

**INDUSTRIAL INJURIES ADVISORY COUNCIL**  
**Minutes of the hybrid online meeting**  
**Thursday 4 July 2024**

**Present:**

Dr Lesley Rushton	Chair
Dr Chris Stenton	IIAC
Dr Ian Lawson	IIAC
Professor Max Henderson	IIAC
Professor John Cherrie	IIAC
Professor Damien McElvenny	IIAC
Dr Jennifer Hoyle	IIAC
Dr Gareth Walters	IIAC
Dr Sharon Stevelink	IIAC
Dr Richard Heron	IIAC
Ms Lesley Francois	IIAC
Mr Steve Mitchell	IIAC
Dr Sally Hemming	IIAC
Mr Dan Shears	IIAC
Professor Kevin Talbot	Nuffield Department of Clinical Neurosciences, Oxford
Mr Andrew Hay	Northern Ireland Department for Communities (NI DfC)
Dr Claire Leris	MoD observer
Ms Lucy Darnton	HSE observer
Mr Lee Pendleton	IIDB
Dr Rachel Atkinson	CHDA
Dr Matt Gouldstone	DWP IIDB medical policy
Ms Georgie Wood	DWP IIDB policy
Mr Stuart Whitney	IIAC Secretariat
Mr Ian Chetland	IIAC Secretariat
Ms Catherine Hegarty	IIAC Secretariat

**Apologies:** None

**1. Announcements, conflicts of interest statements and sign-off of minutes**

- 1.1. The Chair welcomed all participants and set out expectations for the call and how it should be conducted.
- 1.2. Members online were asked to remain on mute and to use the in-meeting options to raise a point.
- 1.3. The Chair announced that Dr Gail Allsopp may join the call as an observer. Gail is the Chief Medical Advisor/Clinical Policy Group Deputy Director and had met with the Chair the previous day.
- 1.4. The Chair welcomed Dr Matt Gouldstone who is a medic and has taken on responsibility for IIDB clinical policy.

- 1.5. The Chair also announced that Professor Kevin Talbot would be joining the meeting later to help the Council with its work on neurodegenerative diseases in professional sportspeople.
- 1.6. The long-standing former MOD observer, Dr Anne Braidwood, retired recently. The Chair formally thanked Dr Braidwood for her very valued input over many years. Dr Braidwood thanked the Council for a fruitful relationship.

### **Minutes of the last meeting**

- 1.7. The minutes of the April meeting and the action points had been circulated to members to comment on and agree.

## **2. Promotion of IIAC's activities and raising of its profile – outreach**

- 2.1. The Chair commented that this was a very important topic and apologised to members for not having time to cover this at previous meetings. They stated they had become aware that there was a lack of awareness around worker compensation such as IIDB. The Chair indicated they had recently delivered a presentation to the TUC and further talks to other organisations were in the pipeline.
- 2.2. The Chair thanked members for having an abstract and poster at the recent [SOM FOM Conference: Occupational Health 2024](#), which was well received.
- 2.3. A member gave an outline of future activities which could be targeted, such as webinars that could showcase the diverse membership of IIAC. Members were encouraged to volunteer to participate.
- 2.4. The Chair indicated that discussions were ongoing with the TUC to deliver a longer talk. It was felt that small and medium-sized enterprises (SMEs) were a difficult sector to engage with and there was a danger of delivering multiple talks to small groups, which is time-intensive. Engagement with The Royal Society for the Prevention of Accidents (RoSPA) could be a route to help with this.
- 2.5. A member commented they felt occupational physicians may be disengaged unless a condition has to be formally reported. Another member felt that presenting specific topics, such as hand-arm vibration syndrome, may be more interesting to certain groups rather than generic overviews of IIDB. Updates on outputs or specific topics may also be better than focussing on the regulatory framework and may also create more engagement.
- 2.6. An employer representative indicated that employee relations or reward teams may be an important stakeholder with the potential to reach a wide audience - [The Reward & Employee Benefits Association](#) (REBA) being an example.
- 2.7. A member indicated that the editorial board of Occupational Medicine would be happy to receive regular pieces from IIAC for inclusion in the journal. The Chair felt that a summary of the work over the last few years could be appropriate, which could be an editorial or an article. Journal issues have

been framed around specific topics, such as research and IIAC could feed into these, however this a lot of work.

