

## UNIVERSITY OF BATH HEALTH AND SAFETY STANDARD

### Radon in the workplace

Version Number	Version 4	Date of Approval	March 2024	Review Date	Three years from acceptance by UHSC
Author and Lead	Debbie Robarts; Scientific Safety Advisor				
Aims	The University is committed to ensuring the health, safety and welfare of all staff, students and visitors. To achieve this the University will carry out a suitable and sufficient assessment of the risks from potential exposure to radon within the work environment and ensure they are reduced to a level as low as reasonably practicable.				
Scope	The UK has been surveyed by the Public Health England (PHE) and British Geological Survey and an <a href="#">Indicative Atlas of Radon in England and Wales</a> shows that the University campus is in a 'Radon affected area'.				
Relevant Legislation	<ul style="list-style-type: none"> <li>Health &amp; Safety at Work etc. Act 1974 (HASWA)</li> <li>The Management of Health &amp; Safety at Work Regulations 1999 (MHSWR)</li> <li>The Ionising Radiation Regulations (IRRs) 2017</li> <li>The Building Regulations (England and Wales) 2000</li> </ul>				
Definitions	<p><b>Radon</b>  Radon is a naturally occurring radioactive gas that can seep out of the ground and build up in houses and indoor workplaces. It comes from uranium which occurs naturally in many rocks and soils. The decay products of radon behave like solid materials and can become attached dust and water droplets that become lodged in the lungs and airways when inhaled. Some of these decay products emit radiation which can damage cells in the lung and may trigger lung cancer.</p>				
	<p><b>Action Levels</b>  A concentration of 300Bq/m<sup>3</sup> for workplaces as defined in the IRRs, if exceeded then action must be taken to restrict exposure. For domestic premises the action level is 200Bq/m<sup>3</sup> which applies to residential areas of the University.</p>				
Responsibility for implementation	Director of Campus Infrastructure Head of SHEW Heads of Departments				
Training availability:	n/a				

<b>Standard to meet:</b>		<b>Accountability</b>	<b>Reference documents and more information</b>
1.	Ensure a risk assessment for radon is carried out for the University premises.	Head of SHEW	General risk assessment in this standard
2.	Co-ordinate radon surveys as part of the radon risk assessment at suitable intervals dependent on levels measured.	SHEW	<a href="#"><u>To date Radon surveys show results below the action levels, therefore an appropriate interval is every ten years in accordance with HSE guidance.</u></a>
3.	Report results of surveys above action levels to appropriate departments and Campus Infrastructure .	SHEW	
4.	Maintain a record of radon measurements undertaken.	SHEW	
5.	Implement any required preventative and/or control measures to reduce radon risks to as low as reasonably practicable within scope of operation.	Director of Campus Infrastructure/ Heads of Departments	
6.	Ensure any engineered systems in place to prevent/minimise radon exposure are on a planned preventative maintenance and inspection regime. Records to be kept.	Director of Campus Infrastructure	
7.	Ensure an up to date register is maintained of all protection measures undertaken to reduce radon exposure.	Director of Campus Infrastructure	
8.	During the construction of new buildings ensure the installation of radon protection measures are considered.	Director of Campus Infrastructure	
9.	Do not interfere with or mis-use any monitoring or protective equipment provided to control radon levels in the workplace.	Employees	

## Radon Risk Assessment

<b>Risk Assessment Title:</b> Radon in the workplace	<b>Date Reviewed:</b> June 2022	<b>Review Date:</b> June 2025
<b>Overview/Description of Activity:</b> Assessment of the potential exposure of persons to Radon on University of Bath premises.	<b>Duration/Frequency of Activity:</b> Radon is produced naturally and so potential for exposure present at all times.	
<b>Location of Activity:</b> University of Bath campus	<b>Generic or Specific Assessment:</b> Specific Assessment	

#	Hazard(s) identified	Who might be affected and how	Existing controls & measures	Severity (a)	Likelihood (b)	Risk Rating (a x b)	Additional control/action required
1	Exposure to natural Radon present at the University of Bath. University is in a Radon affected area with a 3-5% potential surrounded by areas >30%	All persons on the University campus.	<ul style="list-style-type: none"> <li>Radon Survey carried out Jan-Apr 2022 all levels are below defined action levels.</li> </ul>	1	5	5	<ul style="list-style-type: none"> <li>Next survey required within 10 years or after major changes made to infrastructure. This will be by late 2031.</li> <li>No further radon controls required (ref. UKHSA report).</li> </ul>

#	Hazard(s) identified	Who might be affected and how	Existing controls & measures	Severity (a)	Likelihood (b)	Risk Rating (a x b)	Additional control/action required
2	Radon levels determined by survey to be above action levels.	Persons who routinely access areas where Radon measured to be above action levels.	<ul style="list-style-type: none"> <li>• All effected persons will be informed</li> <li>• Action plan will be developed to reduce levels</li> <li>• Identified control measures will be put in place to reduce risk to acceptable levels</li> </ul>	3	3	9	<ul style="list-style-type: none"> <li>• Monitoring of effectiveness of control measures will be overseen by SHEW</li> </ul>