



Housing Health and Safety Rating System (HHSRS)

Case Studies

Group C
**Protection Against
Infection**

Hazard C16
Domestic Hygiene

Example C16.2
**Pre-1920
Ground-floor Flat
(HMO)**

Vulnerable Group
Persons of all ages

Multiple Locations
Yes

Related Hazards A6
Collisions,
Entrapment and
Ergonomics



Dwelling

Description

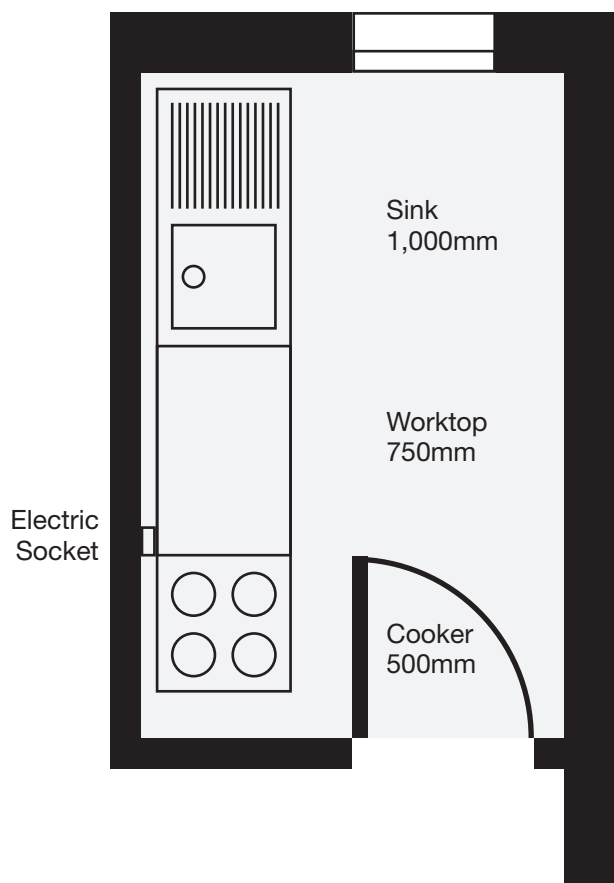
This two-storey Edwardian detached house was built around 1910 and has solid brick walls and the original slate roof. It has been converted into four bedsits on the first floor, and a self-contained ground-floor flat with its own entrance at the rear of the house. The four bedsits share a ground-floor kitchen and first-floor shower room with toilet. There is open access to the rear yard via the side of the property.

The four bedsits are rented to single occupants. The flat is rented to a couple.

There is no EPC for the property.



1
Front elevation



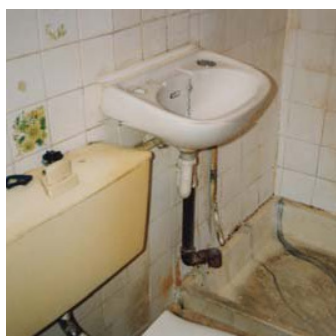
2
Kitchen floorplan
2,500mm × 1,500mm

Deficiencies

Description

The small kitchen is 2.5m × 1.5m, with a single stainless-steel sink separated from the gas cooker by a 75cm length of melamine worktop that is bowed and dilapidated in appearance. The base unit under the sink is in poor condition and smells of mildew. There is no provision for food storage in the kitchen, though a fridge could be installed under the worktop, making use of the single electric socket above the cooker. No bins have been provided to store waste or recycling. There is a small opening window but no extractor fan. Although there is currently no fridge in the kitchen, occupants do have a small fridge and 50 cm of open shelving in their rooms for the purpose of food storage.

The shower room has a WC, wash-hand basin and electric shower. There is no hot or cold supply to the wash-hand basin, which can be filled using the flexible hose on the shower head. The waste from the basin and toilet overflow discharge into the well-worn plastic shower tray. A plastic curtain is pulled round the shower tray to stop water spraying onto the vinyl flooring. There is a top-opening window but no extractor fan for ventilation. The room has no heating. The rear yard is open to access from the front street (there is no side gate), which is a disincentive to residents hanging clothes out to dry. As there is no tumble drier, tenants have to dry their washing in their rooms.



