The Chartered Society for Worker Health Protection

Isocyanate exposures research project: template letter for use by participating members

[*Please keep a copy of this letter and responses on file in a secure place.*]

Dear ….,

Workplace Health Exposure Research

We are contacting you to ask whether you have objections to information derived from our work for you to be contributed anonymously to a national research initiative.

Our occupational hygienists are members of the professional and regulatory body for occupational hygiene, the British Occupational Hygiene Society (www.bohs.org). This is an independent science-based Chartered body which provides free technical guidance and research to industry to help support improved workplace health.

As part of their ongoing work to understand the most efficient and effective approaches to controlling health risks at work, they are pooling information derived from workplaces (not personal or commercial data) such as exposure monitoring findings for particular process types and substances, in this case isocyanates.

This pooled information aims to provide a better picture of the trends and patterns of exposure and control in relation to substances, processes and industries to inform occupational hygiene practice and to provide an evidence base for sectors and industries to better understand how to be effective in control of workplace health hazards.

BOHS will share research findings freely and for non-commercial purposes as well as compiled data to enable better commissioning, design and implementation of workplace controls. The raw anonymous data may also be shared according to our Data Availability principles, outlined in the participation agreement attached. The processing of information we provide is tightly governed through BOHS's research governance framework under the oversight of the Faculty of Occupational Hygiene, our professional standards, technical and ethics body.

Participating client organisations will be able to draw on benchmarking feedback to assist in business decision-making.

Full details of how this works and the governance and the participation agreement entered into by our organisation is attached.

We hope that you will see this as an additional benefit to working with us. If you prefer for us not to contribute anonymised scientific findings to the dataset, please let us know within a reasonable timeframe, normally 28 days.

Research Schedule between …. and the British Occupational Hygiene Society

Research objective

BOHS is seeking to better understand the contexts in which occupational exposure data are being collected around isocyanates, so as to improve our understanding of how health risks are being controlled. To do this, BOHS aims to pool contextual information derived from data by occupational hygienists working in the field, analyse the emerging trends and patterns, and see what might be learnt.

One of the key benefits of pooling and analysing real-world information is that it will allow the creation of leading indicators of risk, to complement existing indicators, e.g. those provided by HSE.

The research outputs will be made available on a non-commercial basis by BOHS and may include the development of analytical tools to help better manage risks, as well as academic and professional articles to highlight key findings, and benchmarking information.

Full details of the study proposal are available here[1]. This is a retrospective study of data collected in 2025, and it has been reviewed and approved by the BOHS Research Governance Committee: 01-2025-RGC.

Background

The only method recommended by HSE for sampling airborne isocyanates is MDHS 25/4. Unlike other commercially available options, this method measures the Total Reactive Isocyanate Group (TRIG) allowing the data generated to be compared directly to the GB Workplace Exposure Limit.

However, MDHS 25/4 requires the use of sampling media that contain a substance regulated under The Misuse of Drugs Regulations 2001. These media can only be used for sampling isocyanates under a Licence issued by the Home Office. Members of the Faculty of Occupational Hygiene may operate under the Group Authority Licence (GAL) providing they work under the conditions of the Licence detailed in the GAL Standard Operating Procedure.

How can you contribute to this?

As a result of the licensing situation, all the isocyanate monitoring data in the UK are generated either by Faculty members, or those exempt from this requirement (HSE personnel). This creates a unique opportunity to examine an entire set of “occupational exposure data” for a substance recognised to be a major cause of occupational asthma.

Collecting isocyanate exposure data, with contextual information on the work being carried out during the sampling, will give an invaluable insight into where improvements need to be targeted. The establishing and population of the isocyanate database should ultimately improve the health of those working with these chemicals.

[1] https://www.bohs.org/app/uploads/2025/12/01-2025-RGC-Isocyanate-Exposures-Version-3-01.12.2025.pdf.

Occupational hygienists involved in assessing exposures to these substances are in a position to provide invaluable qualitative and quantitative data which can help the Society assess exposures, practices and adequacy of control measures.

For this reason, we are hoping to enlist Faculty members that have operated under the GAL, and know the context in which the data is being collected, in the population of the database.

With your help, the data generated in MDHS 25/4 surveys from January to December 2025 will be included. Whilst information will be required on the nature of the work being undertaken, together with details on sampling methodology and monitoring results, no client names will be requested and confidentiality ensured.

