

Volume 8 Number 45 Published on: 28 November 2014

Current News

- Guidance for local authorities and NHS on new psychoactive substances
- Ebola in west Africa: international epidemiological summary (at 16/11/2014)

Infection Reports

Immunisation

- Laboratory confirmed cases of measles, mumps and rubella (England and Wales): July-September 2014
- Laboratory reports of Haemophilus influenzae by age group and serotype (England and Wales) : July-September 2014

News

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Guidance for local authorities and NHS on new psychoactive substances

PHE's alcohol, drugs and tobacco division has issued a toolkit to local authority and NHS commissioners to help them respond to the widespread use of new psychoactive substances (NPS), often misleadingly called "legal highs". These drugs mimic the effects of existing illicit drugs such as cocaine, ecstasy and cannabis, but in many cases are not yet controlled substances and are widely available at low cost [1].

The new toolkit is a 14-page publication with advice for commissioners on local strategy development, competences required and information available, links being provided to up-to-date resources (including websites, support organisations and charities). It deals in turn with: controlling supply of NPS; prevention and resilience-building in vulnerable groups; obtaining prevalence data and sharing information; responding to acute problems (palpitations, seizures, etc); initiating interventions and treatment; and the specialized response required in prisons.

The term new psychoactive substances encompasses both proscribed drugs – such as mephedrone, the more recently banned psychoactive substances groups NBOMe and benzofuran compounds, and some synthetic cannabinoids (which mimic cannabis) – and those that can be legally traded, including some newly formulated synthetic cannabinoids. The toolkit acknowledges that the rapid increase in supply of these products – also called "designer drugs" or "club drugs" – presents a unique challenge for government, local authorities and the criminal justice system.

The public health impact of NPS remains low compared with that of traditional illicit drugs (52 NPS-related deaths recorded in England and Wales in 2012, compared with nearly 1500 drug-related deaths overall) and information about harmfulness and dependence-forming potential is incomplete. Nevertheless, in 2012/13 the National Poisons Information Service (NPIS) recorded a 30% increase in enquiries about NPS in general, and a 13-fold increase in telephone enquiries about synthetic cannabinoids (SCs), compared to the previous year [2]. In that year, SCs represented the second most common drug of misuse encountered in NPIS telephone enquiries after cocaine.

A year-long, government-commissioned new psychoactive substances review (NPSR) of the regulatory and public health challenge in England was published in October [3] alongside the

government's response to the review report's recommendations [4], and the scientific evidence review that underpinned it [5].

The NPSR's remit was primarily legislative and it considered how other jurisdictions (including Ireland and the USA) have responded to the challenge of NPS. Whereas the existing UK legal framework has enabled hundreds of individual NPS, as well as families of such drugs, to be controlled, it has not been fully effective in restricting supply, and certainly not in the particular case of new synthetic cannabinoids (SCs).

The NPSR report notes that, no sooner specific SC products are proscribed:

"new modifications become available at a rapid rate to circumvent [the] legislation. The UK currently controls [only] around 60% of the synthetic cannabinoids that have been reported to the EMCDDA. [F]or other groups of NPS ... we have been able to control 80-90%".

The NPSR therefore recommended, and the government has accepted, that in order to deal with NPS a new "precautionary" legislative approach should be considered whereby such substances are controlled by reference to their neurochemical effects rather than, as at present, their chemical composition (under the Misuse of Drugs Act 1971).

References

- 1. PHE (November 2014). "New psychoactive substances: a toolkit for substance abuse commissioners".
- 2. National Poisons Information Service annual report 2013/14, HPR 8(41), 24 October 2014.
- 3. Home Office (October 2014). "New Psychoactive Substances Review: Report of the Expert Panel".
- 4. "Government response to the New Psychoactive Substances Review Expert Panel Report".
- 5. Stephenson G, and Richardson A (Home Office Science)(October 2014). "New psychoactive substances in England: a review of the evidence".

Ebola virus disease: international epidemiological summary (at 16/11/2014)

Up to the end of 16 November (15 November for Liberia), a total of 15,145 clinically compatible cases (CCC) of Ebola virus disease (EVD), including 5,420 deaths have been reported in the six currently affected countries (Guinea, Liberia, Sierra Leone, Spain, the USA and Mali) and two previously affected countries (Nigeria and Senegal) since December 2013.

Reported case incidence is no longer increasing nationally in Guinea and Liberia. However, transmission remains high in certain hotspots in both countries. In contrast, incidence continues to increase in Sierra Leone, particularly in the western and northern regions, with 533 confirmed cases reported in the last week.

