

## COMARE Statement on the report 'Analysis of cancers associated with radiation in the area around Dalgety Bay, 2008-2017, an update for COMARE'.

The Committee on Medical Aspects of Radiation in the Environment (COMARE) has been considering radioactive contamination in the Dalgety Bay area since 1991 and welcomes the latest report from NHS Scotland Information Services Division (ISD) on cancers in the area.

COMARE first commissioned a report from ISD on cancers in the Dalgety Bay area in 1992, which considered cancer incidence for the period 1975–1990 and was subsequently published in 1994<sup>1</sup>. A second report in 2005 covered 1975-2002; whilst a third in 2012 covered the period 2000-2009. These reports formed a major part of the 15<sup>th</sup> COMARE report ([Radium contamination in the area around Dalgety Bay](#)), published in 2014.

In the 15<sup>th</sup> COMARE report it was noted that for the period 2000-2009, two types of cancer showed raised incidences in the area around Dalgety Bay – primary liver cancer and non-Hodgkin's lymphoma (NHL). The pattern of cancers expected from exposure to radium-226 (the radioactive contamination at Dalgety Bay) would include bone and head cancers; however, no raised incidences of those cancers were detected in the Dalgety Bay data. The 15<sup>th</sup> COMARE report concluded that other (non-radiation) factors may be responsible for the excess cancer cases observed in the analysis, particularly for liver cancer. It is therefore unlikely that the excess cases of liver cancer or of NHL during 2000–2009 were due to the presence of radium-226 in the area.

The 15<sup>th</sup> COMARE report made several recommendations, including that a review of the epidemiological survey of cancer rates in the area should be carried out in five to ten years' time to allow for a latent period following the recent potential exposure<sup>2</sup>. In November 2017, COMARE made a request to ISD to undertake such a review, which has resulted in the published report - [Analysis of cancers associated with radiation in the area around Dalgety Bay, 2008-2017. An update for the Committee on Medical Aspects of Radiation in the Environment \(COMARE\)](#).

The current ISD report reviews the incidences of all relevant cancers in the Dalgety Bay area for the period 2008-2017. None of the cancers examined had a higher than expected incidence when compared against similar areas of Scotland for the same time period. The raised incidences of the two cancers (liver cancer and NHL) seen during the 2000-2009 period were not evident in the latest analysis.

COMARE is grateful to NHS Scotland ISD for undertaking the review and welcomes the report. The Committee also welcomes the findings of no meaningful excesses determined for any cancers for the time period in question. It is recognised that, although this review provides broad reassurance that there is no cause for concern relating to cancer cases in the area, there are limitations with epidemiological analyses using residency as a proxy for exposure to risk factors. It is accepted that, using the available data, this type of analysis cannot take into account the migration of individuals into or out of the area prior to diagnosis. COMARE is pleased to note ISD's intention to continue to monitor the cancer incidence in this area, in line with the recommendation made in COMARE's 15<sup>th</sup> Report.

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<sup>1</sup> Black R J, Sharp L, Finlayson A R and Harkness E F (1994). Cancer incidence in a population potentially exposed to radium-226 at Dalgety Bay, Scotland. *Br J Cancer* **69**, 140–43.

<sup>2</sup> A series of finds by SEPA at Dalgety Bay beach in 2011 prompted the undertaking of the third ISD analysis and the subsequent recommendation in the 15<sup>th</sup> COMARE report.