

NADIS Cattle Report and Forecast – May 2009

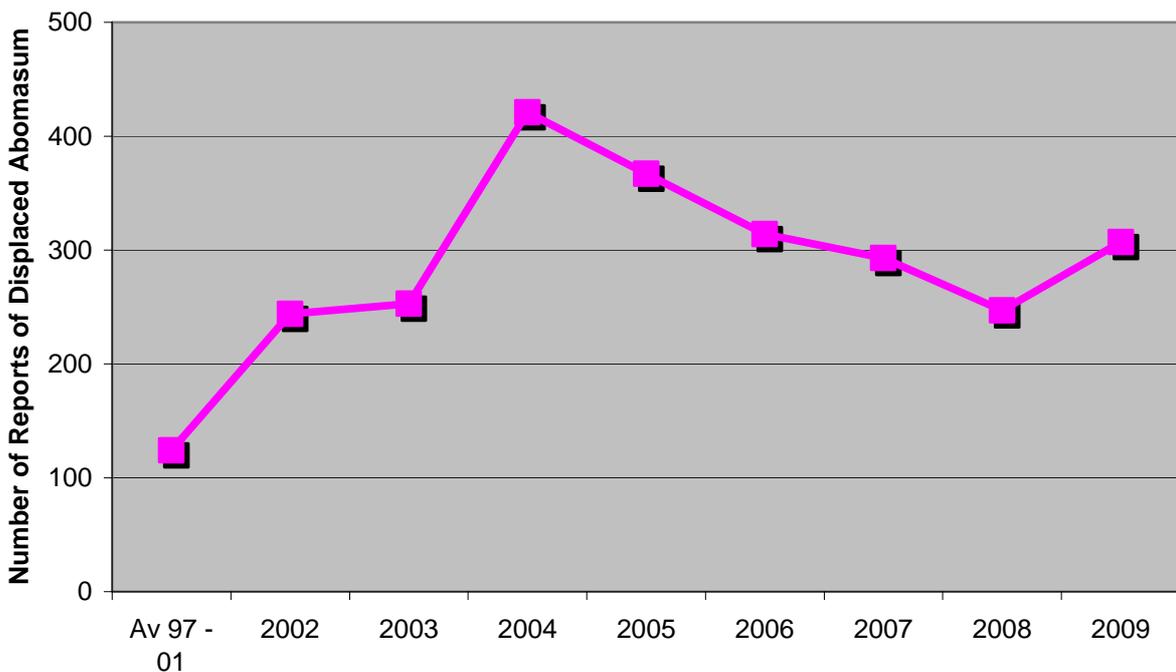
ADULT CATTLE

Overall the number of reports in April was relatively low, with many practices reporting much less work than usual. However, as always there were large differences between practices with some vets reporting that April was far busier than expected!

Metabolic disease

The number of displaced abomasum reports showed their expected fall in April, but despite the fall in overall work there were still more reports of DAs than in 2007 and 2008. So for the first time since 2004, there were more reports in January to April this year than in the previous year (Figure 1)

Figure 1: Change in number of reports of DA in January to April – showing the rise in 2009 after 4 consecutive years of falls.



Acetonaemia cases dropped precipitously in April, falling to well below the long term average, continuing, for a third year there was a decline in the number of reports of acetonaemia received during January to April (Figure 2). Comparing these figures to DA reports clearly shows that the rise in DA cases has not been accompanied by a rise in acetonaemia cases; although these diseases may share several risk factors, they are clearly not strongly linked with modern dairy management increasing the one but not apparently the other (Figure 2).