What does this involve?

Participating Faculty members can choose to either undertake a structured telephone interview (via Microsoft Teams) or complete and return a spreadsheet. The interview method is intended to minimise the time and effort required by members.

Our researcher, Otini Aduku, will contact you by email to book an appointment, with slots available from January 2026 onwards. In most cases the interview will last approximately 30 minutes. Otini will ask for your consent at the beginning of the interview, at which point you will be entitled to decline. The consent questions are available here[2] and on the BOHS Research web page[3] for your information. During the interview, Otini will populate a blank spreadsheet with the information you provide, and at the end, she will share her screen with you and ask you to confirm that the data has been entered correctly.

The interview will be recorded, subject to your consent, and the recording will be deleted once the data has been extracted and checked for quality control.

If you would prefer to complete the spreadsheet separately, or are unable to make any of the available interview dates, Otini will send you a blank version of the spreadsheet for you to populate, along with a copy of the consent form which should be signed and returned.

The fields, and drop-down entries, of the database are detailed in the next section.

The database

Each sample will require the completion of a single row.

FIELD		DROP-DOWN OPTIONS (or entry requirement)
A	BOHS REFERENCE	A simple, unique reference number (e.g. ISO1, ISO2 etc.) assigned by the BOHS researcher in the order received.
B	MEASUREMENT DATE	The date the measurement was taken.
C	RESULT	The measured isocyanate concentration (in mg/m3)

[2] https://www.bohs.org/app/uploads/2025/12/Isocyanates-consent-form-01.12.2025.pdf

[3] https://www.bohs.org/information-guidance/research/

D	REFERENCE PERIOD	• 8-HOUR TWA • 15-MINUTE REFERENCE PERIOD • OVER THE SAMPLING PERIOD
E	LABORATORY	• IOM • RPS • HSE
F	SAMPLE TYPE	• PERSONAL • STATIC
G	REASON FOR STATIC	• ESTABLISH BACKGROUND LEVEL • CLEARANCE TESTING • PART OF SAMPLING TRAIN • NOT APPLICABLE (Select if a personal sample)
H	HARDENER (OR ONE PACK TYPE)	• MDI AND ITS PREPOLYMERS • TDI AND ITS PREPOLYMERS • HDI AND ITS PREPOLYMERS • IPDI AND ITS PREPOLYMERS • MIXTURES OF THE ABOVE • OTHER • NOT KNOWN
I	MODE OF EXPOSURE	• VAPOUR ONLY • PARTICULATES / AEROSOL ONLY • BOTH VAPOUR AND PARTICULATES / AEROSOL
J	SAMPLING MEDIUM	• IMPREGNATED FILTER (SINGLE LOADING) • IMPREGNATED FILTER (DOUBLE LOADING) • IMPINGER SOLUTION • IMPINGER PLUS FILTER COMBINATION • ASSET SAMPLER
K	SAMPLING TIME	• LESS THAN 30 MINUTES • 30 – 59 MINUTES • 1 – 2 HOURS • OVER 2 HOURS • OVER 4 HOURS
L	BULK SAMPLE SUBMITTED?	• YES • NO
M	PROCESS DESCRIPTION	• COATING / SPREADING • GLUING / SEALING • MIXING • MOULDING / INJECTING • PAINTING WITH BRUSH / ROLLER • SPRAY PAINTING • OTHER

This list may be expanded as new data are added.

N	ENGINEERING CONTROLS	• LEV – WALK-IN BOOTH • LEV – CAPTURING / RECEIVING HOOD • LEV – OTHER • YES – BUT TYPE NOT KNOWN • NONE • NOT KNOWN
O	RESPIRATORY PROTECTION	• POSITIVE PRESSURE FROM CLEAN AIR (HALF-FACE) • POSITIVE PRESSURE FROM CLEAN AIR (FULL-FACE) • POSITIVE PRESSURE FROM FILTERED AIR (HALF-FACE) • POSITIVE PRESSURE FROM FILTERED AIR (FULL-FACE) • FULL-FACE RESPIRATOR • HALF-FACE RESPIRATOR • YES - BUT TYPE NOT KNOWN • NONE • NOT KNOWN
P	EYE PROTECTION	• EYE PROTECTION BUILT INTO FULL FACE RESPIRATOR • FULL-FACE VISOR • CHEMICAL GRADE GOGGLES • NON-CHEMICAL GRADE EYE PROTECTION • NONE • NOT KNOWN
Q	SKIN PROTECTION	• GLOVES / GAUNTLETS AND COVERALL • GLOVES / GAUNTLETS ONLY • COVERALL ONLY • NONE • NOT KNOWN
R	INDUSTRY TYPE	Here will appear a drop-down list of SIC codes and industry types. This list may be expanded as new data are added.
S	NUMBER OF WORKERS	Enter the number of workers exposed to isocyanates if known.
T	COMMENTS	Good or bad practice? Why was air testing chosen rather than biological monitoring?

