

# How Healthy Are We Now?

Tim Brigstocke – Chairman,

Cattle Health and Welfare  
Group (CHAWG)



Supported by:



# History

- GB Animal Health and Welfare Strategy
- England Implementation Group (2004)
- Sector Councils....
- Demise of EIG (2009)
- Industry commitment to these issues
- Advisory Group on RCS for Animal Health & Welfare (2009-2010)
- Animal Health and Welfare Board England established in 2011.

# Group Make Up

- Levy Boards
- BCVA
- AHVLA
- CVO's
- NFU
- NBA
- FUW
- AFS/Red Tractor
- RSPCA
- HUK
- RABDF
- NOAH
- NFUS
- AHDA
- Science Base

Correspondence Group: Dairy UK, RUMA, LAA, FAWC, Landex etc

# Terms of Reference

1. To provide an industry forum that will encourage and coordinate a programme of economically focused improvements to cattle health and welfare across GB.
2. To act as a forum to prioritise the research, development and knowledge interaction needs of the GB cattle industry in relation to cattle health and welfare to ensure knowledge gap identification, coordination and minimal duplication. Also, to assist in the dissemination of knowledge across the industry through the participating organisations within the group and others where appropriate
3. To liaise closely with all stakeholders such as Levy Boards and others to promote consistent regional dissemination of national work and encourage the uptake of technological advances and best practice.
4. To provide direction and be a resource for the Chief Veterinary Officer and other relevant Government bodies (AHWBE) on cattle health and welfare matters, including the early stages of policy development and other areas, where appropriate.

# Top Ten Cattle Health & Welfare Issues

## **Beef**

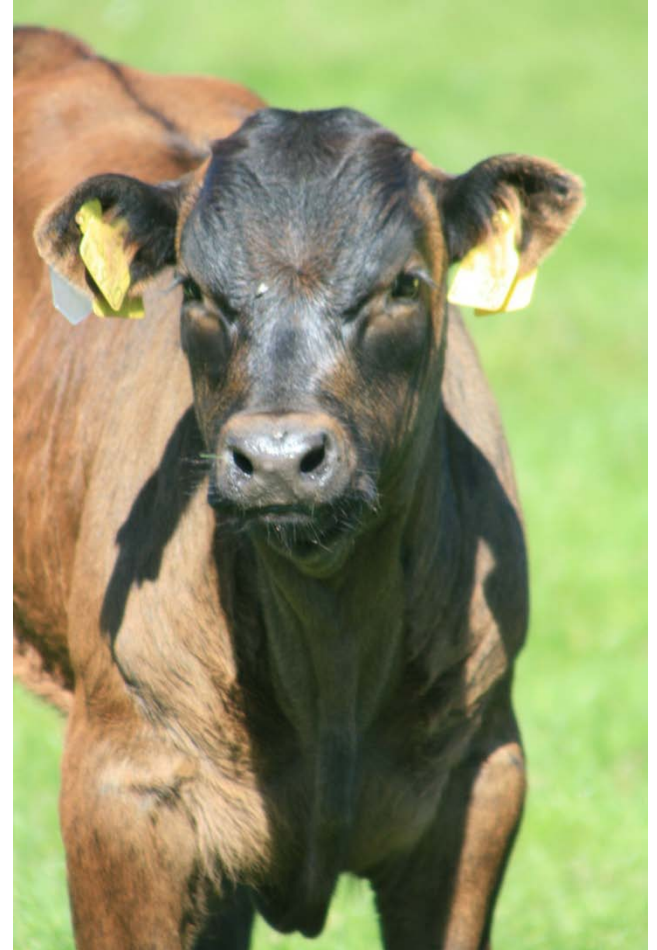
1. BVD
2. Liver Fluke
3. Calf Pneumonia
4. Calf Scour
5. Fertility
6. PGE/Lungworm
7. Nutrition
8. Johne's
9. IBR
10. Mastitis

## **Dairy**

- Infertility
- Mastitis
- Lameness
- BVD
- Johne's
- TB
- Nutrition
- Calf Scour/Pneumonia
- Lungworm/PGE
- = Genetics
- Neospora

# Priorities

- Farm Health Planning
- BVD
- Surveillance and reporting
- Dairy Cow Welfare Strategy



# Farm Health Planning

1. In 2011, 71% of livestock farmers had a farm health plan.
2. Around 65% of farm health plans were completed with the help of a vet or advisor
3. Of those who have a farm health plan, 41% use theirs on a routine basis to inform disease management decisions.