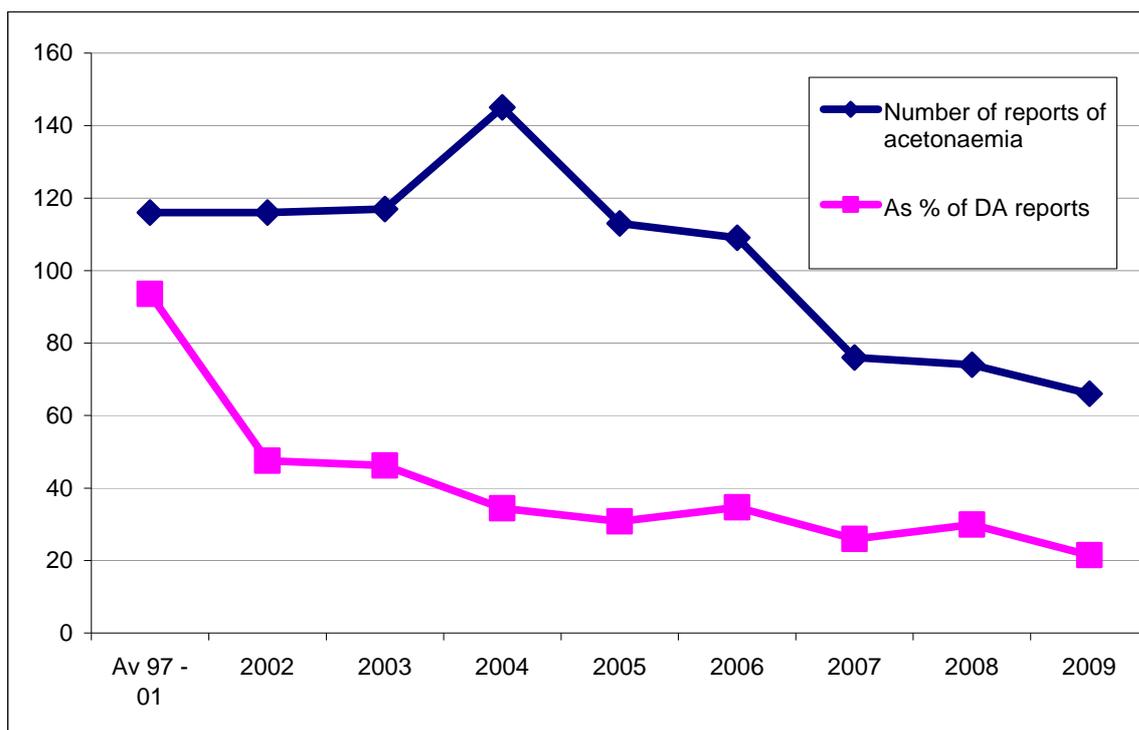


Figure 2: Number of reports of acetoaemia during January to April, and this number as a percentage of DA cases during the same period.

Fewer hypomagnesaemia cases were reported in April than in any previous year. Magnesium management appears to have improved dramatically since NADIS started in 1997 with the number of cases reported in the last three years being equivalent to one years worth of cases in the late 1990s. It would be interesting to get your thoughts as to why this is the case – some may be due to farmer treatment of cases but how important do you think improved nutrition has been and if it has what do you think has prompted that change?

Fertility

The number of reports of anoestrus echoed those of 2008 very closely, falling in April from a very low level in March, with the number of reports being only 10% higher than April 2008, which was the lowest for that month in any year except 2001. In contrast, reports of ovarian cysts were much lower than last year, tracking the long-term average rather than being 50% above. Again these NADIS data show that there must be significant differences in the risk factor for these two diseases even though both are often linked to high milk production and insufficient feed.