A resizable online PHE outbreak distribution map is available at:

https://phe.maps.arcgis.com/apps/Viewer/index.html?appid=6b47b738f1cc40c688eff341544c1c5a.

In Mali, as of 20 November, the cluster of cases of infection in Bamako has now reached five, all of whom have died. This latest cluster is unrelated to Mali's first case who was diagnosed in Kayes on 23 October.

To date, a total of 21 EVD cases have been cared for outside of Africa; 16 repatriated cases (hospitalised in USA, Spain, UK, Germany, France, Norway and Switzerland), two imported cases (both diagnosed in USA) and three incidents of local transmission (in Spain & USA).

The table below summarises Ebola virus disease international epidemiological information as at 16 November 2014.

Country	Total CCCs	Cases in previous 21 days (<16/11/2014)	Total deaths
Guineau	1971	315	1192
Liberia	7069	532	2964
Sierra Leone	6073	1394	1250
Mali	6	5	6
Nigeria	20	-	8
Senegal	1	-	_
Spain	1	-	_
USA	4	-	1
TOTAL	15 145	2246	5421

The latest PHE information on the international epidemiological situation can be found in the agency's weekly Ebola Epidemiological Update at:

https://www.gov.uk/government/publications/ebola-virus-disease-epidemiological-update.



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Infection Reports

Immunisation

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Laboratory confirmed cases of measles, mumps and rubella (England and Wales): July to September 2014

Measles, mumps and rubella are notifiable diseases and healthcare professionals suspecting a case are legally required to inform the local PHE Health Protection Team. Oral fluid testing is offered to all notified cases to confirm the diagnosis. This is part of the enhanced surveillance for these vaccine preventable diseases. Recent infection is confirmed by measuring the presence of IgM antibodies or detecting viral particles (by PCR) in the samples.

Data presented here are for the third quarter of 2014 (ie July to September). Cases include those confirmed by oral fluid testing (IgM antibody tests and/or PCR) at the Virus Reference Department, Colindale, and national routine laboratory reports (mumps infections only) (table 1). Analyses are by date of onset and regional breakdown figures relate to Government Office Regions.

Quarterly figures for cases confirmed by oral fluid antibody detection only from 2013 and annual total numbers of confirmed cases by region and age are available from:

- https://www.gov.uk/government/publications/measles-confirmed-cases
- https://www.gov.uk/government/publications/mumps-confirmed-cases
- https://www.gov.uk/government/publications/rubella-confirmed-cases/rubella-confirmed-cases-inengland-and-wales-by-age-and-region-2012-to-2013.

Table 1. Laboratory-confirmed cases of measles, mumps and rubella and oral fluid IgM antibody tests in notified cases: weeks 27-39/2014

Notif investiga	ied and ated cases			Confirmed cases				
Cases		Oral fluid testing						
virus	HPUs in England*	Number tested	% of reported cases tested	Total positive	Recently vaccinated	Confirmed infections	samples	Total
Measles	489	332	67.9	14	6	7	4	11
Mumps	1814	1068	58.9	231	1	230	134	364
Rubella	128	72	56.3	_	-	-	_	-

* This represents the number of infections reported as possible cases and investigated by individual PHE centres in England.

Measles

Eleven laboratory-confirmed measles infections were identified in England with onset dates in July to September compared to 16 cases in the second quarter of the year [1]. This brings the total confirmed infections for 2014 to date to 99.

Ten of the 11 confirmed infections this quarter were identified in London with five linked to a nursery. Only one case was reported from the rest of England. Across the UK, Scotland identified four new infections, Northern Ireland reported one and Wales two in the same period.

Five of the 12 English cases in the quarter were linked to recent travel abroad; one case each to Thailand, China, Indonesia, Australia and Philippines. Measles virus sequence was obtained from 11 out of the 12 English cases, one of four Scottish cases, two of two Welsh cases, but no sequence from Northern Ireland.

Seven cases were in children below the age of 15 years and the remaining four cases were adults aged 20 to 33 years. No case this quarter reported receiving a measles-containing vaccine.

Mumps

There were 364 laboratory confirmed cases of mumps in England with onset in the third quarter of 2014 compared to 880 and 847 cases in the first and second quarters, bringing total mumps infections to 2,091. This follows the trend observed over the last decade of an increase in cases in first two quarters of the year (figure) [1]. Additionally, 27 oral fluid samples were confirmed from Wales this quarter bringing the Welsh total for the 2014 to date to 376.

