

Use of vaccines in cattle and sheep

2018 sales update

In November 2018, AHDB published a report on the use of vaccines in dairy and beef cattle between 2011 and 2017. The data on vaccine sales are based on wholesaler data collated by Kynetec and provided for analysis by MSD Animal Health.

AHDB has completed an analysis of the data on the number of doses of key vaccines authorised for use in cattle in 2018 (Table 1). The analysis has also been extended using sales data from 2012 to 2018 for the main vaccines used in sheep (Table 2).

Wholesaler sales do not necessarily equate to vaccine usage in that year because, for example, practices may stock up one year, but use the vaccine in the following year due to commercial reasons or to mitigate against potential stock availability concerns. As biological products, vaccines are more sensitive to issues in continuity of supply. However, the data on annual sales is considered the best available approximation for vaccine usage.

The sheep and beef sectors are committed to monitoring the sales of vaccines as part of their 2017–2020 RUMA sector-specific targets. The estimates of uptake use the number of doses of vaccine sold in each year based on the wholesaler sales and the population of animals 'at-risk' approximated using the annual Government statistics on the number of livestock in the UK.

The cattle sector has worked with industry stakeholders (e.g. pharmaceutical companies) to monitor use of vaccinations targeting respiratory disease in cattle, aiming for an increase year-on-year between 2017 and 2020. It is difficult to distinguish use of respiratory vaccinations in dairy and beef cattle from product sales data. Therefore, this target now relates to usage in all bovine animals.

Within their targets, the sheep sector committed to improve the management and control of lameness by increasing uptake of the Five Point Plan. Part of this plan includes vaccination against foot rot, where necessary. It was decided that sales of the foot rot vaccine should be monitored to assess vaccination uptake. A further target concentrated on increasing the responsible control of enzootic abortion by vaccination rather than by treatment with antibiotic. Sales of enzootic abortion vaccine are used to monitor the level of vaccination on farm.

The full 2019 report on vaccine use in cattle and sheep will be published on 29 October 2019 to coincide with the [RUMA conference](#).

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Table 1: Vaccine uptake in cattle between 2011 and 2018

Vaccine uptake in cattle	2011	2012	2013	2014	2015	2016	2017	2018
Total number cattle <1yr	2,882,124	2,925,381	2,805,692	2,821,564	2,939,446	2,970,831	2,948,192	2,888,432
Calf pneumonia vaccines	29%	31%	35%	36%	36%	37%	38%	40%
Total cattle and calves	9,840,128	9,850,583	9,762,925	9,765,127	9,867,061	9,919,436	9,895,124	9,750,599
IBR	17%	19%	22%	23%	22%	22%	25%	26%
Total number of breeding females >1yr	4,809,144	4,819,572	4,786,670	4,784,923	4,861,441	4,911,714	4,908,701	4,846,743
BVD	42%	44%	45%	48%	45%	43%	45%	42%
Leptospirosis	32%	36%	33%	37%	32%	31%	33%	31%
Total no. of breeding females (>2yrs)	3,447,349	3,425,541	3,381,793	3,414,746	3,470,189	3,471,979	3,461,981	3,411,519
Calf enteritis	15%	18%	12%	17%	17%	16%	18%	19%
Total doses of vaccine sold	8,462,739	9,348,562	9,325,950	10,135,160	9,694,725	9,557,830	10,133,805	9,839,155

Table 2: Vaccine uptake in sheep between 2012 and 2018

Vaccine uptake in sheep	2012	2013	2014	2015	2016	2017	2018
Total sheep and lambs	32,214,916	32,856,476	33,743,346	33,336,590	33,942,509	34,831,991	33,780,817
Clostridial vaccine	61%	52%	53%	62%	62%	64%	68%
Pasteurellosis vaccine	46%	39%	39%	48%	47%	49%	51%
Ewes intended for first time breeding	2,430,862	2,563,725	2,511,330	2,745,937	2,843,833	2,907,449	2,713,993
Toxoplasma vaccine	26%	22%	23%	24%	25%	25%	26%
EAE vaccines	44%	33%	38%	42%	40%	40%	41%
Total breeding flock 1 year and over	15,229,456	15,561,296	16,026,113	16,023,715	16,303,891	16,669,432	16,285,553
Rams	391,907	432,222	417,435	407,951	409,293	416,728	407,134
Foot rot vaccine	11%	10%	11%	11%	13%	15%	13%
Total doses of vaccine sold	33,304,866	28,785,486	30,456,271	35,018,208	36,058,143	38,371,472	38,678,889