RESEARCH WORKING GROUP
of the Industrial Injuries Advisory Council

Minutes of the meeting
Thursday 3 March 2016
10am, Room 1.25, 1st Floor, Caxton House

Present:

Professor Paul Cullinan (Chairperson)	RWG
Mr Keith Corkan	RWG (for agenda items 11 onwards)
Professor Damien McElvenny	RWG
Professor Keith Palmer	RWG
Professor Neil Pearce	RWG
Dr Emily Tucker	DWP
Mr Neil Walker	DWP (for discussion on II reform)
Mrs Rebecca Murphy	IIAC Secretariat
Dr Marianne Shelton	IIAC Secretariat
Ms Catherine Hegarty	IIAC Secretariat

Welcome: Mr Neil Walker

Apologies: Dr Ira Madan, Dr Karen Walker-Bone, Mr Richard Exell, Dr Anne Braidwood, Mr Andrew Darnton and Dr Clare Leris

1 Announcements and Conflict of interest statements

1.1 **Publication of IIAC reports** - The Command paper on ionising radiation and cancer was published on 25 February. The diffuse pleural thickening report has been signed off and the Secretariat is awaiting a publication date.

1.2 **Industrial Injuries Scheme reform** – In the 2015 Summer Budget the government stated its intention to consider how employers and insurers could play a greater role in supporting those suffering from industrial injuries. Given the complexities of the Scheme and to enable due consideration to formulate reform options, a statement on proposals for change were not included in the Autumn Statement as originally anticipated. The Minister has asked that the Council provide their own views on reform proposals to him by 29 March 2016.

1.2.1 A Departmental policy official set out a number of potential reform options currently being explored and these were discussed briefly by the RWG. An extraordinary meeting for Council members will be organised to discuss this matter in more depth in the week commencing March 14.

1.3 **Conflict of interests** - No conflicts of interests were raised.

2 Minutes of the last meeting

2.1 The minutes of the last meeting were cleared with minor amendments to paragraphs 4.2, 8.5, 11.6, 12.3, 12.7 and the summary box in Section 4. The Secretariat will circulate the final minutes to all RWG members ahead of publication on the gov.uk website.

2.2 All action points had been completed or were in progress. The following update was given for an action point from the September RWG meeting:

Action point 6: Dr Clare Leris to consider presumption and rebuttal in decision makers' guidance; Secretariat to query when a decision will be made about the Council's recommendations about presumption and rebuttal. Departmental medical policy officials to inform IIAC when the Minister has made a decision about the Council's recommendations in relation to presumption and rebuttal.

Action point 15: Dr Ira Madan to draft an information note about depression and anxiety. This was in progress and will be available for the April Council meeting.

Action point 16: Secretariat to consider the date of the IIAC meeting on 21 April due to the UK and Ireland Occupational Epidemiology Meeting in Buxton being held the same day. It was not possible to change the date of the meeting; the majority of members are able to attend the Council meeting.

3 Medical assessments

3.1 This agenda item was held over to the April IIAC meeting.

4 Occupational osteoarthritis of the knee in construction workers

4.1 The RWG has been reviewing occupational osteoarthritis (OA) of the knee (PD A14) following an MP's request to consider joiners. No direct evidence of an excess risk was identified in joiners, but the RWG took the opportunity to expand the review to consider OA knee in construction workers.

4.2 PD A14 currently covers coal miners and carpet fitters only. Prescription for coal miners was possible by combining limited direct evidence of a greater than doubled risk of OA knee in miners together with a large amount of indirect evidence of a greater than doubled risk of OA knee due to kneeling and squatting - activities typically undertaken by coal miners. The case for

prescription for carpet fitters was supported by direct evidence of an increased risk available according to occupational title.

4.3 Construction work covers a broad range of occupations, not all of which are likely to be associated with activities at risk of OA knee. The RWG has so far a) considered the results of a literature search about OA knee in construction workers and, in addition, a search about kneeling and squatting in construction workers, b) made a call for evidence,and c) approached researchers in the field to request additional data. The call for evidence has not resulted in any evidence being submitted so far. A RWG member will be considering a couple of research papers for closer review.

4.4 Research studies tend to group construction workers in different ways and do not present risk estimates for each sub-group. Based on present evidence, thus far considered, there are significant barriers to prescription. An information note will be drafted which can be published on gov.uk/iiac and sent to the MP who raised the original enquiry.

5 Carpal tunnel syndrome (CTS) and twisting and turning

5.1 The RWG has been considering carpal tunnel syndrome (CTS) due to twisting and turning activities following an initial request from a member of the public in relation to tanker driving. Research reports specify the exposures in different ways, such as ‘bending and turning’ or ‘tightening with force’, making it difficult to amalgamate sufficient data to consider whether the threshold for prescription has been reached for any specific exposure. It was not possible to recommend prescription for CTS for twisting and turning occupational activities based on current evidence.

5.2 Members discussed a draft information note which had been circulated to members ahead of the meeting and recommended that it be brought to the April Council meeting for sign off.

