CC/MIN/2014/01

COMMITTEE ON CARCINOGENICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

Minutes of the meeting held at 10.30am on Thursday 27th March 2014 at Department of Health, Skipton House, Elephant and Castle, London, SE1.

Present

Chair:	Professor D Phillips	
Members:	Mr D Bodey	
	Dr G Clare	
	Dr J Doe	
	Dr P Greaves	
	Professor R Kemp	
	Dr D Lovell	
	Professor J Peto	(Items 1-4)
	Dr L Rushton	
	Dr R Waring	
Secretariat:	Ms F Pollitt	PHE Scientific Secretary
	Dr D Gott	FSA
	Miss B Gadeberg	PHE
	Dr K Burnett	Imperial College PHE Toxicology Unit
	Dr K O'Leary	Imperial College PHE Toxicology Unit
Assessors:	Dr H McGarry	Health and Safety Executive (HSE) (by teleconference)
	Dr O Sepai	PHE
	Dr H Stemplewski	Medicines and Healthcare Products Regulatory Agency (MHRA) (Items 1-4)
Officials:	Mr C Acton	DH Alcohol Policy Team (Item 4.1)
Observers:	Dr Meera Cush	Delphic HSE Solutions Ltd (Items 1-3, 4.1(b)-8)

Contents		Paragraph
Item 1:	Apologies for absence and announcements	1
Item 2:	Minutes of meeting held on 21st November 2013 (CC/MIN/2013/3)	4
Item 3:	Matters arising	5
Item 4:	Alcohol and Cancer risk	8
4.1 (a)	Final report to CMOs on Review of Alcohol Guidelines (**Reserved Business**) (CC/2014/01)	9
(b)	Consideration of recent meta-analysis investigating the effect of alcohol on renal cell carcinoma risk (CC/2014/07)	16
(c)	Consideration of recent meta-analysis investigating the effect of alcohol on extrahepatic bile system cancer (EBSC) risk (CC/2014/08)	18
(d)	Consideration of recent meta-analysis investigating the effect of alcohol consumption on Non-Hodgkin's Lymphoma (NHL) and Hodgkin's Lymphoma (HL) cancer risk (CC/2014/03)	19
4.2	Consumption of Alcohol and Pancreatic Cancer Risk (CC/2014/02)	21
4.3	Cessation of Alcohol Consumption and Effect on Oesophageal and Head & Neck Cancer Risk (CC/2014/04)	25
Item 5:	COC Annual Report for 2013 (CC/2014/05)	32
Item 6:	Guidance Statement – G05: Points of Departure and Potency Estimates – 2nd draft (CC/2014/06)	33
Item 7:	Any other business	37
Item 8:	Date of next meeting – 17th July 2014	39

30

ITEM 1: Apologies for absence and announcements

1. The Chair welcomed the Members and Assessors to the meeting. Apologies were received from Professor H Wallace, Drs B Miller and C Powell and the new COC Member, Professor Kasturi Warnakulasuriya. Professor T Gant (PHE) sent apologies and was represented by Dr O Sepai; Dr D Benford (FSA) sent apologies and was represented by Dr D Gott; Dr M Roberts (Defra) and Messrs C Ramsay (Health Protection Scotland) and P Holley (DH) sent apologies.

2. The Chair welcomed Ms Frances Pollitt back in her role as PHE Scientific Secretary

3. Members were reminded to declare any interests they may have in an item before its discussion.

ITEM 2: Minutes of meeting held on 21st November 2013 (CC/MIN/2013/3)

4. A number of amendments were made to the minutes in paragraphs 16, 22 and 24. Some changes were also made to the reserved minutes.

ITEM 3: Matters arising

Item 3: The development of new screening levels for contaminants in soil

5. As agreed at the meeting in November 2013, the Chair had written to Defra expressing the Committee's concern that without a Soil Guideline Value, Local Authorities would not have any basis on which to assess health risks from lead. A response had been received from Defra and this was tabled alongside the Chair's original letter.

6. Members were informed that Defra had that morning published the research project with an accompanying Policy Companion Document, which included some guidance on assessing risks from lead.

Item 5: G07 Discussion paper (CC/2013/16)

7. Members were thanked for providing comments on this paper by correspondence following the last meeting as there had not been time to discuss it. This topic would be considered further in July 2014.

ITEM 4: Alcohol and Cancer risk

8. Dr G Clare declared an interest as a shareholder in Diageo. This was considered a personal, non-specific interest. It was agreed that Dr Clare would not participate in the discussion or conclusions of this topic.

Item 4.1 (a): Final report to CMOs on Review of Alcohol Guidelines (Reserved Business) (CC/2014/01)

9. The Chair welcomed Mr Acton from the DH alcohol policy team for this item. The item was discussed in reserved session as it included discussion of pre-publication research, which had been provided to the Committee on the understanding that it would not be disseminated further. The minutes for this item will be made available when the research is published.