3
Wastewater discharge
from the wash-hand basin
into shower



4
Close-up of wastewater
discharge



5
Kitchen worktop between
cooker and sink

Relevant Baseline Indicators

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
3	<div>0</div> <div>1</div> <div>2</div> <div>3</div>	3.1	An approved potable water supply system shall provide an adequate amount of running water under pressure to all fixtures simultaneously. Supplies in individual bedsits/dwellings/flats must have their own controllable supply of water or the ability to store water.
		3.2	An adequate supply of heated running water shall be provided to sinks, wash hand basins, baths and showers. Hot water storage tanks shall be set at a minimum temperature of 60°C. At bath taps and shower heads, the maximum temperature shall be 45°C to prevent accidental scalding.
		3.3	The WC cistern overflow should discharge externally unless designed by the manufacturer to discharge internally through the cistern or pan.
4	<div>0</div> <div>1</div> <div>2</div> <div>3</div>	4.3	A dedicated wash-hand basin that is located in the same room as the WC or immediately adjacent shall be in good working condition, with a stable connection to the wall or secure attachment to the floor that is properly connected to the heated and unheated potable water supply and a sealed trap leading to a waste pipe. The wash-hand basin must be adequately sealed with a flexible sealant to prevent leakage and damage to the adjacent areas.
		4.4	A fixed bath or shower in good working condition which does not leak and is properly connected to the heated/unheated potable water supply as appropriate, and a waste pipe that does not leak. The bath or shower must be adequately sealed with a flexible sealant to prevent leakage.
		4.6	A constant supply of heated and unheated water to all wash-hand basins, baths and shower facilities must be supplied and a direct drainage connection with waste trap be in good working order and free from defects and sealed where necessary. Water supply pipes must have isolation valves to allow for maintenance.
		4.8	Ventilation for the bathroom must be provided by mechanical extraction that is ducted to the outside of the building, in line with Baseline Indicator 16.1.

Relevant Baseline Indicators
(continued)

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
5	Sanitary Facilities: Kitchen	0 1 2 3	5.1 Every dwelling/HMO shall have a kitchen or dedicated adequate space for the storage, preparation and cooking of food equipped and provided for the sole use of that dwelling/HMO.
		0 1 2 3	5.3 Sufficient work surface shall be provided for food preparation. Sufficient cabinets and/or shelves sufficient to store occupant or visitors' food that does not require refrigeration, and eating, drinking, and food preparation equipment. Cabinets shall have well-fitting doors and no gaps between any surfaces. The work surface, work-surface edges, cabinets and shelves shall be of sound construction and furnished with surfaces that are impervious to water, smooth, and cleanable.
		0 1 2 3	5.6 Suitable facilities for the effective and safe removal of fumes and moisture-laden air to the external air by means of a cooker hood or extractor fan; a cooker hood that only recycles the odour through an active carbon filter would not be acceptable, it must vent to outside. A mechanical extractor would be the normal mechanism for this function, in line with Baseline Indicator 16.1
14	Lighting and Services	0 1 2 3	14.6 Every habitable room shall have at least 2 separate and remote double electric sockets, that are suitably located for use. Kitchens shall have at least 4 suitably located double sockets.
15	Heating and Insulation	0 1 2 3	15.4 Every dwelling shall have a properly installed heating system in good and safe working condition that is capable of safely and adequately heating all habitable rooms, bathrooms, and toilet rooms. The system must be capable of heating the main living area to 21°C, and the remaining habitable rooms to a temperature of 18°C when the external temperature is minus 1°C, and the system should not allow the temperature to exceed 25°C in any room during the heating season.
16	Ventilation	0 1 2 3	16.1 The air exhausted from a bathroom, WC room, kitchen, clothes dryer or basement must be provided by mechanical ventilation or by a correctly designed and installed natural ventilation system, as required by Part F of the Building Regulations. In addition, it shall not be vented into any other parts of the building's habitable space or an attic; such air shall discharge directly to the outdoors but not near any intake on the building exterior.

Relevant Matters

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Score	Matters affecting likelihood of harm and harm outcomes.			
Drainage				
0	1	2	3	Pipe ventilation
0	1	2	3	Private sewage system
0	1	2	3	Soakaway
0	1	2	3	Recycling system
Domestic waste				
0	1	2	3	Refuse areas
0	1	2	3	Refuse chutes
0	1	2	3	Condition
0	1	2	3	Waste storage
Bathroom				
0	1	2	3	WC siting
0	1	2	3	Macerator
0	1	2	3	Earth/chemical WC
0	1	2	3	WC seat/lid
0	1	2	3	Ventilation
0	1	2	3	Door
Pest control				
0	1	2	3	Design/construction maintenance
0	1	2	3	Access
0	1	2	3	Open vent pipes
General				
0	1	2	3	Shared facilities
0	1	2	3	Provision of facilities
0	1	2	3	Water seals