6 Sports and neurodegenerative disease

6.1 In 2014 the Secretariat highlighted articles from the Guardian and the Daily Mail about dementia in sportspersons. The Council last considered this matter in the ‘Sporting Injuries’ position paper published in 2005. Two members had been reviewing evidence about head trauma in sports and neurodegenerative disease for a review article that had been recently published in a research journal; they had drafted an information note on this topic which was included in the meeting papers.

6.2 There are several reports of high risks of neurodegenerative disease in Italian professional football players. However it is difficult to draw strong conclusions from these results as the estimates are based on small numbers and it is unclear whether the different reports are based on the same cohort.

6.3 The 2005 position paper covered chronic traumatic encephalopathy and Alzheimer's disease in boxers. It would be helpful to include an update of the evidence base in relation to these topics in the draft information note. An amended information note will be included in the papers for the April IIAC meeting for sign off.

7 Occupational cancer

7.1 As part of a horizon scanning exercise a RWG member had considered new carcinogen classifications published by the International Agency for Research on Cancer (IARC). The threshold for classification is lower than the threshold for prescription. However, the IARC monographs provide a good summary of the evidence base in a particular area.

a) Exposure to trichloroethylene

7.1.1 IARC had classified exposures to trichloroethylene (TRIKE) when used as a chemical intermediate or metal degreasant as class 1 carcinogens. Evidence tables from the monograph were included in the meeting papers. Renal cancer and haematological cancer showed increased risks due to occupational exposure to TRIKE, and should be considered further by the Council.

7.1.2 For renal cancer the majority of evidence originates from an investigation of a cluster of cases in Germany, which was subsequently turned into a cohort study. Although the risks are more than doubled, the way this study was designed means the evidence is weaker than a typical cohort study where the cohort participants are assembled independently. However, there is also supportive evidence from studies in Sweden and France.

7.1.3 The risks reported for haematological cancer are raised, and in some cases are more than doubled. However, the overall evidence is less strong than for renal cancer.

7.1.4 The Council had previously considered TRIKE exposure and oesophageal or cervical cancer in dry cleaners. Increased risks for cervical cancer were reported by some studies considered by IARC, however, these studies are generally based on small numbers of study participants.

7.1.5 The evidence considered by IARC will be independently reviewed by another RWG member.

b) Exposure to polychlorinated biphenyls

7.1.6 The IARC monograph evidence tables were also included for exposure to polychlorinated biphenyls (PCB). There was insufficient evidence to warrant further review, but members agreed to keep a watching brief.

8 Depression and anxiety in teachers and healthcare workers

8.1 This agenda item was held over to the April IIAC meeting.

9 HAVS and the use of jack hammers in subsidence engineering

9.1 A MP has queried, on behalf of his constituent, why work underpinning foundations using a jack hammer is not prescribed for PD A11 (Hand Arm Vibration Syndrome; HAVS). His constituent worked as a subsidence engineer which involved activities such as breaking up floors and concrete using a jack hammer, and a number of other hand-held vibrating tools

9.2 PD A11 currently includes coverage for jack hammers used in specific occupational circumstances: “the use of hand-held powered percussive drills or hand-held powered percussive hammers in mining, quarrying, demolition, or on roads or footpaths, including road construction”.

9.3 A literature search on HAVS and the use of jack hammers in construction and building work had not identified any relevant studies. A call for evidence had been published on gov.uk/iiac with a deadline of 7 March; no evidence had been received so far.

9.4 A vibration and HAVS expert from the Institute for Sound and Vibration Research was consulted about this query. He suggested that, in his opinion, the use of jack hammers is a known risk of HAVS and that there has been successful negligence claims for such exposures. He felt that it was “the vibration of the jack hammer that causes the problem and not the specific job” and suggested it would be difficult to find epidemiological evidence of HAVS due to jack hammers when used in the specific way queried.

9.5 Members queried whether subsidence engineering could be covered by the term “demolition” in PD A11. Departmental medical policy officials agreed to consider this matter further.

9.6 The duration of exposure to hand-held vibrating tools can be an important factor in the development of HAVS. It is unclear how much of the working day subsidence engineers spend using jack hammers. The terms of prescription do not specify a duration or intensity of exposure. The last review of HAVS published in 2004 noted the effect of hand-held vibrating dose, but did not find sufficient evidence to be able to practically implement any measure of dose in the terms of prescription. Members queried whether the duration of vibration exposure for PD A11 claims may be considered by the Department under the rules governing presumption.

9.7 The vibration expert also highlighted that jack hammers are not technically used to ‘construct’ a road but rather to break up a surface to allow a road to be constructed, and thus suggested the following change to clarify the terms

of prescription: “the use of hand-held powered percussive drills or hand-held percussive hammers in mining, quarrying, construction or demolition, including work on roads or footpaths”. It was decided not to take immediate action.