(Defra Farm Practices Survey, Sept 2011)

# Farm Health Planning

1. Defra has gifted to CHAWG the Reading University Economic Disease Cost Calculator models.
2. Five Cattle models:
  - BVD (dairy and suckler beef)
  - Johne's (dairy and beef)
  - Digital Dermatitis
3. BCVA incorporate/recommend the use of these models in their relevant CPD module.
4. Useful step but completely dependent on the quality of farm data used ([www.fhpmodels.reading.ac.uk](http://www.fhpmodels.reading.ac.uk))
5. Worth reflecting that Defra estimate that BVD costs the UK cattle industry between £25m-£61m and Johne's £13m.
6. At the Dairy Event and Livestock Show 2011 the exit survey showed that 21% of the 16000 visitors had attended the FHP seminars which had concentrated on farmer/vet relationship to address a specific issue.



# Youngstock Losses

- The newly formed National Youngstock Association has quantified the average losses from birth through rearing. Three main issues are:
  - Sire selection (resulting in dead at birth)
  - Scours
  - Pneumonia
- Some 8% of all calves are born dead or die within 24 hours.
- Only 86 out of every 100 dairy heifers born alive make it to first calving and of those who do, 15% are culled before their second lactation

(Quoted in Farmers Guardian, May 2011)

# Top Three Conditions at Ante and Post Mortem Inspection in Calves and Cattle as Recorded by FSA/MHS

	Ante Mortem		Post Mortem	
	<u>Condition</u>	<u>%</u>	<u>Condition</u>	<u>%</u>
	Pneumonia/Respiratory Disease	19.4	Kidney Lesions	37.5
<b>Calves</b>	Diarrhoea	15.0	Pleurisy/Pneumonia	36.6
	Lameness	14.5	Abscesses	4.9
	Lameness	27.8	Fluke	43.6
<b>Cattle</b>	Pneumonia/Respiratory Disease	10.3	Kidney Lesions	16.0
	Mastitis	8.5	Pleurisy/Pneumonia	11.2

Observations from a total of 1,698, 89,610, 8,730 and 1,940,504 calves and cattle at ante and post mortem respectively

# CHeCS Licensed Health Schemes (February 2012)

SCHEME	OPERATOR	TESTING LAB
Advanced Cattle Health Scheme	Nationwide Labs	Nationwide Labs
AFBI Cattle Health Scheme	Vet Sciences Division, Stormont	AFBI
HerdSure	AHVLA	AHVLA
Herdwise	NMR	NML (Johne's only)
HI Health Herdcare	BioBest	BioBest
Jersey Island Health Scheme	Jersey Island Genetics	BioBest
Limo Leader Herd Health	Irish Limousin Cattle Society	IML
Munster Herd Health	Munster AI Farm Services Group	Various in ROI
Premium Cattle Health Scheme	SAC	SAC
Shetland Animal Health Scheme	Shetland Islands Council	SAC

# Uptake of Cattle Health Schemes

- SAC Premium Cattle Health Scheme now has over 5000 UK members:
  - 55% in Scotland
  - 23% in England
  - 20% in Wales
  - 2% in Ireland
- Overall estimated that around 13,500-14,000 cattle farmers are now involved in some form of monitoring control and eradication under a CHeCS licensed cattle health scheme, largely BVD and Johne's, less so IBR and Lepto.

# Welsh Black Cattle Society's Johne's Disease Control Scheme

% of Total cattle of different health status entered in the Society's sales in each year.

Year	% Cattle Accredited	% With Clear Herd Test	% With No Status
2002	23	7	70
2003	26	9	65
2004	45	19	36
2005	47	19	34
2006	55	24	21
2007	65	15	20
2008	71	9	20
2009	64	12	24
2010	77	11	12
2011 (to date)	89	4	7

# BVD Vaccination Concerns

A study undertaken by the RVC on 71 beef and dairy farms found:

- 21<sup>st</sup> of farmers vaccinated using the incorrect dose of vaccine or administered it by the wrong route
- While all farmers gave a 2-dose primary course, nearly 50% had the wrong time interval between doses.
- Only 24% managed to complete the primary course of a vaccination 4 weeks before service.
- 34% kept a vaccine bottle open for more than a month in contrast to the guidelines of only 10 hours.

