



**INTERDEPARTMENTAL GROUP
ON
HEALTH RISK FROM CHEMICALS**

**STEERING COMMITTEE
*Eighth Meeting***

AGREED MINUTES

Minutes of the meeting held on 7th January 2005
at the Medical Research Council, 20 Park Crescent, London W1B 1AL

Present:	Mr Peter Buckley	Home Office
	Dr Ian Dewhurst	PSD
	Dr Philippa Edwards	DH
	Dr Steve Fairhurst	HSE
	Dr Robin Fielder	HPA
	Ms Alison Gowers	EA
	Dr David Harper (Chairman)	DH
	Professor Michael Moore	NERC
	Mr Henry Stemplewski	MHRA
	Dr Hasmita Stewart	Defra
	Mr Nick Tomlinson	FSA
	Mr Lenroy Wallace	DTI
	Dr Karin Koller (Secretariat)	IEH
	Professor Len Levy (Secretariat)	IEH
	Mrs Claire Lindsay (Secretariat)	IEH

Apologies: Professor Iain Purchase
Dr Jane Stratford (Defra)
Dr Matthew Wakelin (MRC)
Mr Christopher Lees (BBSRC)
Mrs Ruth Kearsley (VMD)

1. Welcome

Action

- 1.1 The Chair welcomed all Members to the Eighth meeting of the IGHRC Steering Committee, including Dr Stewart deputising for Dr Stratford. Apologies were received from Professor Purchase, Dr Stratford, Dr Wakelin, Mr Lees and Mrs Kearsley.

The Chair thanked Dr Fielder for taking over as Chair at the 7th Steering Committee meeting at short notice.

2. Minutes from the Previous Meeting and Matters Arising (IGHRC/SC/min/01/04)

- 2.1 The minutes were accepted by the Committee as a true reflection of the meeting.
- 2.2 Dr Fairhurst referred to item 11.1 of the minutes. He will inform members by email of IPCS activities by the end of January. Dr Fairhurst to keep members informed of IPCS activities¹

3. Report update from Professor Levy on the activities and work programme of the IGHRC

- 3.1 In the absence of Professor Purchase, Professor Levy updated the Steering Committee on the activities and work programme of the IGHRC. Copies of his presentation were provided to Members. Some points arising from the presentation are outlined below:

- 3.2 The following Phase I activities carried over to Phase II have now been completed:

Repeat of training course *Presenting and Publishing Understandable and Transparent Risk Assessment from Chemical Exposures* was held on 4th/5th March 2004 with 24 participants from 7 departments and agencies. The course received very good feedback from participants.

Research reports:

A study on Human Variation in Toxicodynamics by Professor Andy Renwick and colleagues at Southampton University was distributed to Chief Scientists and CEOs in October 2003. Professor Renwick anticipates submitting the study to a peer-reviewed journal in early 2005.

Evaluation of Currently used Exposure Models to define a Human Exposure Model for use in Chemical Risk Assessment in the UK by Dr Mark Nieuwenhuijsen and colleagues at Imperial College London was distributed to Chief Scientists and CEOs in May 2004. In Autumn 2004 Dr Nieuwenhuijsen submitted a paper to Environmental Science & Policy entitled *Human Exposure Modelling for Chemical Risk Assessment: A Review of Current Approaches and Research and Policy Implications*. A further paper is in preparation: *Human Exposure Modelling for Chemical Risk Assessment in the United Kingdom: A Screening Framework Approach*.

The guidance document *Guidelines for good exposure assessment practice for human health effects of chemicals* (cr10) was published on 11th May 2004 and 466 copies distributed. The full document is available in PDF format on the IGHRC website, and has received over 2500 'hits' to date.

Final report for phase I (1999-2003) and forward plan to 2006 (cr11) was published in June 2004 and 204 copies distributed. This is also available on-line.