Likelihood of Harm

Scale Points

Likelihood of harm from this hazard over the next twelve months

Very Likely		1 in 1
	Example Dwelling	1 in 2
		1 in 3
		1 in 5
Likely		1 in 10
		1 in 20
		1 in 30
		1 in 50
Unlikely		1 in 100
		1 in 200
		1 in 300
		1 in 500
Very Unlikely	National Average	1 in 1,000
		1 in 2,000
		1 in 3,000
		1 in 5,000

Score

1 in 2

Justification of Scoring

In the bathroom, there is a substantial risk of infection following use of the toilet. The lack of water supply to the basin discourages hand-washing; this must involve handling the shower unit and shower head with contaminated hands. The shower tray is dirty, stained/worn, with mouldy sealant due to wastewater discharging into it, making it difficult to keep clean. A dirty, poorly fitted shower curtain discourages personal washing, with water likely to spill onto the floor when used. The lack of heating and mechanical ventilation adds to condensation and associated mould growth. Low temperatures discourage frequent personal washing. The likelihood of an occurrence which could cause harm is increased due to the bathroom being shared by occupants of four bedsits.

In the kitchen, the size of the room (3.75m²) does not provide sufficient space for the occupants to prepare and cook food safely. The small worktop is in poor condition with no splashback and is difficult to keep clean, increasing the risk of contamination when preparing food. There is no space to store cooking utensils, crockery or cutlery. The only electrical socket is mounted high on the wall, preventing use of portable and fixed electrical appliances without multi-socket adapters. Poor condition of the sink unit means that the base unit is unsuitable for use, even for storing cleaning materials or other non-foodstuffs. The size and state of the kitchen discourages occupants from preparing and cooking healthy meals, with an associated adverse effect on health.

Unhygienic living conditions may also impact on the mental health of the occupants. Poor facilities discourage occupiers from regular washing and laundering. Living with odours, risk of infection, poor dwelling aesthetics, inadequate kitchen facilities and obvious sources of infection are all likely to cause stress, anxiety, and depression. They can also lead to social isolation and cause tension between occupiers of shared accommodation. The mental health impacts are likely worsened where the occupier has little control over the situation, as may be the case in HMO accommodation.

Harm Outcomes

Extreme		Severe		Serious		Moderate		
Death, permanent paralysis, etc.		Heart attack, serious fractures, etc.		Chronic stress, severe concussion, etc.		Broken fingers, moderate cuts, etc.		
Very Likely	50.0	Very Likely	50.0	Very Likely	50.0	Example Dwelling	78.0	
	30.0		30.0		30.0		National Average	
	20.0		20.0		20.0			
Likely	10.0	Likely	10.0	Example Dwelling + National Average	10.0	These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%		
	5.0		5.0		5.0			
	2.0		2.0		2.0			
Unlikely	1.0	Example Dwelling + National Average	1.0	Unlikely	1.0			
	0.5		0.5		0.5			
	0.2		0.2		0.2			
Very Unlikely	0.1	Very Unlikely	0.1	Very Unlikely	0.1			
	0.0		0.0		0.0			
Example Dwelling + National Average								
Score		Score		Score			Score	
0.0%		2.0%		20.0%			78.0%	

Justification of Scoring

Health impacts from this hazard are mainly due to pathogenic organisms, allergies and psychological reactions. These mechanisms tend to operate in the same way, irrespective of the location; therefore, there is no reason to think that the risk of infection in this property will be any different from the average.

Safety Ratings

Scenario 1
As described in this document

Key

Category	Band	Score
1 Legal duty to take action	High	10,000
2 Discretion to take action	Medium	1,000
	Low	100

Likelihood of Harm
1 in 2

Extreme Severe Serious Moderate
0.0% 2.0% 20.0% 78.0%

Category	Band	Score
1 Legal duty to take action	High	10,000
Example Dwelling		4,390
2 Discretion to take action	Medium	1,000
	Low	100
National Average		9

Score
4,390

Scenario 2

After works meeting baseline indicators

Likelihood of Harm
1 in 300

Extreme 0.0%	Severe 2.0%	Serious 20.0%	Moderate 78.0%
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Category**Band****Score**1
Legal duty to
take action**High**

10,000

2
Discretion to
take action**Medium**

1,000

Low

100

ExampleNational
Average**29****9****Score****29****Justification of Scoring**

The above reduction in likelihood could be achieved by complying with the baseline indicators in relation to the plumbing system (BIs 3.1, 3.2 and 3.3) bathroom sanitary facilities (BIs 4.3, 4.4, 4.6 and 4.8), kitchen sanitary facilities (BIs 5.1, 5.3 and 5.6), lighting and services (BI 14.6), and heating and insulation (BI 15.4), all as detailed above.

