

RESEARCH WORKING GROUP of the Industrial Injuries Advisory Council

Minutes of the meeting Thursday 30 May 2019

Present:

Dr Lesley Rushton	RWG
Dr Sayeed Khan	RWG
Professor Neil Pearce	RWG Chair
Mr Hugh Robertson	RWG
Dr John Cherrie	RWG
Dr Ian Lawson	RWG
Dr Chris Stenton	RWG
Mr Andrew Darnton	HSE
Dr Anne Braidwood	MoD
Mr Vijay Sharma	DWP
Ms Juliet Netting	DWP
Mr Stuart Whitney	IIAC Secretariat
Mr Ian Chetland	IIAC Secretariat
Ms Catherine Hegarty	IIAC Secretariat

Apologies: Professor Karen Walker-Bone, Susan Sedgwick, Lucy Wood, Dr Mark Allerton

1. Announcements and conflicts of interest statements

1.1. None

2. Minutes of the last meeting

2.1. The minutes of the last meeting were cleared with minor amendments. The Secretariat will circulate the final minutes to all RWG members ahead of publication on the IIAC gov.uk website.

2.2. All action points have been cleared or are in progress.

3. Melanoma and occupational exposure to UV/sunlight

3.1. This topic was initiated by correspondence received from a former mariner who developed skin cancer (non-melanoma) as a result of exposure to sunlight.

3.2. Following on from this, it was decided melanoma needed to be looked at by the Council.

- 3.3. There is consistent evidence of an increased incidence of skin melanoma in aircraft crew. A systematic review and meta-analysis of 14 studies published after 2013 and for the most part carried out among northern Europeans (10), reported summary risks of 2.22 (95% confidence interval 1.67-2.93) in pilots and 2.09 (1.67-2.62) in cabin crew.
- 3.4. Following detailed deliberations at previous meetings, a draft paper was submitted to members for further discussion. It was noted a further meta-analysis paper had been identified which confirmed the doubling of risk in air crew. A member consulted experts at Public Health England (PHE), who also have an interest in this topic. It was noted cosmic radiation is high energy and would tend to pass through the skin and have more impact on internal organs rather than the skin. Unlike workers in other industries who work with radiation, air-crew are not routinely monitored for radiation exposure, even though the dose received can be significant. A useful PhD thesis measuring blue light and UV light in cockpits was made available; this included interviews with a large number of pilots and also examined a small sample of work patterns; these showed most flying hours tended to be carried out during daylight hours.
- 3.5. Members reviewed the evidence and concluded again that it is very clear that there is more than a doubling of risk of developing melanoma in air-crew, but the mechanism is unknown. It is clear the risk is increased with length of service, but there is also an increased risk of developing melanoma with age.
- 3.6. Disruption of circadian rhythms were discussed, but melanoma is not associated with shift-work in most studies.
- 3.7. It was noted by a member that if the Council decide to recommend prescription, the complexities such as dose-exposure time and leisure-time exposure would need to be fully examined. The issue of prevention was also brought up and the implications would need to be carefully thought through.
- 3.8. A paper in IAC format together with a draft summary and conclusions will be provided to the full Council in July 2019.

4. Asbestos exposure in non-recognised occupations (bystander)

- 4.1. This follows correspondence from a MP about a constituent who worked as an electrician and developed lung cancer after working in close proximity to other workers who were processing asbestos. The claim for IADB was subsequently turned down as the occupation was not listed in the prescription.
- 4.2. A literature search was undertaken to check for any new evidence on risks in workers with bystander exposure, but there were doubts whether risks would be sufficiently elevated to meet the prescription threshold.
- 4.3. RWG decided to pursue the matter in more detail but to widen the scope to include construction workers as the term 'electrician' may be too specific. Also to widen the scope to include silica exposure.
- 4.4. Following discussion at RWG, it was decided to no longer refer to 'bystander' as the exposure is as a consequence of working in an area where asbestos is present and the worker may not be aware of this.

- 4.5. The development of lung cancer from an occupation perspective may not necessarily be due to asbestos exposure alone – there are many components of respirable dust, which may be carcinogens.
- 4.6. Given the wide scope of this topic and the amount of work involved, it was suggested a bid for funding to carry out a commissioned report could be appropriate.
- 4.7. Extrapolation of exposure using modelling of risks from other industries to the construction industry was discussed as a possible approach.
- 4.8. It was decided that members would assess the scope of a review and define the parameters to assess, but a member asked that the scope not be limited to the confines of the industrial injuries scheme. It was suggested to assess the construction industry in parallel with occupations already prescribed.