- 3.3 Phase II activities were summarised, and will be discussed more fully under their relevant agenda items (see below).
- 3.4 The workshop on Skin Sensitisers was not progressed by the Executive Committee following concerns over cancellation of a BTS one-day event on the Local Lymph Node Assay due to lack of interest. Dr Harper invited further discussion of this decision and Dr Fairhurst noted that the BTS event may not have been widely

Members to keep watch on IPCS involvement in

¹ Actioned 31/1/05

enough publicised. Dr Fairhurst informed members that IPCS are becoming active in this important area. Dr Dewhurst noted that the local lymph node assay is being incorporated into pesticide evaluations by the EC, and Dr Fielder expected the method to be the most common assay recommended in all EU chemical risk assessments, as it minimised experimental animal suffering. There will, however, be a problem in the area of cosmetic testing as the method does involve tests on animals. An in vitro skin sensitisation test is not yet on the horizon. Members agreed to revisit the idea of holding a workshop once more is known about IPCS activities in this area.

the area of risk assessment of skin sensitisers.

4. Secretary's Report (IGHRC/SC/01/05)

Outstanding items not covered by Professor Levy's update are outlined below:

4.3 Mr Stemplewski indicated the potential of MHRA funding further research into human variation in toxicodynamics. Dr Harper stressed that, although IGHRC no longer funds individual projects, no-one would want to lose the prospect of funding of this important area of research. Members discussed the issue of data availability. Professor Renwick's study was limited by only having access to published data. Future studies would greatly benefit from access to unpublished data from the pharmaceutical industry, and members supported the idea of a small feasibility scoping study with possible input from the Association of the British Pharmaceutical Industry (ABPI). This is an area of particular relevance to MHRA and HPA and Dr Fielder agreed to help take this forward, together with Mr Stemplewski, with support from IGHRC as required. Dr Harper offered to send a letter of support from IGHRC to the ABPI.

Dr Harper to send a letter of support from IGHRC to ABPI for access to unpublished data².

Mr Stemplewski and Dr Fielder to liaise on a possible scoping study

7.10 Extending IGHRC training courses into the public domain was discussed at the 17th Executive Committee meeting and members agreed that this should be decided on a case-by-case basis.

8.4 The final report of the IGHRC for the period October 1999 to September 2003 was published in June 2004 and, for consistency, included the forward plan for phase II (the first report had included a forward plan to 2002)

9.3 Seven of the nine IGHRC funding departments/agencies agreed to be invoiced annually in advance. Defra continues to be invoiced quarterly in arrears and the Environment Agency six monthly, in arrears. Ms Gowers stated that she would be content for the Environment Agency to be invoiced annually, and would confirm this with their Accounts Department.

Ms Gowers to confirm yearly invoicing.

5. Guidance Document: Guidelines on Route-to-Route Extrapolation of Toxicity Data

5.1 The Department of Health has taken the lead on this document, with initial drafts written by Dr Fielder and discussed at the 16th and 17th Executive Committee meetings. Version 3 was discussed at length at the 18th Executive Committee meeting in September 2004 and additional text received from Dr Edwards, Dr Diane Benford, Ms Gowers and Dr Fielder. Members of the Secretariat will be meeting with Dr Edwards and Dr Fielder immediately after the Steering Committee meeting to finalise Version 4, prior to editing input by IEH. The document will be circulated to Executive committee members for approval at their next meeting (3rd March 2005), and then circulated to Steering Committee

Dr Edwards and Secretariat to progress the document.

² Actioned 14/2/05

members and Expert Committees for feedback. It is planned to achieve sign-off by correspondence with the Steering Committee towards the end of 2005, with publication in early 2006.

6. Guidance document: Exposure Modelling in Chemical Risk Assessment

- 6.1 The Environment Agency's Human Health Science Team has taken the lead on this document. An outline proposal was discussed by the Executive Committee in September 2004. Ms Gowers will ask Ms Grosso to discuss the proposal in more detail at the 19th Executive Committee meeting in March, with a first draft prepared for full discussion at the 20th Executive Committee meeting scheduled for June 2005.
- Ms Gowers and Ms Grosso to progress the document