It is not, however, possible to meet all of the baseline indicators in this property. BI 5.3 cannot be met completely at present due to the small size of the kitchen. The property would have to be reconfigured in order to provide the space for a larger kitchen with the necessary facilities. The likelihood can be reduced to 1 in 300 based on the kitchen having improvement works that go as far as possible towards meeting the baseline indicator within the confines of the space currently available, i.e. tight-fitting doors to cabinets and no gaps between any surfaces and the work surface, work-surface edges, cabinets and shelves being of sound construction and furnished with surfaces that are impervious to water, smooth and cleanable. While the existing kitchen cannot accommodate sufficient worktop and dry-goods storage cupboards of sufficient capacity for the number of occupiers to completely comply with the baseline indicators, the likelihood of harm would be reduced considerably by the above measures.

Scenario 3

After further improvements

Likelihood of Harm
1 in 1,000

Extreme 0.0%	Severe 2.0%	Serious 20.0%	Moderate 78.0%
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Category	Band	Score
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1 Legal duty to take action	High	10,000
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2 Discretion to take action	Medium	1,000
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	Low	100
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Score

9
**Example
Dwelling +
National
Average**
9**Justification of Scoring**

To reduce the likelihood to the national average, the property needs to be reconfigured in order to provide the space for a larger kitchen complying with BI 5.3 and the HMO amenity standards adopted in the area in which the property is situated. A score of at least the national average would be attained by a comprehensive scheme of improvement works that includes providing a larger kitchen that would achieve the following standards:

- Be of suitable layout and size to enable the safe storage, preparation and cooking of food
- Have a minimum worktop length of 1.5m and depth of 0.6m, with worktop adjacent to the cooker. (The work surface must be smooth, impervious, and easily cleanable.)
- Have a minimum of four double electric sockets, in addition to electrics required for the cooker or any other fixed electrical appliances
- Have extract ventilation provided.

Other Relevant Legislation and Guidance

Energy Performance of Buildings

The Energy Performance of Buildings Regulations 2012 requires an EPC to be produced when a property is placed for sale or rent (subject to tenancy type). Where a property is required to have an EPC, it is subject to the requirements of the Energy Efficiency (Private Rented Property)(England and Wales) Regulations 2015.

Minimum Energy Efficiency Standard

The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 (often referred to as the Minimum Energy Efficiency standards/MEES) set a minimum energy efficiency level for domestic private rented properties. Since 1 April 2020, property owners can no longer let or continue to let properties covered by the MEES Regulations if they have an EPC rating below E unless they have a valid exemption in place. The Government has since proposed that all rental properties will need an EPC rating of 'C' or above in the future (which remains a proposal at the time of writing), and it will be in a property owner's interest to consider this when making decisions around conducting works, as it may be more economically efficient to improve a property straight to Band C rather than carrying out graduated works over a period of time.

Electrical Regulations

The Electrical Safety Standards in the Private Rented Sector (England) Regulations 2020 require landlords to have the electrical installations in their properties inspected and tested by a person who is qualified and competent, at an interval of at least every 5 years. Landlords must provide a copy of the electrical safety report to their tenants and, if requested, to their local authority.

Management Regulations

The Management of Houses in Multiple Occupation (England) Regulations 2006 apply to all HMOs. Under these regulations, among other matters, the manager must ensure:

- That the water supply and drainage system serving the HMO is maintained in good, clean, and working condition
- That the gas and electric supply must not be interrupted and must be regularly tested
- That means of escape are kept clear and well maintained
- That all common parts of the HMO are maintained in good and clean decorative repair and maintained in a safe and working condition
- That all windows and other means of ventilation within the common parts are kept in good repair.

HMO licensing

If the HMO is in England and is rented to five or more people who form more than one household, an HMO licence will be required. The local housing authority may impose conditions relating to the management, use and occupation of a licensed HMO based on locally adopted standards. Under the Licensing of Houses in Multiple Occupation (Mandatory Conditions of Licences) (England) Regulations 2018, these locally adopted standards may include minimum space and facilities requirements, for example, the minimum floor area for a kitchen based on the number of persons using it. Other requirements may be the number and size of food storage cupboards, waste storage facilities, fire precautions, etc.

Updates

Matters for consideration listed in this section were correct at the time of publication. For the most up-to-date legislation and guidance in these areas, please visit the gov.uk website.