5. Osteoarthritis of the knee in footballers

- 5.1. The Professional Footballers Association (PFA) has engaged with the secretariat to ask the Council to assess osteoarthritis of the knee in footballers.
- 5.2. It was clear from the data that footballers who sustained a knee injury were more than likely to go on to develop osteoarthritis of the knee.
- 5.3. Members with musculoskeletal expertise were asked to review 21 key papers which had published evidence from studies on this topic. This review is ongoing and members will be asked to give their considered views and critical appraisals at the full Council meeting in July 2019.
- 5.4. Osteoarthritis in general was brought up as a potential topic to investigate in more depth. This could be the subject of another commissioned review for the Council to consider.

6. Coke oven workers and COPD

- 6.1. BBC Wales online reported that a former British Coal workers widow was awarded compensation and that four other test cases were settled out of court.
- 6.2. The Council was asked to consider the implications of the judgement and whether to review the prescription for COPD.
- 6.3. An initial literature search provided studies which were fairly old, with inconsistent evidence and many cases had been settled out of court.
- 6.4. A member reviewed the current literature and concluded that based on the quality and consistency of the evidence in the literature, on the balance of probability, there is an association, but the evidence is weak.
- 6.5. A draft paper was circulated for discussion and there was general agreement with the assertions above, but overall it was thought there was a doubling of risk, but this should be tagged with caution.
- 6.6. Older studies were carried out before the introduction of preventative measures, so the exposure doses were significantly elevated. The Institute of

Occupational Medicine has published reports on the steel industry, which broadly align with the draft paper presented for discussion.

- 6.7. The draft paper reviews studies which report mortality statistics, but as COPD is usually non-fatal and can be present for many decades before causing death, mortality rates are likely to underestimate the overall burden of COPD.
- 6.8. Given the depth of the investigations carried out, it was decided to format the report as a position paper which will be reviewed by the full Council at its meeting in July.

7. AOB

- 7.1. HSE Workplace Health Expert Committee (WHEC) published a report on Shift work and breast cancer, which was discussed by members. The report identified a review by McElvenny et al (2017) identified 15 systematic reviews, meta-analyses and narrative reviews published on the topic between 2005 and 2015. It also includes a review by Fenga et al, 2016. WHEC summarised the evidence from these reports and believed be a full, although perhaps not complete, summary of evidence. While cut-points varied, most studies presenting data on the question have not indicated an increase in risk for exposure durations <10 years, but a caveat to this last conclusion is that higher intensity of exposure (or permanency of night working) may possibly add to risks over a shorter period, although only a few studies have provided data on the issue. Considering the evidence summarised in the report, it is WHEC's view that a causal association is "Possible/uncertain".
- 7.2. A member commented that a recent paper in the British Journal of Cancer (The Breast Cancer Now Generations study) found night shift work does not increase the risk of breast cancer, but it was decided to wait until June 2019 when an International Agency for Cancer Research (IARC) monograph is expected on this topic before deciding how the Council should respond.
- 7.3. The final draft of a paper on Hand-Arm Vibration Syndrome was circulated for comment and several minor amendments were agreed. It is hoped this position paper could be published in early July 2019 and the formal process of publication has been started.
- 7.4. A member commented on a paper which gave a systematic review of the literature on the association between Raynaud's phenomenon, neurosensory injuries and carpal tunnel syndrome and hand-arm vibration (HAV) exposure. The paper concluded at equal exposures, neurosensory injury occurs with a 3-time factor shorter latency than Raynaud's phenomenon.
- 7.5. This was compared to the published carpal tunnel syndrome (CTS) command paper and differences were submitted in a draft note to members for discussion.
- 7.6. A member felt claimants may be unfairly treated because of non-occupational causes.
- 7.7. It was decided to assess the statistics for PD A12a & PD A12b to establish if there is a high rate of claims being turned down. An audit of claims for CTS may be required if a high failure rate is apparent.

- 7.8. The Council requested claims statistics be provided for PD A12 and will be reviewed by a member with expertise of this topic.
- 7.9. It was felt that it would be beneficial to regularly review statistics for industrial injuries disablement claims (IIDB) to ensure the scheme is operating as it should, and guidance is being interpreted as it is intended.
- 7.10. Current and past members were thanked for their contributions in reviewing the respiratory disease handbooks provided to health care professionals for assessing claims to various prescriptions involving respiratory diseases.

Next meetings:

Full IIAC – 10 July 2019

RWG – 12 September 2019