- 2.8. An employee representative suggested that panel solicitors who advise unions may not be aware of IIAC or its work, so outreach may be a good idea.
- 2.9. A member volunteered to co-ordinate all the ideas and suggestions, so members were asked to email their suggestions which could become a 'living' document.
- 2.10. The Chair reminded members that IIAC was set up to advise on a small piece of legislation, so must keep to that remit.
- 2.11. An employer member felt that the private insurance market (e.g. income protection) may be useful stakeholders to target.
- 2.12. From an IIDB assessment perspective, there is often a disconnect between the disease and the exposure, so education for medical professionals could also be important as medical training often doesn't include occupations or their diseases. The faculty of Occupational Medicine is trying to increase training for these topics at undergraduate level. Other post-graduate opportunities could be to target articles in [Royal College of Physicians \(RCP\) journals](#) such as Clinical Medicine, which has been done previously (by a previous IIAC member) and was well received.
- 2.13. The [Occupational Health \(at Work\)](#) journal would also welcome articles from IIAC.
- 2.14. The human resources (HR) community, e.g., Human Resources Today could also be considered to engage with – whilst not academic, it is widely read by practitioners. Other journals, such as the Health and Safety Management, were also discussed.
- 2.15. It was agreed that a list would be compiled by a member – this could then be prioritised.

### **3. Neurodegenerative diseases (NDD) in professional sportspeople**

- 3.1. The Chair introduced the topic and members were reminded that Professor Kevin Talbot would be joining the meeting to discuss the draft paper on ALS (amyotrophic lateral sclerosis) and sport. Prof. Talbot had been provided with a copy of the paper and had already provided comments.
- 3.2. The Chair thanked members who have drafted the paper and reiterated how complex this topic is, with many 'knowns' and 'unknowns' about the disease and the exposure.
- 3.3. When IIAC started this investigation, an author of a key study was invited to attend a meeting to discuss the findings, which showed there were significant results for a number of NDDs, which was explained by the author as having the same pathology, that has been countered by Prof Talbot in his comments on the draft paper.
- 3.4. A number of questions had been raised with Prof Talbot e.g. the reliability of diagnoses, causative exposures and nomenclature to use.
- 3.5. The Chair invited the members who had drafted the paper to comment and to lead the discussion.

- 3.6. A member stated they had a number of issues to discuss with Prof Talbot and gave an overview:
- Some epidemiological evidence from:
    - 1 study American football;
    - 4 studies from soccer;
    - 1 study from rugby.
  - These appear to show a link between ALS and professional sport. A pathogenic pathway has been very difficult to work out, possibly because:
    - Strenuous exercise and its deleterious effect, possibly related to genetics;
    - Head impacts and/or head injuries.
  - The potential link between exercise and genetics (common predisposition) is very complex.
- 3.7. A member felt that they would like an explanation for common pathogenesis between 'brain injury and ALS' and 'exercise and ALS' – is there a common pathway and why if both of these are relevant? This may be difficult to resolve and a response may be that the studies were carried out incorrectly to answer this question.
- 3.8. A member who authored the paper felt that there were flaws in the epidemiology e.g. uncommon exposures and an uncommon disease, with numbers being small in the studies and wide confidence intervals.
- 3.9. This member felt (personal view) that the studies were leaning towards exercise rather than head impact/injury/trauma being the causative pathway, but it was difficult to judge.
- 3.10. Anecdotally, a member felt that it was whole-body impact when tackling (rugby) which could cause the damage (via a shaking of the brain), but there was no evidence to support this.
- 3.11. A member asked what would constitute sufficient evidence to recommend prescription and referred back to recommendations made in the past which relied on evidence from relatively small, but robust studies. It was acknowledged that evidence should be sufficiently robust so that it would be unlikely to be overturned.
- 3.12. A member commented that the impact of genetics should be framed correctly as having a potential genetic trait would not preclude access to IIDB.
- 3.13. Recalling earlier discussions, a member asked about the evidence relating to exercise and ALS (no involvement of head injury/trauma) in skiers as this doesn't appear to be covered in the paper. A member stated that it could be that there was no difference in the risks between skiers and the reference population, but there may have been a gradient within the skiing population.
- 3.14. A member asked if there was merit in looking again at athletes (e.g. marathon runners/triathletes) to attempt to disentangle head injury/trauma from high-intensity exercise – a member agreed to share the references.
- 3.15. A member felt that as chronic traumatic encephalopathy (CTE) is mentioned in the draft paper, the paper published by Nowinski et al (Front Neurol