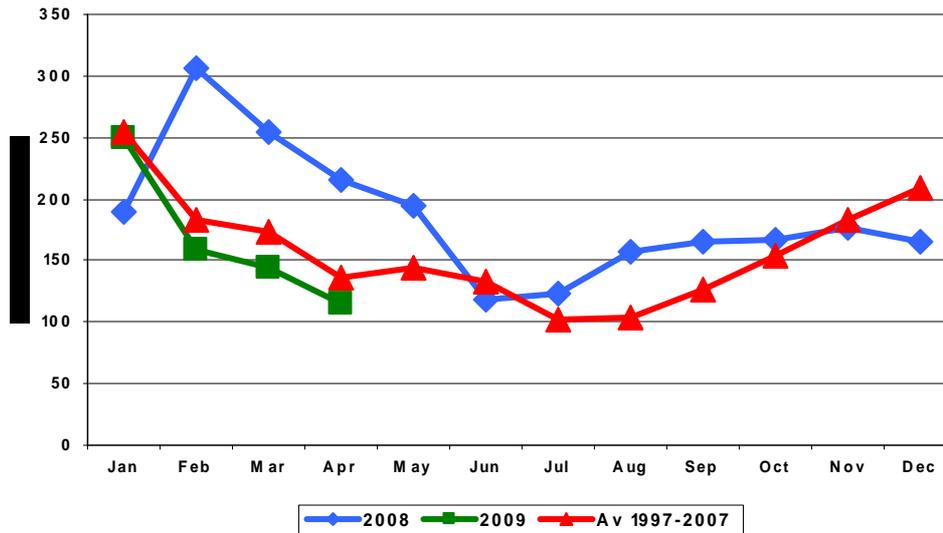


Figure 4: Monthly reports of ovarian cysts

Uterine torsion reports increased steadily between 2000 and 2006, except for an upwards blip in 2004 but then fell in 2007. However in 2008, reports increased to levels near those seen in the peak year of 2004, so the upward trend seems to have begun again

Comparing the number of reports of uterine torsion to those of dystocia gives us further information. In 1997 just under 6% of cases were of uterine torsion, last year this had doubled to almost 12% (Figure 5). So far this year the equivalent figure is only 8% but this low figure reflects the increased seasonality of uterine torsion compared to dystocia. This is clearly shown in the time series presented in Figure 6 which shows an increase from around 5% in the early months of the year to around 15% in the peak summer months.

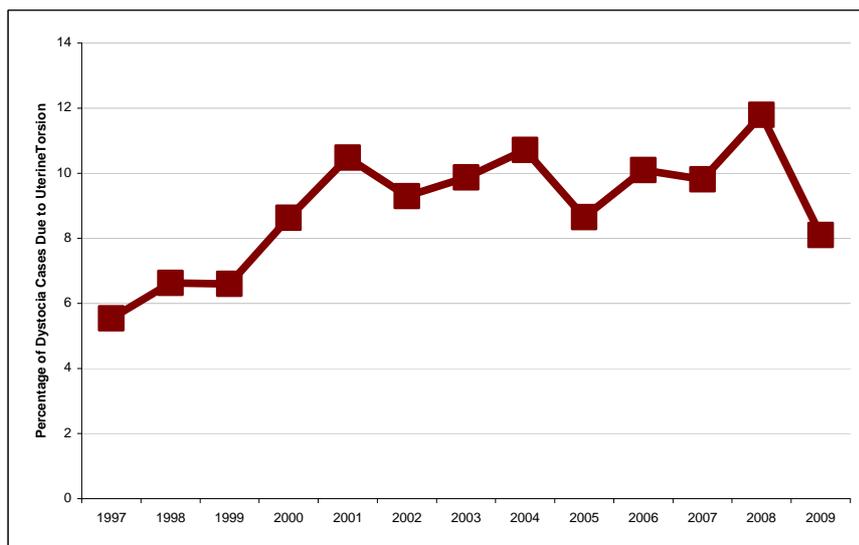


Figure 5: Change proportion of dystocia reports that are due to uterine torsion (The low figure for 2009 reflects the increased seasonality of uterine torsion compared to dystocia)

