



Nuclear Free Local Authorities Steering Committee

information

NFLA Media Advisory - for immediate release, 16th May 2011

COMARE report on leukaemia rates and Nuclear Power Plants – independent analysis indicates important flaws

The NFLA publishes today on its website its latest Policy Briefing which considers the 14th Annual Report of the independent Government committee COMARE (the Committee on Medical Aspects of Radiation in the Environment) (1). The briefing provides a critique of this report with comments of the independent consultant in the environment, Dr Ian Fairlie (2).

COMARE's 14th annual report (3) – 'Further consideration of the incident of childhood leukaemia around nuclear power plants (NPP) in Great Britain' – follows on from its previous reports and also is a response to the German Government's 'KIKK' (4) report, which indicated that childhood leukaemia rates within 5kms of nuclear power plants was higher than the statistical average.

In COMARE's press release it concludes:

"In conclusion, COMARE's primary analysis of the latest British data has revealed no significant evidence of an association between risk of childhood leukaemia (in under 5 year olds) and living in proximity to a NPP." (4)

According to Dr Fairlie, the COMARE Report refutes the clear pattern of epidemiological evidence across the world indicating increased leukaemia risks near nuclear power plants (NPPs). Dr Fairlie's analysis of the report, to which he has kindly allowed the NFLA to publish on its website, identifies a number of areas of concern. The NFLA publishes it so as to contribute to this important debate over the effects of low level radiation on human health, and at a critical time in the wider discussion over the proposed construction of new nuclear power stations.

In the conclusions to his assessment of the COMARE report Dr Fairlie argues:

- The data in the COMARE Report indicates a 22% increase in various types of leukaemias and non-Hodgkins lymphoma. However it concluded "that the latest British data has (*sic*) revealed no significant evidence of an association between risk of childhood leukaemia ... and living in proximity to an NPP".
- This statement pivots on the equivocal meaning of the word "significant". COMARE rejects the 22% increase by incorrectly implying that, as its findings did not meet a significance test, the findings were negative - a type II error in statistics. COMARE's Report is regrettable as it may mislead members of the public into thinking there are no increases in leukaemias near UK nuclear power stations when in fact this may not be the case. The Report should have said that it found increases ranging between 22% and 47%; that these increases did not meet the statistical test used by COMARE; but that this could be due simply to the low numbers in the study and not to lack of effect.
- In three areas, the COMARE Report's handling of epidemiological data is not transparent -
 - (a) it excludes recent data on child leukaemias near NPPs after 2004, despite being established to do precisely that;
 - (b) it includes new categories of lymphomas and leukaemias, although none were actually observed and although neither KiKK nor the 2008 Bithell study examined these types;
 - (c) it excludes data from the Calder Hall nuclear power station although they state "...their inclusion would certainly have yielded a higher estimate of risk."

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- This irregular handling of data unfortunately lays the COMARE Report open to accusations of selecting or 'cherry picking' their data. In order to dispel any doubts in this area and increase transparency, it is recommended COMARE should release its data:
 - (a) on the observed numbers of childhood acute lymphoblastic leukaemias within 5 km of NPPs between 2004 and 2010, and
 - (b) on the observed numbers of childhood acute lymphoblastic leukaemias within 5 km of Sellafield between 1969 and 2010.

NFLA Chair Bailie George Regan says:

"The NFLA has been calling for the publication of the COMARE's response to the KIKK study since March 2010, so it is pleased that it has finally been published. However, we are surprised, to say the least, with COMARE's conclusion that it finds no significant evidence of a link between childhood leukaemia and living near a nuclear power plant. We publish Dr Fairlie's concerns about the COMARE report to bring these issues out to a wider audience. We will be writing to the COMARE Secretariat and the Department of Health to make them aware of these concerns and seek their urgent response to them. Until we receive an adequate response to them, we retain our own doubts over aspects of the COMARE report. "

Ends

Further information: Sean Morris, NFLA Secretary 07771 930196. Dr Fairlie is available for interview on request.

Notes for editors:

(1) NFLA Policy Briefing 82 is attached with this media release.

(2) Dr Ian Fairlie is an independent consultant on radioactivity in the environment. He has degrees in chemistry from the University of Western Ontario in Canada, and in radiation biology from Barts Medical College in London. His doctoral studies at Imperial College examined dosimetric impacts of nuclide discharges at Sellafield and la Hague.

Dr Fairlie was Scientific Secretary to CERRIE – the influential independent committee reporting to Government, known as the Committee Examining Radiation Risks of Internal Emitters. In the past, Dr Fairlie worked on occupational health issues at the Trades Union Congress and as a radiation advisor to Greenpeace Canada. He was also on the Secretariat of the FSA's former Consultative Exercise on radiation doses to critical groups near nuclear facilities. He has advised environmental NGOs, the European Parliament, attorneys and local and national authorities in a number of countries.

Dr Fairlie has also worked at MAFF, SEPA and FSA on radiation protection matters, and was on the Secretariat of the FSA's recent Consultative Exercise on Dose Assessments on radiation doses to critical groups near nuclear facilities. He was a technical advisor to environmental NGOs on BNFL's National Stakeholder Dialogue. Dr Fairlie has written on various matters on radiation protection, including tritium dosimetry, nuclide speciation, and the utility of collective doses.

(3) COMARE 14th annual report, 6th May 2011,

http://www.comare.org.uk/press_releases/documents/COMARE14report.pdf

(4) COMARE press release, 6th May 2011,

http://www.comare.org.uk/press_releases/14thReportPressRelease.htm

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