- 2022 Jul 22:13:93816) should be referenced as it was brought to the Council's attention by Dr Adam White from the Professional Footballers Association.
- 3.16. A member asked if there was any information relating to lag time when early exposure could have occurred to onset of ALS rather than related to age. A member replied that evidence was weak and would likely not be a factor for considering prescription.
  - 3.17. Professor Kevin Talbot joined the meeting and was welcomed by members and the Chair.
  - 3.18. A member asked about the correct nomenclature to use when referring to ALS – ALS is the correct anatomical term and is preferential to motor neurone disease (MND)) to use.
  - 3.19. A member summarised the evidence the Council found and asked about the reliability of the diagnoses at earlier stages of the disease. Prof Talbot felt that studies which were from 20 years ago should be treated cautiously and the draft paper contained studies which were under-powered and small. The diagnostic criteria have improved over time and in current time are associated with a high level of accuracy.
  - 3.20. It was postulated that if sportspeople were at great risk of ALS, this could be due to exercise or head or body impacts. Data from the UK BioBank cohort also indicate that study participants who develop ALS have a different socioeconomic profile than others and may be constitutionally different years before ALS developed. This is an observation which may be subject to confirmation bias.
  - 3.21. Prof Talbot felt that the differences in ALS patients may be due to pleiotropic antagonism – a genetic profile which may be beneficial in early life (e.g. physical fitness) traded off against some negative attributes in later life – this may be a fact but does not prove a link. Either there is a biological relationship between describable elements (physical activity/head impacts) or there is an association not causal or mechanistically related. If mechanistically related, then the mechanism of exposure some 30 years before onset would need to be understood - there is no preclinical or biological evidence which could help.
  - 3.22. Prof Talbot felt that remote exposure could drive it (ALS) but the mechanism is unknown – it was felt unlikely that motor neurones could be 'worn out' by exercise and evidence for oxidative stress is lacking. Summarising, Prof Talbot felt it was unclear whether this is an association with no mechanistic relationship or if there is a mechanistic relationship. Caution should be adopted when referring to Mendelian randomisation studies as this method is in its early stages and much more data are required before concluding this is not related to a shared genetic profile.
  - 3.23. A member summarised that the mechanistic pathway between exercise causing ALS is far from clear and asked if the same could be said for head impacts/injury. Prof Talbot felt that all case-control studies which used self-reporting should be eliminated due to bias. A record-linkage study (30 years of NHS data) found that there was no association between head injury and

- ALS, with the exception of the year before ALS diagnosis. This could be due to reverse causality and attributed to falling over due to onset of spasticity.
- 3.24. Prof Talbot referred to a pseudo-cancer model which incorporates a multi-hit mechanism – a genetic-susceptibility profile, which leads to development of a nervous system with somatic mutations.
  - 3.25. A member stated they were unclear how head trauma could translate into ALS which involves the spinal cord. Prof Talbot iterated that ALS is a system disease and felt that head trauma could disturb the cellular architecture which could have impacts downstream, so head injury could be a cofactor. However, there doesn't appear to be a link between ALS and head trauma as traumatic brain injury is more likely to occur, as observed in boxing.
  - 3.26. Referring to NDD as a whole, Prof Talbot was clear that he felt that the individual diseases were distinct and that overlap between them has been over-emphasised. Patients with Parkinson's disease are very different genetically to those who develop ALS, with different neuropathology and different motor-system abnormalities.
  - 3.27. The Chair stated this was a very complex issue which needs to be communicated to interested parties, scientifically and in lay-man's terms. Prof Talbot indicated he would be willing to revisit the draft paper after further consideration by the Council and reiterated his neutral position and maintains an open mind on this topic. However, as a scientist he is sceptical and would need to be convinced, which is not the case at present.
  - 3.28. A member asked about the role of cognitive impairment as a precursor to neurological diseases, particularly ALS, and does this have a time window. Prof Talbot indicated that whilst this may be useful in Alzheimer's and Parkinson's, there is no such preclinical marker for ALS. ALS can occur when people are in peak health. The relationship between cognitive impairment and ALS is very complex and has yet to be fully worked-out.
  - 3.29. Cognitive reserve was briefly discussed, and it was thought that there was possibly not a link to IQ and ALS development.
  - 3.30. A member asked about an earlier statement that from BioBank data, ALS patients appear to be constitutionally different. Prof Talbot explained that when an ALS patient presents in clinic, there are no obvious signs which is not the case for other NDDs. The patients from BioBank who developed ALS had a different lipid profile from the control group. This was borne out by looking at lipid data from the patients seen in Prof Talbot's clinics. So, whilst there may be a metabolic link, this is only preliminary and doesn't amount to a phenotype which could be identified.
  - 3.31. A member commented that Prof Talbot's input will be invaluable in helping the Council to reach a conclusion about ALS and a potential link to professional sportspeople. When asked if there may be a dose-response to exposure to head injury/impact, Prof Talbot was unable to give a definitive response as evidence is lacking.
  - 3.32. Prof Talbot was thanked, by the Chair and members, for his input into the discussion.