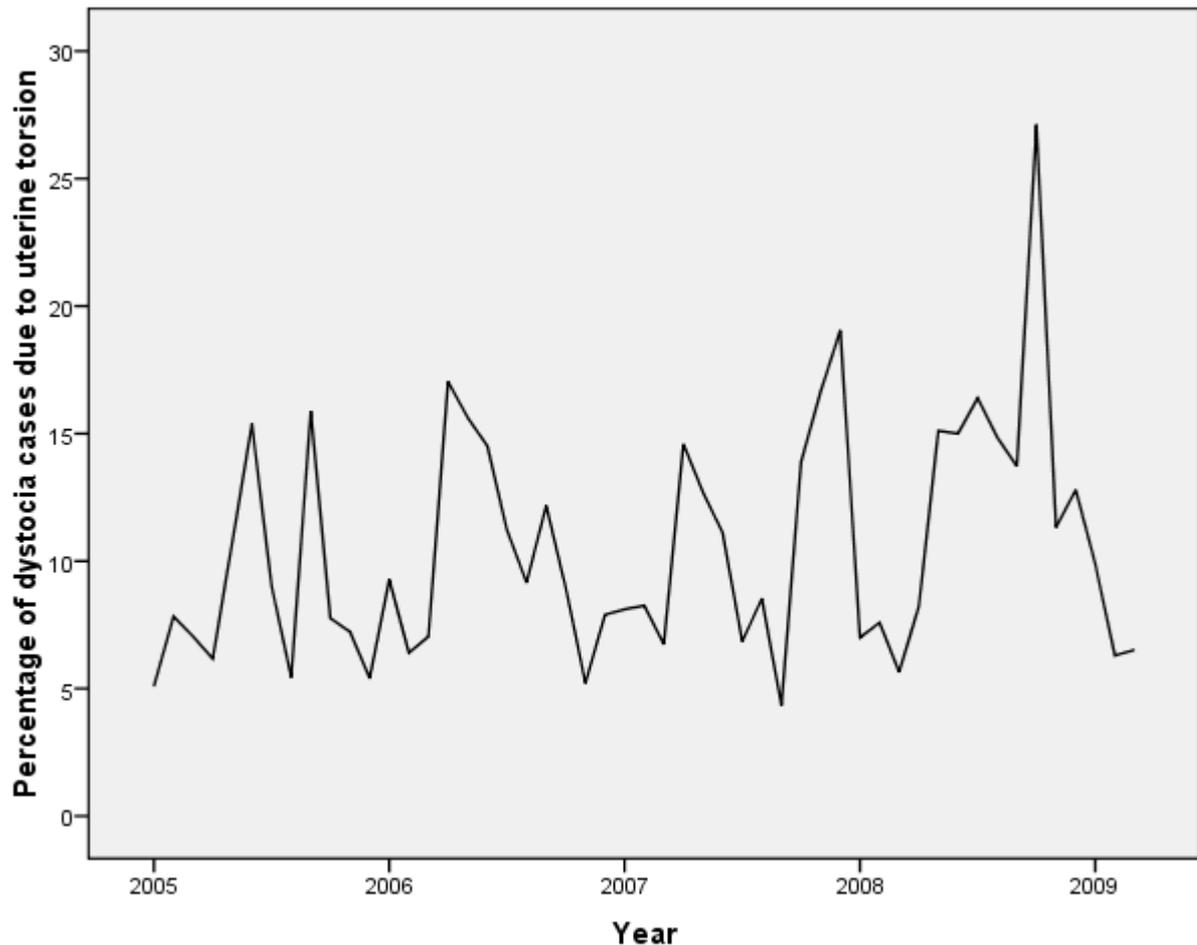


Figure 6: Time series graph of proportion of dystocia reports which were due to uterine torsion, since 2005. The peak month in 2008 was November which had relatively few dystocia cases

It is only with long term data, such as that collected by NADIS veterinarians, that we can identify such changes and highlight them. Ideas as to why dystocia in the summer is more likely to be associated with uterine torsion than in the winter would be gratefully received.

Vet 46 (North Yorks) reported that he is finding that post calving metritis is becoming more and more of a problem in large, high yielding herds with a few ongoing problem cases on each farm. One of his clients has not changed size (130 cows) but average production has gone from 8,500 to 9000 litres at the same time as a large increase in dirty cows. Certainly, increased negative energy balance has been linked to increased persistence of uterine infection so it would be interesting to see if this pattern is also occurring elsewhere?

Vet 74 (Mid Wales) described an abortion problem after bluetongue vaccine. The vaccine is not the cause, what seems to be the cause is BVD virus; affected animals have high titres with some of them showing rising titres. The herd is vaccinated so the vet has questioned where the titres have come from, particularly as the herd was vaccinated 10 months ago. This is a complex issue; most vaccinated animals will not have titres so it is likely that the high titres are caused by active virus on the farm. This then leads to his query about the length of activity of the vaccine as the

data sheet suggests 6 monthly intervals may be needed, but the reps for the company say that they will be fine for 12 months. The answer is that both of these are correct. The difference is that fetal protection is different from protection of the vaccinated animal. The former requires a significantly higher degree of protection so lasts for a shorter period of time. In most cases this wouldn't matter as the risk period for abortion is typically the first 4-5 months of pregnancy, so annual vaccination in a non-seasonal herd will protect most pregnant cattle, but if challenge is high and it's >9 months since vaccination, abortions may occur in some animals – this proportion will still be lower than it would have been had the animals not been vaccinated. This is probably what has happened in this case.

