

COMMITTEE ON MEDICAL ASPECTS OF RADIATION IN THE ENVIRONMENT

131st COMARE MEETING, Friday 11th March 2022.

Online meeting

Present	Chair:	Professor John Harrison
	Members:	Professor Frank de Vocht Dr Mark Hill Dr Colin Martin Professor Stewart Martin Dr Susan McCready-Shea Dr Richard McNally Professor Paul Pharoah Professor David Read Professor Lesley Rhodes Professor Graham Smith Professor James Smith Professor David Sutton Dr Chris Westcott
	Assessors:	BEIS DHSC EA FSA HSE NDA ONR SEPA SG UKHSA WG
	Secretariat:	Dr Simon Mann (UKHSA) Dr Emma Petty (UKHSA) Mrs Samantha Watson (UKHSA)

Open Session

1. Welcome & declarations

- 1.1 The Chair opened the 131st meeting, welcoming members and assessors to the 6th online meeting for COMARE. The Chair noted that the meeting is not being opened to observers to ensure meeting security. The meeting would still be split into an open and a closed session due to the minuting requirements of specific items.
- 1.2 The Chair welcomed Professor Lesley Rhodes to her first COMARE meeting. The Chair also welcomed substitute assessors for SG and FSA.
- 1.3 Apologies were received from Dr Ray Kemp, Dr Teik Chooi Oh, and assessors for DforE, FSA, NHS Scotland and SG. The Chair reminded assessors that substitutes may attend the meeting.

- 1.4 The Chair advised members of the private nature of the Committee's proceedings and that papers marked "For Members Use Only" should be kept in members' own hands. Members were also reminded that they should disclose any relevant interests to the Chair.

2. Minutes of the 130th COMARE meeting

i. Minutes, actions & matters arising

- 2.1 The Chair asked for comments or corrections to the minutes from the 130th meeting. The minutes were agreed with no amendments. The Chair noted that the minutes of the open session will be posted on the COMARE webpage. The minutes of the closed session will remain confidential.

[Action: Secretariat]

- 2.2 The Chair noted that an action was previously placed on BEIS to provide details of the consultation on the draft policy on radioactive substances. The BEIS assessor reported that the consultation was planned for last year but had been delayed. It is hoped that it will be published after the May elections this year. The BEIS assessor agreed to provide the details to the Secretariat when the consultation is opened.

[Action: BEIS]

- 2.3 The Chair asked the HSE assessor to update the Committee on the post-implementation review of the EMF at work regulations. The HSE assessor informed members that this report was published last year and showed that the regulations on statute are broadly fit for purpose and they will be retained. The regulations will be reviewed again in five years, with HSE making a commitment to look at simplifying the regulations and guidance. The HSE assessor agreed to provide the link to the report.

[Action: HSE]

- 2.4 The Chair reminded members that an action was placed on FSA and the Secretariat at the last meeting to share a link to the final report on the assessment of risks from imported Japanese foods. The risk assessment was published in December 2021 and the link was provided to members by the Secretariat.

- 2.5 The Chair noted that he took an action at the last meeting to talk to members individually about thoughts on the COMARE work programme and promotion of its work. The Chair reported that he has spoken to some members but that all members were invited to get in touch with the Chair about their ideas.

[Action: Members]

- 2.6 The Chair reminded members that the SEPA assessor had agreed at the last meeting to provide a note on remediation at Dalgety Bay and the perceived risk to the public. The SEPA assessor noted that material on the beach is being taken up and screened, with removal of radioactive material above the activity level criteria while material below the criteria level is returned to the beach and covered with membrane and rock armour. After completion of the remediation Fife council will take responsibility for the site and make sure that the rock armour remains fit for purpose.

- 2.7 The Chair noted that an action was placed on HSE at the last meeting to provide an update on radon. The HSE assessor reported that there have been internal discussions within HSE over the use of dose coefficients. HSE will examine the economic impacts of changing the coefficient, but this has not taken place yet because of other priorities. This will be picked up later in 2022 and a further update will be provided at the next meeting. The HSE internal position on radon will also to be reconsidered in 2022, especially after queries regarding

home working. It was noted that the UK currently uses two dose coefficients: a lower one for occupational exposures and a higher one for public exposures.