7. Training Course: Probabilistic Modelling of Exposures in Risk Assessment

- 7.1 This two-day practical training course has been organised jointly by IGHRC and HSL (Dr Anna Rowbotham), and will be held at the new HSL building in Buxton, Derbyshire on 16/17 March 2005. A Memorandum of Understanding was signed between IGHRC and HSL in July 2004, with projected costs of up to £21,140. Dr Koller clarified that payment to HSL of up to £19,940 covers course preparation and input by all HSL staff, plus catering costs. Flyers (including a registration form) were distributed at the meeting. The course is restricted to government scientists and policy makers, and Dr Harper encouraged early registration as places are limited to 40 and the course is likely to be popular. Flyers are also available on the IGHRC website.
- Members to distribute flyers within their departments/agencies and nominate staff to register.
Secretariat to continue to progress the course.
- 7.2 Professor Moore asked whether the course would cover PBPK modelling. This particular course does not, but members agreed to discuss this under item 12 as a possible new IGHRC training course.

8. Training Course: Understanding Chemical Exposure Assessment

- 8.1 This two-day training course is based on the guidance document on good exposure assessment practice (cr10) and will take place on 16-17 May 2005 at MRC-IEH in Leicester with places for up to 25 participants. The course is being co-ordinated by Mr Bob Scott (LGC/DTI), in conjunction with the Secretariat. The following speakers are confirmed: Dr Sue Barlow, Dr Martie van-Tongeren, Mr Mark Selby, Mr Ian Axford, and Dr Raquel Duarte-Davidson. Dr Mark Nieuwenhuijsen will be on sabbatical at this time, and is therefore unable to participate. We do not yet have speakers for two sessions, and members were asked for suggestions for speakers to cover *Exposure Sources and Pathways*, and *Evaluation and Audit*.
- Members to inform Secretariat of details of possible speakers.
Secretariat to progress the course
- 8.2 Members discussed the content of the course, and Ms Gowers sought clarification of the session involving PEC/PNEC ratios, which are ecological receptors and outside the area of human health.
- Secretariat to clarify content of session with Mr Selby and Mr Scott
- 8.3 Dr Koller raised the issue of payments to speakers from non-governmental organisations. IGHRC offers honoraria + expenses to outside speakers, but the Secretariat sought clarification on whether this also covers payment to LGC staff who are not directly funded by DTI. Mr Wallace agreed to clarify this with colleagues at DTI.
- Mr Wallace to clarify funding of LGC staff speaking on IGHRC training courses

9. Workshop: Risk Assessment of Chemical Mixtures

- 9.1 Professor Levy introduced this item. IGHRC has been discussing the need to produce a guidance document on risk assessment of chemical mixtures since 2001, but delayed action until the publication of the WiGRAMP report and implementation of the ensuing FSA research programme. Advice had been sought from FSA, and the Secretariat met with Dr Tim Marrs and colleagues at the FSA. Tim Marrs suggested holding a workshop with a small number of invited participants, which would lead to production of a UK position paper on risk assessment of chemical mixtures.