Cases continue to be identified predominantly in young adults between 16 and 30 years of age (232/364 64%, table 2). Over 40% of all cases this quarter have reported receiving at least one dose of MMR vaccination in childhood, suggesting some waning immunity may be contributing to transmission. Mumps cases were identified in all regions of England although greater numbers were identified in London and the South East regions (table 2).

Region	<1	1-4	5-9	10-14	15-19	20-24	25+	Total
North East	-	_	_	_	3	5	3	11
North West	_	_	_	_	8	5	17	30
Yorkshire & Humber	_	_	1	2	4	5	8	20
East Midlands	_	2	_	6	8	8	8	32
West Midlands	_	_	2	6	8	20	21	57
East of England	_	_	2	5	9	7	18	41
London	1	3	7	6	11	15	44	87
South East	_	_	4	4	10	20	32	70
South West	_	_	_	_	3	4	9	16
Total	1	5	16	29	64	89	160	364

Table 2. Laboratory confirmed	cases of mumps by ag	ge group and region,	England:
weeks 27-39/2014			-



Laboratory confirmed cases of mumps by quarter, England, 2003-2014

Rubella

There were no confirmed rubella infections this quarter.

Reference

1. PHE. Laboratory confirmed cases of measles, mumps and rubella, England: January to March 2014. *HPR* **8**(33): immunisation, https://www.gov.uk/government/publications/measles-mumps-and-rubella-laboratory-confirmed-cases-in-england-2014/laboratory-confirmed-cases-of-measles-mumps-and-rubella-england-april-to-june-2014.

Laboratory reports of *Haemophilus influenzae* by age group and serotype (England and Wales): July to September 2014

In the third quarter of 2014 (July to September) there were a total of 96 laboratory reports of invasive *Haemophilus influenzae*. This represents a 55% decrease in cases compared to the previous quarter (n=173) and a similar number of cases compared to the third quarter of 2013 (n=93).

Of the samples which underwent serotyping (n=75), 81% were non-capsulated *Haemophilus influenzae* (ncHi), a further 15% were serotype a, e, or f, and 4% were serotype b (Hib). There was a two-fold increase in the proportion of serotype a, e, or f cases and 9% decrease in the proportion of ncHi cases compared to the third quarter of 2013 when; 89% of serotyped samples were ncHi, 7% were serotype a, e, or f, and 4% were Hib.

Age group was well reported (see table). Of the laboratory confirmed cases during the third quarter of 2014: 84% were aged 15 years and over; 7% were under 1-4 years old, and 4% were among both the under one year of age and 5-14 year olds. This differed from the third quarter of 2013 where: 92% were aged 15 years and over; 4% were under one year of age, 2% were 1-4 years of age, and 1% was 5-15 years of age. There was a four-fold increase in cases among children aged 1-14 years compared to the third quarter of 2013; this was due to an increase in the number of ncHi and Hib cases from one to seven and zero to two, respectively. Among those aged 15 years and over there was an increase in the number of a, e, or f cases from four to nine; however, the number of ncHi and Hib cases decreased from 57 to 51, and three to one, respectively.

During this quarter, 69% of cases in children under 15 years were ncHi (n=9/15).

There were two cases of Hib this age-group; a one year old who presented with tonsillitis and an immunocompromised five year old who presented with pneumonia. Both were unimmunised and made a full recovery. In comparison during the third quarter of 2013 there was one case of Hib in a partially immunised 5-14 year old child.

Serotype			Total, third quarter			
	<1y	1-4y	5-14y	15+	nk	2014 <i>(</i> 2013)
b	- ()	1 ()	1 ()	1 (3)	- ()	3 (3)
nc	2 (4)	4 ()	3 (1)	51 <i>(</i> 57)	1 ()	61 <i>(62)</i>
a,e,f	1 ()	1 (1)	- ()	9 (4)	- ()	11 <i>(5)</i>
not typed	1 ()	1 (1)	- ()	19 <i>(</i> 22)	- ()	21 <i>(</i> 23 <i>)</i>
Total	4 (4)	7 (2)	4 (1)	80 <i>(86)</i>	1 (–)	96 <i>(</i> 93 <i>)</i>

Age distribution of laboratory-confirmed cases of *Haemophilus influenzae* by serotype England and Wales, third quarter 2014 (*and 2013*)

Notes: " -- " Indicates that testing yielded no positives. Percentages may not add up to 100 due to rounding.