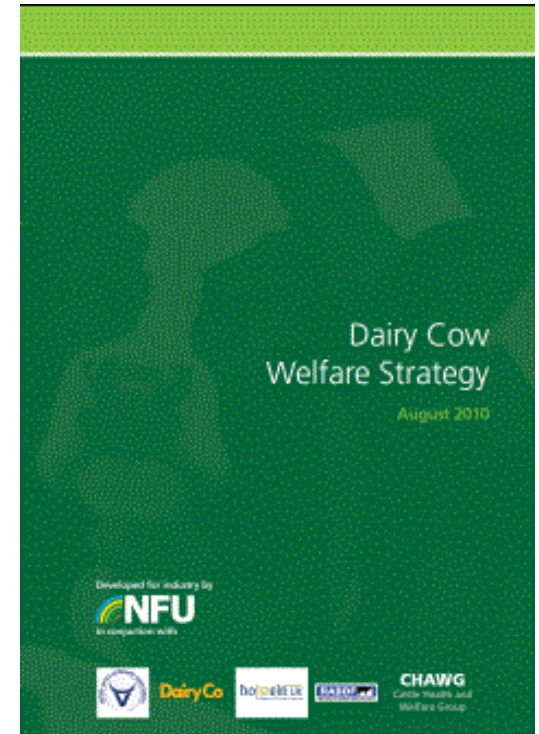
(Quoted in Farmers Guardian, May 2011)

# Surveillance and Monitoring

- AHVLA keen to use CHAWG as an industry sounding board (e.g. Brucella review).
- CHAWG through its industry wide membership can quickly disseminate information/seek views.
- Issues discussed in the last year:
  - Psoroptic mange
  - Salinomycin toxicity in calves
  - Idiopathic arterial aneurysm/rupture in Holstein Friesian cattle
  - Toxocara vitulorum in cattle
  - BNP/bovine neonatal pancytopenia (calf bleeding disease)
  - Copper toxicity in cattle
  - Schmallenberg Virus

# Dairy Cow Welfare Strategy

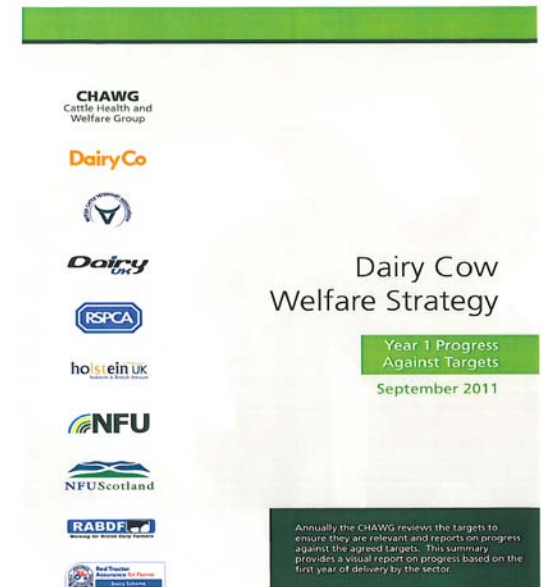
- Launched August 2010
- Cross industry monitoring Group now in place
- Annual Review of performance against targets...





# Dairy Cow Welfare Strategy

- 1<sup>st</sup> year Progress Report
- Now in summary (hard copy)
- More detail (Electronically)
- Next year
  - Review Strategy
  - Ensure issues and targets will promote progress



# Dairy Cow Welfare Strategy

## 10 Priority Areas

- Better on-farm recording and use of aggregate data
- Mastitis improvement in recognition, treatment, prevention and control.
- Lameness: improvement in recognition, treatment, prevention and control
- Understanding fertility
- Cow nutrition
- Addressing welfare through farm assurance
- Improving welfare through breeding programmes
- Informing and educating the consumer
- Preparing for the future
- Industry co-operation

# Dairy Cow Welfare Strategy

- Year 1 report measures industry progress towards agreed targets
- General praise for work done to date.
- Still plenty to do!



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8 November 2011

Dear Sir/Madam

#### DAIRY COW WELFARE STRATEGY

The Farm Animal Welfare Committee (FAWC) very much welcomes the initiative taken by the Cattle Health and Welfare Group (CHAWG), and all the collaborating players in the GB dairy sector, resulting in the Dairy Cow Welfare Strategy launched in August last year and the Year 1 report on progress against targets seen in September.