Item 4.1 (b): Consideration of recent meta-analysis investigating the effect of alcohol on renal cell carcinoma risk (CC/2014/07)

16. In November 2013, the COC had suggested reviewing two recent meta-analyses showing an inverse association between alcohol consumption and Hodgkin's and Non-Hodgkin's lymphoma (HL and NHL). Two meta-analyses showing a similar inverse relationship between alcohol consumption and renal cell carcinoma risk had also come to the attention of the Secretariat and the COC was requested to consider these.

17. Members reviewed the two meta-analyses and agreed that they provided evidence of an inverse relationship. It was not clear what mechanisms could be involved although it was suggested that the development of tumours might be influenced by altered fluid consumption impacting on urine production. It was noted that one meta-analysis considered only studies on cancer incidence and, therefore, did not include two of the studies from the other analysis which also included papers on cancer mortality. This accounted for the difference in the strength of association in the two meta-analyses. The small number of studies which considered heavy drinking suggested that the risk reduction levelled off at intakes of 20-25 g alcohol per day. It was concluded that the studies indicated an inverse association between alcohol consumption and renal cell carcinoma risk, but there was no consistent dose response.

Item 4.1 (c): Consideration of recent meta-analysis investigating the effect of alcohol on extrahepatic bile system cancer (EBSC) risk (CC/2014/08)

18. As described above for the paper on renal cell carcinoma risk, a meta-analysis showing an inverse association of alcohol consumption with extrahepatic bile system cancer had also come to the attention of the Secretariat. Members noted that this is a rare cancer site, with many other potential risk factors, and the analysis was based on 3 studies only. The adjusted OR for heavy drinkers compared to non- or low drinkers was 1.58 and for moderate drinkers 0.8, which suggested that this may represent an alcohol associated cancer exhibiting a threshold for effect. It was concluded that this study suggested an inverse relationship at moderate consumption levels compared with non-/low drinkers but it was unclear what mechanisms might be involved.

Item 4.1 (d): Consideration of recent meta-analysis investigating the effect of alcohol consumption on Non-Hodgkin's Lymphoma (NHL) and Hodgkin's Lymphoma (HL) cancer risk (CC/2014/03)

19. At the November 2013 COC meeting, concerns were raised as to whether the inverse association between NHL and HL cancer risk with alcohol consumption identified in a meta-analysis was a true effect. It was suggested that Members should review the two recent meta-analyses where the role of alcohol consumption and the risk of these cancers were analysed.

20. The meta-analyses suggested a decrease in risk of these cancer types among people consuming alcohol compared to non-drinkers, but a significant dose response was not observed for either cancer type. The authors themselves suggested caution in interpretation of the findings. Members raised concerns about

the consistency of the classification of cancers of this type and commented that this was confounded by the heterologous tumour pathology. It was queried whether the finding could be artifactual, as there was no immediately obvious mode of action which could explain the association. Overall, it was concluded that, although based on only a few cases, the finding was very consistent and could therefore not be discounted. A Member suggested that Professor David Spiegelhalter may be able to provide a more detailed insight into how this could be communicated if this were required.

Item 4.2: Consumption of Alcohol and Pancreatic Cancer Risk (CC/2014/02)

21. In 2009, IARC reviewed the available literature on alcohol consumption and pancreatic cancer and concluded that high alcohol intake was associated with a small increased risk of pancreatic cancer. The paper was a review of the epidemiological studies (pooled/meta-analysis, cohort and case-control studies) on alcohol consumption and pancreatic cancer published after the 2009 IARC review.

22. Overall, the new evidence presented supported the conclusion of IARC in 2009. The Committee noted that the IARC conclusion on pancreatic cancer and alcohol acknowledged the possibility of residual confounding due to smoking. Some of the studies presented in the paper had analysed smokers and non-smokers separately and these were suggestive of the effect of alcohol on pancreatic cancer being independent of smoking.

23. The evidence since 2009 included papers which presented data on patterns of drinking, including binge drinking and volume consumed over a week, as well as studies looking at daily drinking. These could be informative in terms of providing description of the effect of different types of drinking but it was considered unlikely that different relative risks could be identified for the various drinking patterns. No evidence had been identified which investigated the effect of alcohol-free days on pancreatic cancer risk.

24. In this paper, Members were also asked about quality assessment of the literature and whether a formalised approach should be adopted for the papers to be presented to the COC on alcohol and cancer risk. A number of schemes were mentioned as possible starting points. It was noted that the method of assessment of alcohol consumption would be useful to highlight as well as how non-drinkers are classified to enable account to be taken of whether former drinkers are included. It was agreed that the Secretariat would develop a formalised assessment scheme and this would be agreed with the epidemiologists on the Committee and then be used for the other cancer sites to be reviewed as part of this topic.