[Action: HSE]

3. Committee matters

i. Membership

- 3.1 The Chair informed members that five members, whose terms of office finish this year, have been reappointed for further terms on the Committee. He reminded members that four new members were appointed last year but that there are two outstanding vacancies on the Committee, although these are not being advertised at present. The Chair thanked all members for their support.
- 3.2 Dr Mann formally introduced new member, Professor Lesley Rhodes, to the Committee.

ii Correspondence and updates

- 3.3 The Chair noted that no FOI requests have been received since the last meeting.
- 3.4 The Chair reminded members that the Committee's submission on the revised Code of Practice for Scientific Advisory Committees (CoPSAC) consultation was made on 5th October 2021. The revised Code of Practice was published online on 15th December 2021 and members have been provided with the online link.
- 3.5 The Chair informed members that the Goldacre review of the use of personal health data for research and analysis for the benefits of patients and their healthcare sector has been written but a publication date is still to be confirmed. The Secretariat will update members as soon as more information becomes available.

[Action: Secretariat]

- 3.6 The Chair reminded members that COMARE published its 18th report in July 2019 on 'Medical radiation dose issues associated with dual-energy X-ray absorptiometry (DXA) scans for sports performance assessments and other non-medical practices'. In December 2021, the Chair was invited to represent COMARE at a meeting between BEIS and DHSC, involving relevant experts from CQC, HSE and NHS Healthcare Improvement Scotland. The BEIS assessor reported that the potential for justification of DXA for non-medical purposes was discussed. The DHSC assessor added that a public consultation on the justification options for non-medical uses of DXA should be launched in the next few weeks and is expected to run for 3 months. Following the consultation, if it is agreed to approve justification, the practices would then be covered under the Ionising Radiation (Medical Exposure) Regulations (IR(ME)R).
- 3.7 The Chair informed members that the University of Oxford Cancer Epidemiology Unit, current custodians of the National Registry of Childhood Tumours (NRCT), are unable to continue holding the database. The database was originally owned by the Childhood Cancer Research Group (CCRG). Following the closure of CCRG in 2013, COMARE petitioned the Chief Medical Officer (CMO) and Public Health England (PHE) for the transfer of the registry, highlighting the importance of the data in the work of COMARE and others. The Chair has written to the current custodians about concerns over the deletion of the database, noting that the UK currently has one of the highest quality cancer registration systems in the world and it is important that the entire database is transferred intact to allow future analyses to be carried out. It is understood that a new home for this information is being sought and the database has been frozen until all avenues have been exhausted. Dr McNally added that

there have been recent discussions among interested parties about rehousing the database, costs, infrastructure etc. It is hoped that a position can be reached by the end of the month.

- 3.8 The Chair also reported that he has received correspondence suggesting that COMARE was not taking EMF concerns seriously, which follows on from correspondence with the previous Chair of COMARE. It was noted that in the information papers the Committee considers high quality science in peer-reviewed publications, not commentary pieces, consistent with the agreed remit. Members were reminded that a formal complaint lodged against COMARE on similar concerns was not upheld. Members who wished to see the correspondence were welcome to do so. It would be sent in confidence, as required by the correspondent.

iii. 2021 Annual Report & COMARE work programme 2022-2023

- 3.9 The Chair brought the 2021 annual report to members' attention and thanked Dr Ray Kemp and Dr Chris Westcott for help in the drafting of this document. Members were asked for comments on the document, and none were received.
- 3.10 The Chair advised members that COMARE's work programme for April 2022-March 2023 has been drafted and discussed with DHSC. The main focus is the analysis of low dose risk of circulatory diseases, which should be published later this year. The work programme continues to include a watching brief on the health effects of EMFs. The Chair asked members for comments on the work programme and whether there are additional areas of interest which may be considered for the future.
- 3.11 Dr McCready-Shea suggested that the development of new recommendations by ICRP (International Commission on Radiological Protection) would be of interest to the Committee and to Government departments and agencies. Topics of particular interest might include individual response to exposure; clarification on exposure situations, including transition from emergency to existing situation; and looking at radiation protection of the environment. The Chair noted that the ICRP process will be lengthy and COMARE will be able to comment on the consultations on the ICRP proposals and associated responses. It was proposed that this could be included in the work programme.

[Action: The Chair & Secretariat]

- 3.12 Professor Read suggested that the CWG section of the work programme should include follow up of progress on the Magnox swarf storage silo leak at Sellafield and also suggested that assessment of radiological consequences of changes to the UK's energy policy might be considered by the AWG. The Chair asked Professor Read to provide some text for possible inclusion and for agreement with DHSC.

[Action: Professor Read]

- 3.13 The Chair informed members that following updates both documents will be placed on the COMARE webpage.

[Action: Secretariat]

4. Working group reports:

i. Contaminations Working Group

- 4.1 The Chair informed members that the CWG met the day before. In addition to the standard updates from EA and SEPA, the working group were provided with an update on the remediation of the Dounreay shaft from NDA and on the Magnox Swarf Storage Silo leak from NDA and Sellafield Ltd. The Chair noted that the remediation of the Dounreay shaft was

not considered to be of concern regarding the potential release of particles, and he reported that the CWG is considering a visit to Sellafield.