The Farm Animal Welfare Council Opinion on the welfare of the dairy cow identified the incidence, prevalence and causes of lameness, mastitis, metabolic disorders and injuries in dairy cows; and the lack of centralised recording schemes yielding data at a national level as critical issues. It is welcome that the Welfare Strategy is aiming to tackle many of these issues.

FAWC understands that improvement in some of these problems takes time and demonstration of progress will become clearer over a period of years. However, we also hope that targets will be reviewed over time (as CHAWG concludes) and the challenge to these diseases can be increased appropriately when possible.

With kind regards,

Yours sincerely

*Huw Davies*

Huw Davies  
Chairman, FAWC Ruminants Standing Committee

Chairman: Professor Christopher Wathea, BSc, PhD  
FAWC website: <http://www.defra.gov.uk/fawc>

# Animal Welfare – A Growing Concern

**38%** Are concerned about animal living conditions



**Up from 33% in 2003**

Source: IGD's Shopper Trends – 5 Years On, 2008

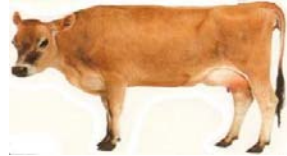
**24%** Want industry to focus on promoting high standards of animal welfare



Source: EDS/IGD Shopper Research, 2007

# Perceived Animal Living Conditions

Best



Dairy cattle



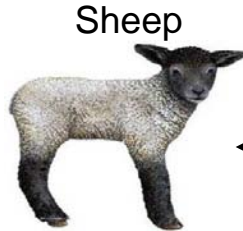
Salmon



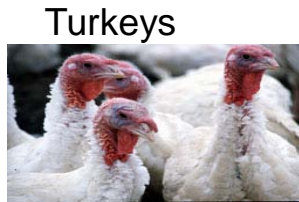
Pigs



Beef cattle



Sheep



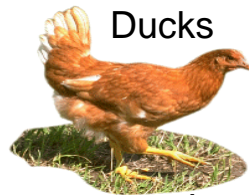
Turkeys



Ducks



Chickens



Laying hens

← Perceived as profitable herd

← Conditions similar to nature

← Visible in fields

← Lack of knowledge

← Media coverage

Worst

# What do Consumers Think about Dairy Cows?

- 93% of consumers would pay more for milk of good welfare standards.
- In fact, 37% of those surveyed would pay 30% more for their milk if this was the case.
- 50% of consumers perceive welfare to be good on dairy farms.

BUT other issues:

- 95% of respondents thought that keeping cows permanently indoors was unacceptable.
- 32% thought it was unacceptable to keep cows outside all year round.
- The average consumer estimated a cows average life expectancy at 10 years.

(Survey conducted in central Scotland and northern England by Dr Kathryn Ellis, University of Glasgow and presented at BCVA, November 2009)



# Age Structure of UK Herds (Based on the BCMS Cattle Database)

Cow Age (Years)	Suckler %	Dairy %
3	15.6	18.9
4	13.5	17.5
5	11.9	15.6
6	10.6	13.2
7	9.3	10.6
8	8.1	8.3
9	6.9	6.1
10	5.7	4.3
	81.6	94.4
11	5.0	2.8
12	4.3	1.6
13	3.6	0.8
14	2.3	0.4
15	1.3	0.1
16	0.8	-
17-20	1.1	-
	18.4	5.6

Todd, 2011.  
SAC Beef & Sheep Notes, Feb 2012

# Super Dairy Facts

- The largest dairy herd in the world on a single site is 37,000 cows in Saudi Arabia.
- The largest dairy herd in Europe on a single site is 7000 cows in Turkey.
- In the US in 2006 there were 1443 dairy herds with at least 1000 cows on a single site and 573 herds with 2000+ cows.
- In 2009 47% of milk in the US was produced by herds of more than 1000 cows. In 2004 the equivalent position was 32%.
- In Wisconsin which has more dairy cows than any other US state, just 17% of herds use “intensive grazing”. The rest are permanently housed.



