



Health Protection Report

weekly report

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Health Protection Agency issues new advice on radon

New advice about when it is appropriate for practical measures to be taken to reduce concentrations of radon in UK homes has been issued in a new report from the Health Protection Agency [1,2].

After reviewing the latest scientific evidence, as well as the costs and benefits of radon reduction measures, the HPA is retaining its Action Level of 200 becquerels per cubic metre – but introducing a new Target Level of 100 becquerels per cubic metre.

The Target Level has been introduced because research published since 1990 has given scientists a greater understanding of the risks to health of exposure to radon below 200 becquerels per cubic metre and because HPA now has considerably more experience of the effectiveness of remediation measures. Although low level exposures can still lead to lung cancer, the risks at these levels are low and can be reduced further by simple mitigation measures. The role of Target Level is to provide an objective for remedial action in existing homes and preventive action in new homes.

The role of the Action Level is to assist in the designation of areas of concern for possible high radon concentrations in new and existing homes and to provide a threshold above which all householders are advised to remediate, ie:

- ▶ Areas where 10% or more of homes are estimated to be above the Action Level should be regarded as higher probability radon areas;
- ▶ Areas where 1% or more but less than 10% of homes are estimated to be above the Action Level should be regarded as intermediate probability radon areas; and
- ▶ Areas where less than 1% of homes are estimated to be above the Action Level should be regarded as lower probability radon areas.

It is recommended that householders in intermediate and higher probability radon areas should have measurements made of indoor radon concentration in their home. The HPA also recommends that Target and Action Levels should be applied to other premises where occupancy by members of the public exceeds 2,000 hours per year and to all schools.

The HPA recommendations follow recent advice and improved evidence on the risks from radon issued by the International Commission on Radiological Protection (ICRP) and the World Health Organization (WHO). The HPA's independent Advisory Group on Ionising Radiation (AGIR) also recently issued recommendations about radon and public health and the HPA (NRPB prior to 2005) has published radon probability maps of all parts of the UK.

The new HPA report reiterates previous advice, issued by HPA in 2008, on the desirability of installing radon preventative measures in all new buildings; now with the aim of ensuring radon concentrations are below the Target Level.

Information for householders about the likelihood that their home is above the Action Level is available at: www.ukradon.org. Radon maps for England, Wales, Scotland and Northern Ireland are available at: www.ukradon.org/article.php?key=indicativemap.

References.

1. *HPA advice on the limitation of human exposure to radon - RCE 15* (ISBN 978-0-85951-669-3), July 2010. Available from the HPA website: Home › Publications › Radiation › Documents of the HPA: RCE series.
2. *Health Protection Agency issues new advice on radon*, HPA press release, 8 July 2010.

Confirmed measles cases in England and Wales in 2010: update to end-May

In May, the number of confirmed measles cases doubled for a fourth consecutive month reaching a total of 83 cases in England and Wales for the first five months of 2010.

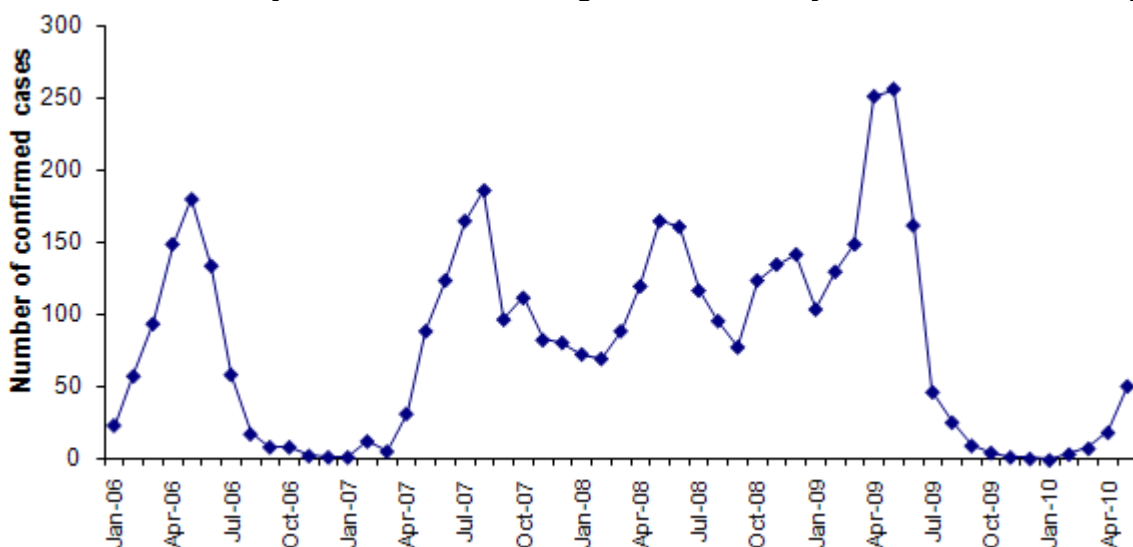
The majority of cases were reported from two regions, London (42%; 35/83) and the East of England region (19%;16/83) (see table). All cases were unvaccinated apart from two children, both part of a large school outbreak in London, who had received only one dose of MMR vaccine. Most cases this year have been reported in children under 18 years of age, however, almost a quarter of all cases are in adults. A detailed age breakdown of cases for 2010 to the end of May by region is available at:

http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1223019390211.