- 9.2 The workshop will take place on 23rd February 2005 in Leicester, with the following invited participants: Dr Diane Benford (FSA), Professor Alan Boobis (ICL), Dr Ian Dewhurst (PSD), Professor John Groten (TNO, Holland) and Dr Caroline Harris (Exponent International). Professor Andy Renwick is unable to attend but wishes to be kept informed of progress. There is clearly a great deal of enthusiasm for this initiative and the following people have also asked to participate: Ms Elanor Ball (HSE), Dr Philippa Edwards (DH), Dr Robin Fielder (HPA), Professor Iain Purchase (IGHRC) and Dr Mike Roberts (Defra). Professor Groten is attending a meeting of the US SOT on chemical mixtures a week prior to the workshop, and will be able to give feedback on this at the workshop.
- 9.3 Ms Gowers and Dr Stewart raised the possibility of inviting additional scientists to participate in the workshop, but members felt it important to have a small core group to identify main areas, and then to invite other experts to help flesh out the document.
- 9.4 The 12 workshop participants have been sent a list of selected key references, and invited to submit further suggestions in order that copies of key papers can be available at the workshop. Professor Moore recommended a paper on xenoestrogens³
- 9.5 Dr Harper sought clarification of the programme for the workshop. The secretariat is currently putting together a programme and welcomed suggestions from members. It was agreed that the workshop should include an update on the FSA's current mixtures research programme, and recommendations from the WiGRAMP report as background information. Members to contact secretariat with further ideas for the workshop programme
- 9.6 The committee asked to be copied into all correspondence with workshop participants Secretariat to progress workshop and keep members informed of progress
- 10. Proposed Workshop: Current chemical risk assessments being undertaken by UK Government**
- 10.1 Dr Dewhurst introduced this item in which it was proposed to hold a one-day training course/workshop where regulatory scientists working in different departments and agencies would become aware of the different approaches to risk assessment currently undertaken. An outline proposal had been taken to the 16th Executive Committee meeting and discussed more fully at the 18th Executive Committee meeting.
- 10.2 There was a full discussion of the aims of the proposal. While members welcomed the idea of relatively junior staff becoming more aware of these issues, there was concern that such an audience was too inexperienced to be able to make improvements in the way risk assessments were carried out. Dr Fielder stressed that the workshop should address the wide range of different regulatory approaches to common risk assessment procedures, and that the IGHRC guidance document on Uncertainty Factors covered the area well. Members agreed that there was a place for an awareness-raising one-day workshop for new regulatory toxicologists Dr Dewhurst to incorporate changes to the programme

Executive Committee to discuss further on 3rd March 2005

³ Kortenkamp, A & Altenburger, R. (1998) *Synergisms with mixtures of xenoestrogens: a reevaluation using the method of isoboles*. *Sci. Total Environ.*, 221, 59-73.

- and policy makers, and that the day should include examples and/or case studies. The committee thanked Dr Dewhurst for his work so far, and asked him to incorporate suggested changes to take to the next Executive Committee meeting. Secretariat to inform the Steering Committee of progress by correspondence
- 10.3 Mr Wallace brought members attention to a conference taking place in April 2005 *Best Practice Risk Assessment in Consumer Safety*, and agreed to circulate details to the Committee through the Secretariat. Mr Wallace to supply Secretariat with conference details
- 11. MRC-IEH future and implications for IGHRC Secretariat**
- 11.1 Professor Levy informed members that the MRC will be closing the Institute for Environment and Health in October 2005, and this will have repercussions for the Secretariat and phase II of the IGHRC programme of activities which runs to September 2006.
- 11.2 Dr Koller and Mrs Lindsay have accepted redundancy terms and will continue working for the Secretariat until October 2005, or the date of transfer to a new Secretariat if this occurs before October 2005.
- 11.3 A small number of current IEH staff plan to relocate to Cranfield University in 2005, to develop a new Institute for Environment and Health (currently a Cranfield Centre for Environment & Health has been set up as an interim measure). Professor Levy has accepted a position as Visiting Professor to Cranfield University, and has the expectation of employing a scientist and part-time administrative secretary at Cranfield University in order to continue the Secretariat work of IGHRC.
- 11.4 Members raised concerns over the future of the IGHRC website, and were informed by Professor Levy that there would be no break in continuity as this will continue to be maintained within the new IEH website.
- 11.5 Dr Harper expressed his gratitude to the Secretariat for working towards the long-term continuity of IGHRC. Dr Harper felt it was important to have a contingency plan in place if Professor Levy's transfer to Cranfield University does not take place. IGHRC is self-funding, and therefore there are no costs involved for any new umbrella organisation wishing to take on Secretariat duties. Members were asked to inform Professor Levy of any alternative suggestions for a new home for the Secretariat. Members to inform Professor Levy of any alternative ideas for re-location of the IGHRC Secretariat
- 12. Financial Statement Oct 2003 – Sept 2004, and projected income and expenditure to Sept 2006**
- 12.1 Dr Koller introduced this item. In September 2003 the following agencies/councils/departments confirmed their willingness to contribute to funding Phase II activities: Defra, DH, DTI, EA, FSA, HSE, MRC, PSD, BBSRC. The Home Office, NERC, MHPRA and VMD declined to fund but asked to keep a watching brief through participation at Steering Committee Meetings. In November 2004 Dr Robin Fielder joined the Executive Committee as the representative of the (new) Health Protection Agency (HPA) and HPA offered to make a one-off payment of £15k towards the 2nd and 3rd years of Phase II.
- 12.1 Finances are currently healthy, with a balance of £106,136 at the end of Year 1. This is the result of cancellation of a proposed workshop on risk assessment of skin sensitisers, lower expenditure than anticipated on three activities (work having been carried out by committee members rather than outside consultants), and just under £45K funds carried over from Phase I. However, a number of activities initiated in Year 1 will come to fruition in Year 2/Year 3, and at the end of Phase II