Item 4.3: Cessation of Alcohol Consumption and Effect on Oesophageal and Head & Neck Cancer Risk (CC/2014/04)

25. In discussing the strategy for the Committee's assessment of the effect of alcohol on cancer it had been suggested that it could be informative to look at the effect of giving up alcohol consumption on cancer risk. Therefore, this paper presented the available evidence on the effect of cessation of alcohol consumption on risk of oesophageal cancer and head and neck cancers.

26. It was noted that much of the evidence was based on case-control studies, and relied on subjects providing a history of their exposure, rather than following a cohort of people. It was not always clear why people had stopped drinking but possibilities included health concerns or deteriorating health as well as a conscious decision to stop drinking. The comparison groups varied between the studies, in some the reference group was people who had never consumed alcohol while in others comparison was made to current drinkers.

27. In the studies assessing the risks when people had stopped drinking many years previously, it was noted that only small numbers of subjects were included who had given up drinking for 15 years or more. Anyone who had died in the meantime would not be included in the study which could influence the observed risk. It was queried why there seemed to be an increased risk initially after cessation of alcohol consumption. The influence of people who give up drinking being in ill health and potentially being more likely to develop cancer in the near future was noted. The decreased risk longer term could equally potentially be due to people who survive in the short term also being less likely to develop cancer in the long term and, therefore, surviving long enough to be included in the studies.

28. It was noted that decreasing the amount of alcohol consumed was likely to be considered more achievable than giving up completely, and it would be helpful to have information on the effect of alcohol free days compared to the effect of not drinking for a one month ‘detoxification’ period.

29. Overall, it was difficult to quantify the possible reduction in risk of oesophageal and head and neck cancers following cessation of alcohol consumption. There was, in some studies, an initial increase in risk or a trend to an initial increase in risk, followed by decrease in risk in the longer term. There was a need for caution because most studies were case-control and included a small number of subjects, especially at longer time points. The time period required for risks to return to that of non-drinkers appeared to be greater than 20 years for head and neck cancers, and greater than 16.5 years for oesophageal cancers. It was not possible to give a time period from cessation for which there would be a significant impact on public health.

30. In response to a question, the Committee agreed that it would be helpful also to review the evidence for effect of cessation on risk of liver cancer, but not stomach cancer, on the basis of the IARC classification for these sites.

31. At the end of discussion of this topic, the Committee reviewed the current work plan to take this topic forward. It was agreed that, at the next meeting, the Committee would consider a draft of its feedback to the CMO’s work, an update on the evidence of the role of alcohol on liver cancer risk and effect of cessation on this risk, and, possibly, an update on the evidence on colorectal cancer risk. In presenting the evidence, any information on interaction of alcohol and other risk factors would be presented alongside information on proposed mode of action for alcohol and the cancer in question. It was also suggested that COM could review the evidence for whether alcohol acts via a genotoxic mode of action.

ITEM 5: COC Annual Report for 2013 (CC/2014/05)

32. This paper presented the draft COC contribution to the joint COT, COM and COC 2013 Annual Report. A number of comments were made on the text which would be incorporated in the final version.

ITEM 6: Guidance Statement – G05: Points of Departure and Potency Estimates – 2nd draft (CC/2014/06)

33. David Lovell declared an interest as he was involved in two EFSA publications cited, namely on benchmark dose modelling and threshold of toxicological concern. It was agreed that he could be fully involved in the discussion.

34. The first draft of this Guidance statement comprising an overview of the benchmark dose (BMD) methodology and how it can be used to derive a point of departure for carcinogens, T25, TD50, and developments in the Threshold of Toxicological Concern (TTC) approach was first reviewed by the Committee in November 2013. Following discussion and comments from Members at the meeting, the statement was redrafted for further consideration and specific guidance was requested on a number of areas.

35. Members provided a number of comments and suggestions for amendment, as well as addressing the specific requests. In particular, it was noted that the definition of point of departure as used in the document should be checked for consistency against that used by the US EPA.

36. The Committee agreed that the guidance statement would be updated in light of the discussion and could then be cleared for publication by Chair's action.

ITEM 7: Any other business

37. Members were informed that the Department for Education has launched a call for evidence to support a review of its policy on asbestos management in schools. This followed the publication in 2013 of the COC statement on relative vulnerability of children to asbestos compared to adults. This had been circulated to Members by email in February 2014.

38. It was noted that, due to a technical fault, the Secretariat had not been able to update the COC website with the papers for this meeting. Also, the Committee website would be migrated to www.gov.uk by summer 2014. This would result in a change to how the information was presented. Members would be kept informed of when the migration would happen.

ITEM 8: Date of next meeting

39. The date of the next meeting will be 17th July 2014 at Skipton House.