10 Noise induced hearing loss and nail guns

10.1 An MP writing on behalf of his constituent has queried why the use of nail guns in woodworking is not covered by the terms of prescription for PD A10 (noise induced hearing loss; NIHL). His constituent suggests that work with nail guns is noisier than work with saws - an exposure which is currently prescribed.

10.2 A literature search for NIHL and nail guns or fastener drivers in carpentry and woodworking was included in the meeting papers. No relevant studies were identified that provided suitable hygiene data for the purposes of considering prescription.

10.3 A HSE research report on noise exposure and fastener driving tools stated that “Noise from fastener driving tools is likely to be a significant contributor to risk of hearing damage if a person is exposed to more than about 500 events per day (an *L*pA,1s value in the region of 98 to 100 dB giving an equivalent eight-hour daily personal exposure, *L*EP,d, of approximately 81 dB). For other tools the risk could be significant after only 100 events per day (an *L*pA,1s value of 105 dB giving an equivalent *L*EP,d of approximately 80 dB).” A RWG member has asked the HSE Principal Inspector for Noise about a) how many nail gun actions would be required to reach the threshold for prescription (>98bA L_{eq} over an 8 hour working day) and b) whether the HSE research report was representative of nail gun use in general in the UK workforce (compared to past and current exposures). No response has been received to this query so far.

11 IIAC Autumn Abstracts Booklet

11.1 The Autumn 2015 abstracts booklet was published in February. A table was included in the meeting papers showing the division of labour for each member to consider particular topics and identify any abstracts which IIAC may wish to review. Only RWG members will be asked to provide comments.

12 Extrinsic allergic alveolitis and paint spraying/isocyanate exposure

12.1 A member of the public asked IIAC to consider extending prescription for PD B6 (extrinsic allergic alveolitis; EAA) to include exposure to isocyanates. The RWG has been reviewing the evidence and concluded that there is sufficient

evidence to recommend prescription for EAA and isocyanates based on unique clinical features. Due to the increasing number of exposures associated with EAA, the RWG has discussed including an 'open' category for any other causes of the disease in the prescription for PD B6, similar to 'category x' for occupational asthma (PD D7).

12.2 Departmental medical policy officials highlighted that 'category x' claims for PD D7 generally require additional evidence gathering which increases administrative complexity and expense. To combat this issue a list of known causes for EAA was included in Command paper as an appendix, which will be updated routinely by the Council.

12.3 EAA is currently categorised under the diseases due to biological agents (the 'B' diseases). As isocyanates are a chemical substance, the RWG sought advice from Departmental lawyers about their preferred wording for the recommended changes to the terms of prescription. They had suggested splitting the prescription between the 'B' diseases and 'C' diseases, with an open category for PD B6 and a specific list of chemicals, including isocyanates, for a new prescribed disease, PD C34. Members agreed that it was the RWG's intention to include an open category for EAA due to chemical agents under PD C34. EAA is a rare condition, which requires diagnosis by a consultant. Including an open category for both the 'B' and 'C' disease entries for EAA is logical and cost-effective by ensuring that the increasing number of new chemical causes of EAA can be accomodated within the prescribed disease list without the need for changes to legislation; it is unlikely to result in many extra claims.

12.4 Members suggested a number of amendments to the draft Command paper ahead of its circulation to all IIAC members for sign off.

13 AOB

13.1 **Cataracts and exposure to fluorescent and artificial light** – A member of the public has asked IIAC to consider cataracts and exposure to (reflected) artificial or fluorescent light in an office. The correspondent highlighted a report from the Scientific Committee on Emerging and Newly Identified Health Risks entitled 'Health Effects of Artificial Light'.

13.2 The report's executive summary noted that the "probability that artificial lighting for visibility purposes induced any acute pathological condition is low, since the levels of maximum exposure [to optical radiation] are normally much lower than those where such effects are known to occur in healthy people and certainly much lower than in typical summer daylight". The report also stated that there was "no evidence that artificial light from lamps belonging to RG0 [Risk Group 0, exempt from risk] or RG1 [Risk Group 1, minor risk] would cause any acute damage to the human eye".

13.3 A RWG member highlighted a research report by Walls *et al.* (Am. J. Pub. Health, 2011. Vol. 101:12-13) which noted that some fluorescent light falls

outside the ultraviolet range. The authors estimated that the increased use of fluorescent lighting as an energy saving strategy may, therefore, increase eye disease by up to 12% and calculated that this could result in an additional 3000 cases of cataracts per year in Australia based on lifetime doses of UV radiation. Natural UV radiation is also much higher in Australia than the UK. No calculations were provided to predict the number of cases of cataracts due to occupational exposure to UV radiation. A literature search undertaken by the Secretariat did not identify any supportive evidence of an increased risk of cataracts due to exposure to artificial or fluorescent light.

13.4 Cataracts are a common eye disease, particularly associated with older age. The RWG agreed that there was no evidence that the threshold for prescription had been reached for cataracts and exposure to artificial or fluorescent light. The correspondent will be informed of the RWG's conclusions.

Date of the next meeting: 26 May 2016