an overall balance of £62K is anticipated. [This includes just over £24K total funding from Defra and PSD, which has yet to be confirmed].

- 12.2 Dr Harper noted that the uncertainty of the Secretariat was an important factor in terms of financial commitment, but as a work programme had been agreed which members had signed up to, Dr Harper felt that most departments would follow Defra's approach of funding for years 1 and 2 and review prior to year 3. Mr Tomlinson agreed that it would be sensible to keep payments at a similar level for the second year of the programme, and then review contributions in January 2006. Mr Wallace raised concerns at the surplus of funds being kept by IGHRC, but was content to accept the majority view that contributions are next reviewed in January 2006. Dr Harper pointed out that the current surplus of funds was money committed by individual departments and agencies who had signed up to a programme of work through individual MOUs, and that individual departments and agencies were free to review their contributions at any time. Dr Harper also stressed that IGHRC accounting procedures were open and transparent and in accord with Government Good Accounting Practice.
- Secretariat to invoice contributing departments and agencies for the period Oct 2004-Sep 2005

- 12.3 Dr Harper invited members to make suggestions for any new areas of work they wished to see taken forward by IGHRC, and the following two items were raised:

Dr Fairhurst expanded on his idea for a new area of work in PBPK modelling. Although the value of PBPK modelling is recognised, there is no evidence that this tool has been used more over the last 5 years. HSL have been collaborating on a project known as the 'PBPK Club Project' to simplify procedures needed to carry out PBPK modelling. The aim is to develop a new computerised model that will reduce PBPK procedures from months to hours, and which can be used by biologists with limited mathematical backgrounds. Dr Dewhurst is also involved on this project. There is a practical example of the model available on the HSL website. Professor Moore informed the committee of a relevant special issue of the Journal of Molecular Histology he had edited together with Denis Noble⁴ and agreed to circulate details to members. Committee members agreed that the PBPK Club Project was an important new development, and asked that Dr Fairhurst discuss this further with HSL prior to taking it for a full discussion at the next Executive Committee meeting in March 2005.

Dr Fairhurst to discuss the initiative further with HSL.

Secretariat to ensure PBPK modelling is on the agenda for the next EC meeting

Professor Moore raised the possibility of new work in the area of nanoparticle toxicology. There is growing interest in the health impact of ultrafine particles ('ultrafines'), and industries (through CEFIC) have identified this as an area in which they wish to be proactively involved. Dr Harper confirmed that this was an area of growing concern recognised by all government departments. Members agreed that it was important to identify if there were any gaps that could usefully be filled by IGHRC-funded activities, and that this should be put on the Agenda for the 20th Executive Committee in June 2005.

Secretariat to ensure this item is on the Agenda of the June 2005 EC meeting

Any other business/date of next meeting

The Committee agreed that the Secretariat could shred old drafts of finalised and published documents which are now in the public domain.

Date of next meeting – to be arranged.

This being the current Secretariat's last Steering Committee Meeting, Dr Harper thanked Dr Koller and Mrs Lindsay for their contribution to the committee and

⁴ Moore, M.N. & Noble, D., Editors (2004). Special Issue on Computational Modelling of Cell & Tissue Processes & Function. J. Mol. Histol., 35(7), 655-714.

wished them well for the future.

The meeting closed at 1.45 pm.