# US Milk Production

- US dairy industry is becoming increasingly polarised between small family farms which are often not commercial and large agri-business enterprises that produce most of the milk

# Is British Dairying Adopting a North American Model?

CATEGORY BY VOLUME OF PRODUCTION	% OF PRODUCERS	
	1994/5	2009/10
2 Million+ litres (250 cows)	1	8
1 million+ litres (100 cows)	4	22
500K+ litres	20	32
<500K+ litres	75	38

(Note: 2000 largest herd currently on a single site in the UK. Less than 2% of British dairy herds house their cattle all the year round - less than 10% of cows)

Source: DairyCo/RPA.

# Current State of Cattle Health and Welfare in GB

- A short focussed report to help the dairy and beef sectors prioritise their focus on designing health and welfare strategies that will lead to sustainable and profitable cattle farming.
- Will not duplicate existing reports – bTB, Salmonella or zoonoses.
- Huge amount of data out there but not co-ordinated and often conflicting.
- Real enthusiasm from the whole sector to give data to this report.
- Final report will be out in the spring.

# Current State of Cattle Health and Welfare in GB

## Table of contents

- Introduction
- Demographics
- Key Challenges – Health
- Key Challenges – Welfare
- Health Planning and Medicine Usage
- Surveillance
- Horizon Scanning
- Conclusions/Recommendations

# Share of Total UK Cattle Population by Country (%)

Time Period	England	Wales	Scotland	Northern Ireland
1922-1957	66.0	9.8	15.2	9.0
1958 - 1993	61.0	10.6	17.4	11.0
1994 - 2010	54.9	11.5	18.1	15.5

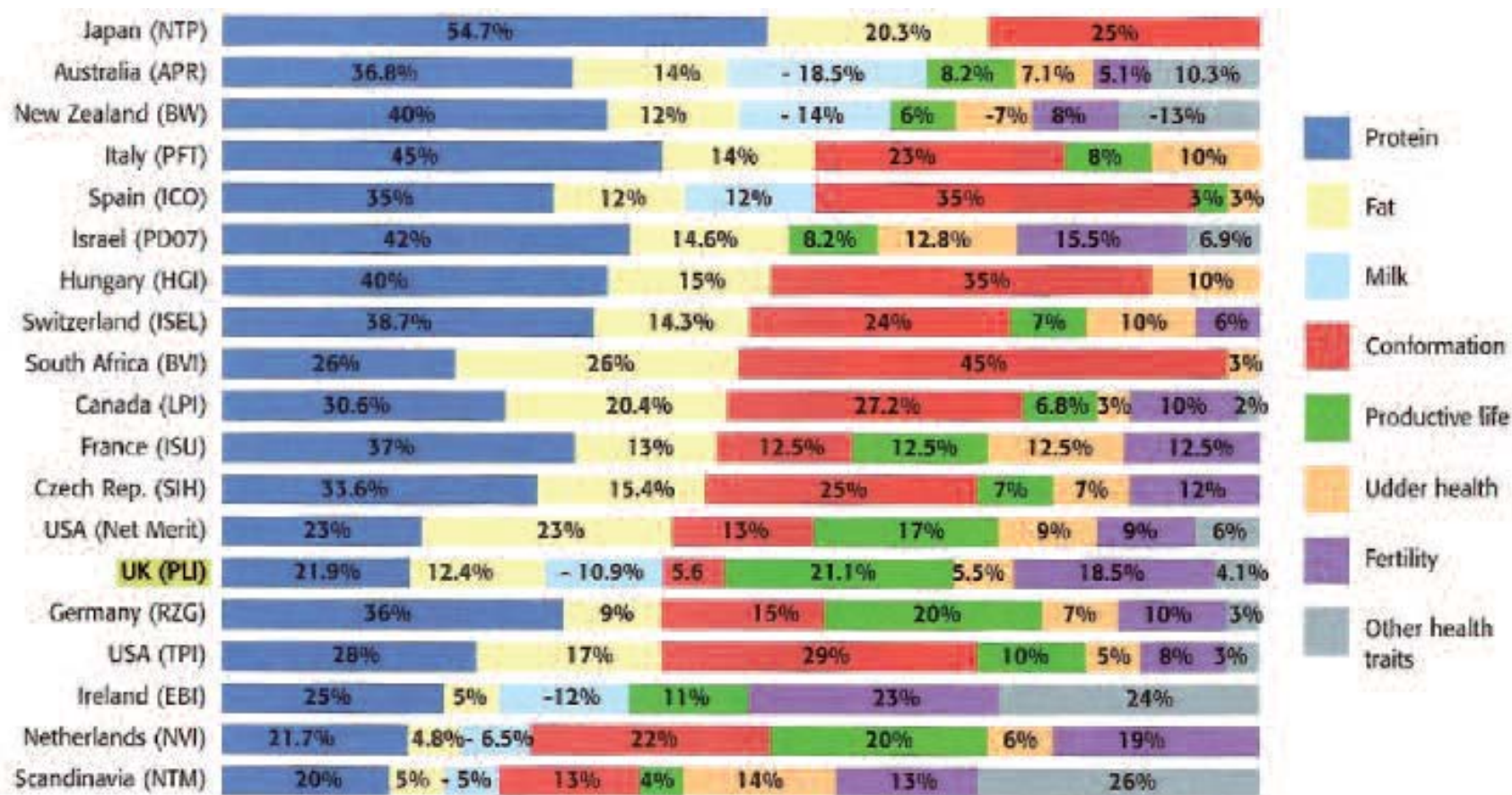
Source: UK Census & Survey Data, quoted in the Feed Compounder, Dec 2010)