- 4.2 The EA assessor provided the Committee with an update on the Sellafield Beach Monitoring Programme, with a brief background for new members. In 2021, 121 hectares of beach were monitored against a target of 105 hectares and resulted in 94 particles and 4 larger objects being recovered. None of the finds required intervention. There was a northward drift of particles observed, which is in line with modelling. The EA assessor reported that an on-site event late in 2021 released a small amount of liquor containing particulate material. The incident has been investigated and extra monitoring was undertaken, but no additional particles were found. The 2022 monitoring programme has commenced with the same 105 hectare target.
- 4.3 The SEPA assessor provided an update on the situation at Dalgety Bay, including a brief history of the site. Remediation work is underway, though it has been paused since October 2021 due to overwintering birds. The contractors undertake weekly checks on the security of the site and both the site signage and the Food and Environment Protection Act (FEPA) ban remain in place. Beach monitoring continues on a monthly basis. A number of particles above the 20 kBq activity threshold have been found since October 2021, confirming that the remediation is necessary. Work on the remediation will restart in April 2022 and it is hoped that this will be completed in the 2nd year of the programme, though it may need to extend into a 3rd year.
- 4.4 The SEPA assessor also provided an update on the situation at Dounreay. The 2021 survey program included a series of 34 beach monitoring surveys as part of the statutory permit requirements plus an additional 14 surveys. The number of finds for 2021 and the total number of finds to date have been provided to members. In 2022 there has been an increase in the number of particles found on the foreshore, with 5 found in a single day. The Particle Retrieval Advisory Group (Dounreay) (PRAG(D)) have been asked to consider if the increase in finds is linked to recent storms. Data on wave height and direction are being provided to PRAG(D). A beach monitoring trial was completed last year and no lower activity americium-241 particles were found. PRAG(D) have also been asked to review the find data for 2012-2021.
- 4.5 Members were asked for comments on any of the items covered in these updates, and no comments were received.

ii. Authorisations Working Group

- 4.6 The Chair of the AWG, Professor Sutton, updated the Committee on the work of the AWG and thanked Dr McCready-Shea for joining the group.
- 4.7 A consultation request was received from EA on an environmental permit variation application for Barrow Shipyards. This is slightly different from the normal permit variation applications as only the location is changing, not the type, volume or activity of radioactive waste. The consultation closes on Tuesday 22nd March 2022.

5. Information papers.

- 5.1 The Chair drew attention to the 12 information papers and 3 digital links, highlighting that the papers cover a range of topics, both ionising and non-ionising, to reflect the wide remit of the Committee. The Chair asked for comments from members on the papers circulated for this meeting.

- 5.2 There was interest in a paper by Amoon et al¹ containing a pooled analysis of recent studies that have addressed a potential relationship between exposure to power frequency (50/60 Hz) magnetic fields and childhood leukaemia. Pooled analyses of earlier studies had linked prolonged exposure to fields above 0.4 microtesla with a doubling in risk of childhood leukaemia (Ahlborn 2000)². More recent studies seem to show the risk is declining over time, although the reason for this is not clear. It was suggested that there may be some bias in the earlier studies.
- 5.3 It was noted that a number of papers were related to UV exposure and there is potential for an impact on UV exposure from global warming. It was felt that there is a need to increase the level of information brought to COMARE on this topic. Professor Rhodes agreed to discuss possibilities with the Chair.

[Action: Professor Rhodes]

- 5.4 Two information papers relevant to the Committee's work on circulatory disease were noted.

6. AOB.

- 6.1 The situation in Ukraine following the Russian invasion was discussed, particularly the potential for an incident involving nuclear facilities. It is anticipated that, if required, a SAGE group would be set up to provide advice to government and there would be involvement from UKHSA. COMARE members may be asked to be involved in an individual capacity, but there is no expectation that COMARE would be required to give advice at this stage. Members discussed a seminar "Dispatches from the war in Ukraine" to be given that evening (11th March) by Dr Vadim Chumak PhD, DSc, Head of Laboratory, National Research, Centre for Radiation Medicine, National, Academy of Medical Sciences, Kyiv, Ukraine.
- 6.2 No other business was raised.

Close of meeting

The Chair thanked members for their attendance and contributions to the meeting. The next COMARE meeting will be held on Thursday 7th July 2022. The format will be confirmed in due course. The Chair then declared the meeting closed at 12.25 pm.

¹ Amoon A.T. et al. Pooled analysis of recent studies of magnetic fields and childhood leukemia. Environ Res. 2022 Mar;204(Pt A):111993.

² Ahlbom A. et al. A pooled analysis of magnetic fields and childhood leukaemia. Br J Cancer. 2000 Sep;83(5):692-8.