Confirmed cases of measles by region and month of onset, England and Wales: January 2010 to May 2010

Month	Lond-on	East Mids	East of Engl'd	North East	North West	South East	South West	West Mids	Wales	York & Humb	Total
Total 2010	198	47	74	122	79	276	43	95	159	51	1144
Jan 10	–	–	–	–	–	–	–	–	–	–	–
Feb 10	–	–	2	–	–	3	–	–	–	–	5
Mar 10	1	–	2	–	–	3	2	–	–	–	8
Apr 10	7	–	1	–	5	2	1	–	3	–	19
May 10	27	1	11	1	4	3	1	–	2	1	51
Total 2010	35	1	16	1	9	11	4	–	5	1	83

Number of laboratory confirmed cases in England and Wales by month of onset: January 2006 to May 2010



So far this year, clusters of cases have been identified in the traveller community (East of England, Yorkshire and Humber), linked to schools (London) and in the community and nurseries (North West).

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A further 14 cases had a documented history of recent travel abroad, including Europe (Ireland, France, Italy, the Netherlands), Africa (South Africa, Ethiopia), the Middle and Far East (Afghanistan, Dubai) and India. This demonstrates the risk of measles to unvaccinated travellers and anyone planning to go abroad should therefore ensure that they are fully protected against measles before travelling.

Infection reports

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General outbreaks of foodborne illness in humans (England and Wales, weeks 23-26/2010)

Preliminary information has been received about the following outbreaks

Health Protection Unit	Organism	Location of food prepared or served	Month of outbreak	Number ill	Cases positive	Suspect vehicle	Evidence
West Midlands	Campylobacter	Hotel	June 10	27	1	N/k	–
Thames Valley	Campylobacter	Boarding school	June 10	6	1	Chicken liver parfait	D

D (descriptive) = other evidence, usually descriptive, reported by local investigators as indicating the suspect vehicle or food.

Common gastrointestinal infection laboratory reports (England and Wales, weeks 23-26/2010)

Laboratory reports	Number of reports received				Total reports 23-26/10	Cumulative total	
	23/10	24/10	25/10	26/10		01-26/10	01-26/09
<i>Campylobacter</i>	1813	1730	1424	224	5191	25996	26009
<i>Escherichia coli</i> O157*	11	21	43	29	104	257	288
Salmonella †	127	101	30	1	259	2683	3050
<i>Shigella sonnei</i>	33	16	13	2	64	380	533
Rotavirus	175	114	73	24	386	14125	14141
Norovirus	62	45	36	4	147	9277	5080
<i>Cryptosporidium</i>	40	36	29	5	110	1295	1355
<i>Giardia</i>	57	51	43	17	168	1475	1533

* Vero cytotoxin-producing isolates: data from HPA's Laboratory of Enteric Pathogens (LEP).

† Data from LEP.

Less common gastrointestinal infections, England and Wales: laboratory reports weeks 14-26/2010

Laboratory reports	Total reports 14-26/2008	Cumulative total to 26/2010	Cumulative total to 26/2009
Astrovirus	8	36	23
Sapovirus	6	18	16
<i>Shigella boydii</i>	32	66	55
<i>Shigella dysenteriae</i>	22	46	27
<i>Shigella flexneri</i>	107	222	181
<i>Plesiomonas</i>	12	23	18
<i>Vibrio</i> spp.	20	42	34
<i>Yersinia</i> spp	5	6	26
<i>Entamoeba histolytica</i>	6	22	33
<i>Blastocystis hominis</i>	47	119	143
<i>Dientamoeba fragilis</i>	11	31	27

Salmonella infections (faecal specimens), England and Wales: reports to the HPA (Salmonella data set), May 2010

Details of serotypes of 375 salmonella infections recorded in May are given in the table below. In June 2010, 500 salmonella infections were recorded.

Organism	Cases May 2010
S. Enteritidis PT4	19
S. Enteritidis (other PTs)	111
S. Typhimurium	108
S. Virchow	17
Others (typed)	120
Total salmonella (provisional data)	375

Note. Figures quoted from the HPA salmonella data set are for isolates confirmed and typed by Laboratory of Enteric Pathogens.

Hospital norovirus outbreaks (England and Wales, June 2010) and comparison of seasonal laboratory reports laboratory reports (2002-2010)

The norovirus outbreaks in hospitals reporting scheme recorded 15 suspected and confirmed norovirus outbreaks occurring between weeks 23 and 26 of 2010. Eighty-seven per cent (13) of these outbreaks involved some kind of ward closure or restriction to admissions and 60% (9) were laboratory confirmed.

Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 23-26/2010

	Outbreaks between weeks 23-26/2010			Total outbreaks 01-26/2010		
	Outbreaks	Ward closure	Lab-confirmed	Outbreaks	Ward closure	Lab-confirmed
E. of England	2	2	2	43	39	41
E. Midlands	1	1	1	72	61	59
London	1	–	–	57	41	34
North East	–	–	–	42	28	27
North West	–	–	–	191	105	128
South East	1	1	1	226	213	134
South West	10	9	5	485	402	396
W. Midlands	–	–	–	72	72	46
Yorks-Humb	–	–	–	195	161	159
Total	15	13	9	1383	1122	1024

Comparison of laboratory data: The total number of laboratory report of norovirus to week 26 is 12145, which is a 52% increase on the number reported by the same time last season (7982). Note the season 2009-2010 includes a week 53.

Note. (i) The norovirus season runs from week 27, in year one, to week 26, in year two (ie week 27, 2008 to week 26, 2009 – July to June) in order to capture the winter peak in one season; (ii) 2009 included a "week 53".

Seasonal comparison of laboratory reports of norovirus (England and Wales) (2002 - 2010)