Will this process involve the sharing of data regulated under GDPR or commercial confidentiality?

No personal data is to be exchanged as part of the research project and no personal or sensitive information will be part of this. Actual data about the client or its employees, whether or not obtained commercially in confidence, will not be provided to BOHS, as the source client data or information will not be required.

In the context of commercial confidentiality, the sharing of results for the purposes of further analysis, quality assurance, verification and improvement of a service, is not normally a breach of commercial confidentiality, where the client, site and employees are not identifiable. Indeed, most data analysis requires some sharing. By participating, members will be able to gain benchmarking and quality assurance feedback which may improve the quality of service to the client. Nevertheless, it is good practice to inform your client and give them the opportunity to withdraw. A template is available on the BOHS Research web page[4] for this purpose.

In the alternative, the study can use information derived from the professional observations or analysis conducted by the hygienist from client data which provides a statistical description of the data without the need to share individual raw data.

How will the data be managed?

Submitted, anonymised data will be held indefinitely on BOHS's secure virtual server with password protected access provided only to members of the research team. Information derived from the data may be shared by BOHS in the form of publication and/or supporting pooled data tables for the purposes of not-for-profit research to academics, research, scientific and policy organisations based in the UK and by recognised international occupational health research and policy bodies.

The raw anonymous data may also be shared according to our Data Availability principles which can be read in the study proposal[5], where you can also find more information about the data management protocol.

The processing of information will be tightly governed through BOHS's research governance framework (available on the BOHS Research web page[6]) under the oversight of the Faculty of Occupational Hygiene, our professional standards, technical and ethics body.

How do I know that a client's data and commercial interests will be protected?

Information derived from the research study will be concatenated with other information sources and any outputs published by BOHS will include information at a sufficiently high level of generalisation that the identification of client data source cannot be inferred. If raw data is shared, it will be anonymous and only made available to not-for-profit, legitimate research institutions according to our Data Availability principles.

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[4] https://www.bohs.org/information-guidance/research/

[5] https://www.bohs.org/app/uploads/2025/12/01-2025-RGC-Isocyanate-Exposures-Version-3-01.12.2025.pdf.

[6] https://www.bohs.org/information-guidance/research/

Our aim is to obtain responses for all air tests undertaken in a 12 month period (2025). This mass information set will not provide sufficient specificity to identify a client out of the thousands of potential users of isocyanates. The hygienist providing the information will not be identified beyond the research collection and analysis stage and therefore a client will not be identifiable by reference to the professional relationship with the occupational hygienist.

A client may wish, by expression in writing, to be associated with the study at a high level, as a supporter of it and be acknowledged in research publication for marketing and publicity purposes.

An occupational hygiene firm or professional may not (without prior written client approval) be associated or acknowledged in research publication for marketing or publicity purposes in order to protect inadvertent connections being made between a client and the member.

Do I have to participate?

Participation in the study is not mandatory and you may decline. We would be interested in your reasons for doing so to help us better understand the barriers to effective research in partnership with our professional membership.

You can withdraw from continuing participation in the study at any time up until the submission of data. However, in later stages of the study it may not be feasible to retract information provided by you, as it will have been amalgamated with other information.

This is a unique opportunity to get a complete data set on monitoring and exposure through one method. It is therefore of very real significance to our discipline and profession. There are relatively few people undertaking this work, so every participant really makes a huge difference to the evidence base. It's also a good activity to include in your CPD portfolio. We really hope that you will agree to participate.

Thank you for your support of this initiative.

Graham Newport (Chief Investigator), Chris Keen (Chief Investigator), Otini Aduku (Researcher), Roz Phillips (Research Co-ordinator), Kevin Bampton (Regulatory Coordinator)

BOHS Isocyanate Exposures Research Team