- 3.33. Further discussion followed with members indicating they felt that all the information was there and at some point, the Council would need to come to a decision whether or not to recommend prescription.
- 3.34. A member raised the point whether mechanistic or biological plausibility information is required to come to a decision. There is also a question around bias in some of the studies, especially case-control studies and those with self-reporting of exposure. However, this may not be relevant for professional sportspeople where reporting of exposure may be better documented.
- 3.35. There was discussion around the use of evidence from studies which did not focus on professional sportspeople, with some arguing that evidence from non-professional sportspeople was mixed in their outcomes and the overall effect was marginal. Others felt that all studies should be included provided design, quality etc aligned with those from professional sportspeople, giving an overall picture of the evidence. It was suggested that the authors state their confidence in the studies selected for inclusion in the paper in terms of quality, reliability and whether the reporting of exposure was 'official' of self-reported etc.
- 3.36. It was also noted that perhaps the genetic differences in those who develop ALS should be covered in the paper.
- 3.37. Reflecting on Prof Talbot's input, a member felt they would be uncertain in recommending prescription due to a lack of pathogenesis and felt the evidence may be an association rather than a causation. The absence of a plausible mechanism was also a concern. They also felt the genetic element was not relevant as this would not preclude access to IIDB. If studies were discounted for inclusion in the draft paper, this needs to be explained very carefully.
- 3.38. Another member commented they felt that the Council doesn't need to understand the mechanism but needs to be sure there is a causal association between work activity and the disease. This was related back to the command paper '[Cutaneous malignant melanoma and occupational exposure to \(natural\) UV radiation in pilots and aircrew](#)' where the epidemiology was good and the evidence was strong but there was no clear mechanism.
- 3.39. A member felt that in this instance, the epidemiology is not especially good, more 'islands of suggestion', they echoed Prof Talbot's view that the pathophysiology of the NDDs were not the same.
- 3.40. A member and author of the paper commented they felt the epidemiology was weak and not supported by a clear pathogenetic pathway. If studies in non-professional sports or head injuries supported the evidence then confidence would be higher, but that is not the case. The evidence is based on a small number of studies with disparate outcomes and issues with numbers etc, so this member felt there was not a case for prescription.
- 3.41. A member felt that evidence from non-professional sport should be treated with caution as the exposures are different and different physiological status. This member had the opposite view and felt the evidence was strong enough to recommend prescription.

- 3.42. The strength of the evidence and its limitations were reflected upon and reference was made to 'Table 1' in the draft paper which showed high risk estimates, but some of the numbers were very small. A meta-analysis showed that elevated risks were apparent.
- 3.43. It was suggested that the Council carry out its own informal meta-analysis as a member had the software. It was agreed that a double data extraction could be carried out. As some of the studies selected for the paper were overlapping, members were asked to select which were the most appropriate studies to use for meta-analysis. It was agreed that members would discuss further.
- 3.44. It was suggested that the Council could ask Prof Talbot to review some of the studies, but this was felt to be an imposition.
- 3.45. The point was made that if the Council decide not to recommend prescription, this could be due to the quality of the studies, so the Council will need robust wording to explain this. A member also stated that it is important that there is consistency in the interpretation of the evidence.
- 3.46. A member felt that if prescription was recommended, claims would not be high but felt that timing would be important as there have been a number of high-profile cases recently and there are likely to be more, and the topic is unlikely to go away.
- 3.47. The Chair commented that the draft paper was almost there, but time would be taken to ensure the outcome is correct. They suggested that the investigation into other NDDs could be outsourced.
- 3.48. A member felt that it may be premature to recommend prescription due to the lack of mechanism, causal relationships etc., so would err on the side of caution until further information or clear evidence is available.
- 3.49. A member updated the Council on an ongoing legal case (concussion) involving rugby players where another 65 or so cases had been added to the original 295. These players have ALS and a number of other conditions. The courts are requiring additional medical evidence to support the claim for class action. The member agreed to continue to monitor this legal case.