# Fertility Trends in UK Dairy Herds

	1993	2002	2005	2007	Target
Herd Size	109	121	130	144	
Milk Yield (Litres/Cow)	5974	7138	7705	7648	
Heat Detection Rate (%)	71	57	46	45	75-80
Days to First Service	71	95	99	101	60
Conception Rate (%)	45	40	39	37	45-50
Calving Index (Days)	382	411	420	425	380

(Source: Paul Robinson, Kingshay, quoting from his Nuffield Scholarship, Nov 2010)

# Worldwide Selection Indexes



Source: Holstein International June 2009

# Annual Dairy Cow Culling Report (Kite Consulting Culling Monitor)

Reason for Culling	2006	2007	Change (+/-)
Mastitis/High SCC	18.50	18.33	-0.17
Udder Conformation	4.11	4.60	+0.49
Not in Calf	25.43	24.49	-0.94
Not seen Bulling	1.00	0.47	-0.53
Abortion	2.31	2.62	+0.31
Lameness/Legs & Feet	7.70	8.73	+1.03
Accident/Trauma	3.73	4.01	+0.28
Metabolic Disorder	2.57	2.28	-0.29
Calving Injury/Downer Cows	3.98	5.70	+1.72
Infectious Disease	1.67	1.46	-0.21
Age	8.60	7.82	-0.78
Yield/Slow Milking	2.95	4.06	+1.11
Die on Farm	11.05	8.88	-2.17
Other	<b>6.40</b>	<b>6.55</b>	<b>+0.15</b>
Culling %	19.67	20.41	+0.74
Mortality %	1.22	0.89	-0.33
Total Culling & Mortality %	20.89	21.30	+0.41



# Surveillance and Monitoring

- About 240,000 adult cattle die each year of unknown causes on farms.
- By getting a better 'handle' on why these animals are dying – useful for disease surveillance and reducing replacement rates. Fallen Stock data?
- What data to collect?
  1. Passport ID – BCMS – Fit for Purpose?
  2. Did the animal die:
    - a) Suddenly
    - b) Was it ill before it died

# Surveillance and Monitoring

## (...Contd)

### 3. What symptoms did it show?

- Digestive (diarrhoea)(Bloat)
- Respiratory (coughing/pneumonia)
- Legs and feet (lameness)
- Mastitis
- Calving Problems
- Reproductive (infertility)
- Nervous (fits/paralysis)
- Kidney Trouble (red water)
- Skin Problems (mange)
- Generalised Illness
- None – just died

# Imports of Breeding Animals Into GB

	2010		2009	
	No. of Consignments	No. of Animals	No. of Consignments	No. of Animals
<b>TOTAL</b>	<b>1762</b>	<b>31338</b>	<b>1485</b>	<b>28953</b>
Of which				
France	151	1768	73	1150
Germany	162	3693	177	4657
N.Ireland	515	7965	492	7885
ROI	209	3477	270	6223
Netherlands	572	11599	307	6914

# Conclusions

- The cattle sector fully recognises that health and welfare has never been more important
- The industry is taking responsibility and hopefully CHAWG as an industry group can steer this endeavour by providing a sounding board and delivering facts to the whole supply chain including consumers rather than misplaced conceptions!