> February
- 9<sup>th</sup> EAHWG meeting – 2<sup>nd</sup> June
- 10<sup>th</sup> EAHWG meeting – 6<sup>th</sup> October

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

The UV Sunbed Subcommittee (USS) conducted two scoping exercise meetings using an online platform.

- 1<sup>st</sup> USS SE meeting – 14<sup>th</sup> February
- 2<sup>nd</sup> USS SE meeting – 19<sup>th</sup> May

The Light and Health Subcommittee (LAHS) held its first meeting via an online platform.

- 1<sup>st</sup> LAHS meeting – 30<sup>th</sup> September

## 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, with the aim of advising DHSC on implications for the UK. The report was completed during 2025 and agreed by the Committee. It was submitted to DHSC, requesting permission to publish.

#### *UVR and Sunbeds (USS)*

COMARE published its 13<sup>th</sup> Report ([The health effects and risks arising from exposure to ultraviolet radiation from artificial tanning devices](#)) in 2009 in response to requests to provide advice regarding the safety of sunbeds in the UK. There is now interest in whether COMARE should update its review and advice. The USS held two scoping exercise meetings to review options to revisit and update COMARE's 2009 report. A proposal was submitted to the four UK health departments, and it was agreed that a short update to the 13<sup>th</sup> report would be provided, to review scientific developments since 2009, assess the level of implementation of the 13<sup>th</sup> Report recommendations across the UK, and identify regulatory options and research requirements.

#### *Light and Health (LAHS)*

The LAHS completed a scoping exercise on the requirements for a scientific review to determine what is known and what further information is required to provide evidence-based guidelines regarding the impact of artificial light on human health within the built environment. Approval was secured from DHSC to progress with the project. At its first meeting, a structured evidence-review programme was developed by the LAHS, focusing on artificial light and health (including circadian and cognitive effects). The subcommittee have begun gathering evidence and identifying gaps.

#### *Cancer Risk (CRS)*

A report on the risk of solid cancer following exposure to ionising radiation was published in 2011 from the Advisory Group on Ionising Radiation (AGIR) to the then Health Protection Agency, following a previous AGIR report on leukaemia and related malignancies. Since then, there has been substantial progress in both cancer epidemiology and radiobiology. The CRS completed a scoping exercise to consider cancer risks from low dose exposures to ionising radiation. DHSC has approved COMARE undertaking a summary report which will consider risks of radiation-induced cancer for the UK population and comment on implications for current UK protection policy and legislation.

## Working groups:

### *Contaminations (CWG)*

The CWG met twice in 2025 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.

The University of Bristol gave an invited talk to the CWG on monitoring with drones.

The CWG also reviewed correspondence regarding a potentially contaminated site in Nottinghamshire.

### *Authorisations (AWG)*

The 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 the following consultations in 2025:

1. EA consultation:

- Disposal facilities for solid radioactive waste: Guidance on the Requirements for Authorisation (GRA)
- Geological disposal facilities for solid radioactive waste: Staged Regulation guidance

(Response submitted on 27<sup>th</sup> February 2025)

2. SEPA consultation:

- Consultation on Objective and Principles for Regulating Radioactive Substances Activities
- Consultation on the Environmental Standards for Inputs of Radioactive Substances into Groundwater
- Consultation on Near-surface Disposal Facilities on Land for Solid Radioactive Wastes: Guidance on Requirements for Authorisation

(Response submitted on 7<sup>th</sup> May 2025)

3. EA consultation:

- Application to change (vary) the radioactive substances permit at Hinkley Point B Power Station

(Response submitted on 7<sup>th</sup> July 2025)

4. EA consultation:

- Permit application to accept low level radioactive waste at Port Clarence landfill

(Response submitted on 31<sup>st</sup> July 2025)

5. EA consultation:

- Application to change (vary) the radioactive substances permit at Winfrith nuclear site

(Response submitted 2<sup>nd</sup> September 2025)

One COMARE representative (for both the CWG and the AWG) attended the second 'Meet the Regulator' meeting arranged by EA on 22<sup>nd</sup> October 2025.

*ICRP Recommendations (IRWG)*

The IRWG met three times in 2025 to consider ICRP developments towards new recommendations and ICRP public consultations on reports in preparation for publication.

The IRWG responded to the following consultations in 2025:

1. TG91: Scientific Evidence Relevant to the Assessment of Solid Cancer Radiation Risk at Low Dose and Low Dose Rate  
(Response submitted 13<sup>th</sup> June 2025)
2. TG103: Pregnant-female Mesh-type Reference Computational Phantoms  
(Response submitted 9<sup>th</sup> July 2025)
3. TG99: Considering the Environment When Applying the System of Radiological Protection: Part 1 Broadening the Reference Animals and Plants Approach and Related Derived Consideration Reference Levels.  
(Response submitted 28<sup>th</sup> July 2025)

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

*EMF and Health (EAHWG)*

COMARE continues to recognise public health concerns regarding exposures to electromagnetic fields (EMF). The EAHWG met three times in 2025 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 two updates from the UK Health Security Agency (UKHSA) – one on radon at its 140<sup>th</sup> meeting on 6<sup>th</sup> March and one on EMF and health issues at its 142<sup>nd</sup> meeting on 11<sup>th</sup> November.
- COMARE published a statement welcoming the publication by [Davies et al](#) of a detailed analysis of childhood cancer incidence around nuclear installations in Great Britain, 1995-2016. This project had been completed by the Small Area Health Statistics Unit (SAHSU), based in Imperial College, London, 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).

## Correspondence

The Committee received and responded to correspondence regarding public concerns on issues of relevance to COMARE's work. The secretariat took primary responsibility for the responses, referring to the Chair as necessary and keeping the Committee informed. Topics included updates to COMARE reports, publication of Committee meeting minutes, concerns regarding cancer deaths in specific areas, cases of electro-hypersensitivity (EHS) and potential radioactive contamination of land. A selection of these were directed to specific working groups for their attention.

The Committee received and responded to two Freedom of Information requests in 2025. These were generic requests for information which were sent to multiple organisations. They were not targeted at COMARE's work and COMARE did not hold the information for any of these requests.

COMARE sent a letter of support for the continued upkeep of the Oxford Survey of Childhood Cancers (OSCC) and the National Registry of Childhood Tumours (NRCT) databases to the University of Oxford. An additional letter was sent to support continued work with the data held in these databases.

## 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)	26 items
Non-ionising radiation (NIR)	19 items
Ultraviolet radiation (UV)	8 items

## Future meetings and work programme

The Committee agreed to hold two in person meetings in 2026.

- 143<sup>rd</sup> meeting – 14<sup>th</sup> May
- 144<sup>th</sup> meeting – 10<sup>th</sup> November

The Committee will continue with the major themes of its work during 2026, supported by the CWG, AWG, IRWG and EAHWG. Updates from UKHSA will be considered, including regular items on EMFs and radon, as will peer-reviewed papers and reports published during the year.

The two sub-committees, LAHS and CRS, will continue their work to consider the available evidence on the effects of artificial light on human health and cancer risks at low doses of ionising radiation. At the time of writing, the report on UV radiation and sunbeds, provided as an update to the 13<sup>th</sup> report, has been submitted to DHSC and the devolved health departments.