#### **4. Occupational impact of COVID-19**

- 4.1. The Chair introduced the topic and thanked members for their final inputs. The long-COVID section has been updated and the Chair made a specific point that this command paper (and the previous health and social care workers command paper) does not prescribe for long-COVID. It recommends prescription for 5 clearly defined diseases and in this command paper this is more fully explained where it is recognised that some claimants who may qualify (under the prescription) will also have symptoms of long-COVID (post COVID syndrome). If a claimant presents with long-COVID symptoms other than those stated in the prescription, they would not qualify.
- 4.2. There was some discussion around the proposed title of the command paper and it was agreed to have further discussions off-line.



- 4.3. There was discussion around the use of face-masks in the workplace, especially the NHS and clarification given that face-masks are not routinely required.
- 4.4. The Chair asked if members were content with the paper and could be signed-off. This was passed.

## **5. Commissioned review on respiratory diseases**

- 5.1. The Institute of Occupational Medicine (IOM) gave a short presentation on progress made to date and outcomes so far. 6 disease/exposure combinations were selected for further work:
  - Silica + COPD – report submitted to Council and feedback received;
  - Silica + Lung Cancer - report submitted to Council and feedback received;
  - Cleaning products + COPD - report submitted to Council and feedback received;
  - Farming/ pesticides + COPD - report submitted to Council;
  - Chromium VI + lung cancer – will be available for RWG in September;
  - Asbestos + lung cancer - will be available for RWG in September.
- 5.2. IOM asked for clarification of the occupation element of prescription for PD D8 (primary carcinoma of the lung where there is accompanying evidence of asbestosis).
- 5.3. The review may identify other high exposure scenarios for consideration for D8. IOM are also looking for evidence for lung cancer in the absence of asbestosis. A member commented that this a complex topic in which the epidemiology is based on chest x-rays where asbestosis of sufficient severity is visible.
- 5.4. A member asked if exposure/response is being considered – IOM indicated it was looking for instances of when risks were doubled. Similarly for asbestosis alone as a doubled risk would also translate into a doubled risk for lung cancer, which will be considered by IOM.

## **6. Work programme update**

- 5.5. The Chair suggested the funding made available to the Council be used to take forward the next steps for the commissioned review based on the detailed reports produced by the IOM. Detailed specifications would need to be drawn up which could potentially include consideration of toxicology and mechanistic information (e.g., silica is a genotoxic carcinogen) if appropriate.
- 5.6. Members did not object so the Chair will work with other members to put this into action.

### **Scoping review into women's occupational health**

- 5.7. The Chair indicated work had started and initial meetings held – this project is scheduled to conclude early 2025.

### **Other work programme activities**

- 5.8. Following a meeting with a stakeholder, there are a number of potential topics which may need to be (re-)considered:
- PD A14 (Osteoarthritis of the knee) – qualifying occupations underground;
  - PD D9 (Diffuse pleural thickening) - exposure criteria.

### **7. AOB**

- 5.9. DWP medical policy raised Caplan's disease in relation to PD D1 pneumoconiosis, which is absent from the DWP decisions makers guide. Whilst Caplan's is rare, it does occasionally come up. The concern is that a claimant may apply for PD D1 but due to a diagnosis of Caplan's their claim may be rejected. IIAC members advised that Caplan's should be treated as a synonym for pneumoconiosis and refer on for further evaluation.
- 5.10. The secretariat had circulated the dates for meetings in 2025. The Chair noted that there would be a public meeting in 2025.

### **Date of next meetings:**

RWG – 5 September 2024  
IIAC – 17 October 2024