Lameness

The low figures for lameness treatment in the first four months of 2009 confirm the long-term trend of reduced veterinary involvement in lameness. This is by no means a necessarily bad thing, we should be focussing on prevention rather than remedial treatment, but we still lack well-designed focussed control plans – equivalent to the mastitis 5-point-plan – which are readily available for use on farm. So far research has shown that lameness intervention is generally much less effective than mastitis control. Hopefully, Bristol University's Healthy Feet project will form the basis of an approach which will get farmers and vets involved in reducing lameness.

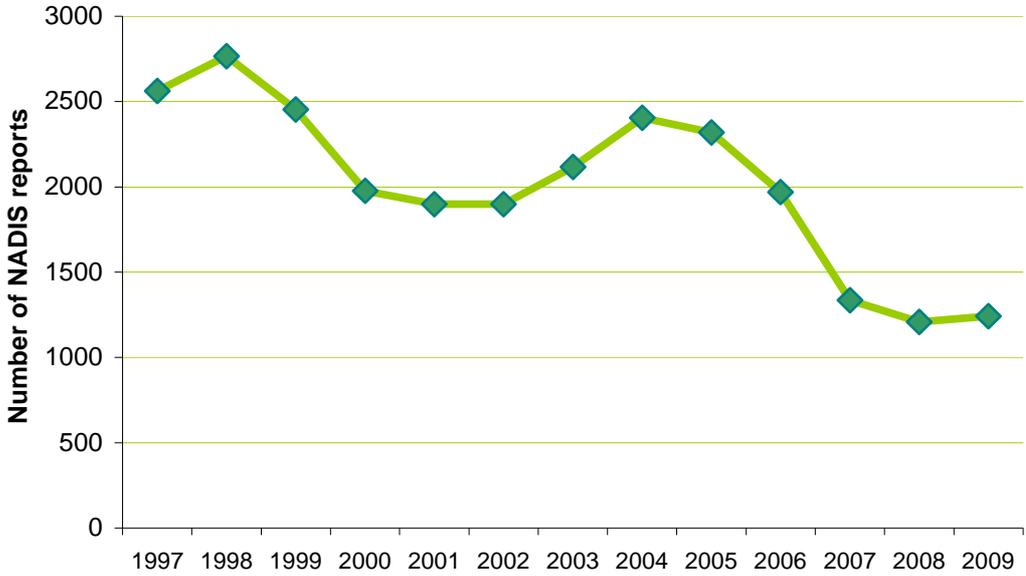


Figure 7: Number of reports of lameness in January to April from 1997 to 2008.

Other diseases

Vet 81 (Northumberland) reported what appears to be an unusual multifactorial problem on a client's farm. The cattle have been in poor condition for several months and have been diagnosed with selenium deficiency. However there has been a relatively high level of unexplained deaths and down cows – with the only abnormality discovered being slightly raised urea which has been

linked to insufficient ruminal protein supply. However he also reports that the affected group of cattle has large numbers of ticks, so further investigation into the possibility of louping ill being involved is currently ongoing. Other reports of louping ill in cattle would be welcomed.

Another veterinarian reported a dairy heifer had a marked reaction to dinoprost (PGF_{2α} analogue), with marked cellulitis down the leg and also cranially. The affected heifer was off feed, depressed and pyrexia. This was correctly reported as an adverse drug reaction; it is a well-recognised side effect of PG injections, but often appears to occur in 'outbreaks' with large numbers of cattle affected at the same time. Another drug reaction was also reported in April. A beef cow went down a couple of days after being vaccinated for Rotavec. The reporting vet stated that he sees a couple of cases like this each year and that he has previously diagnosed hypophosphataemia in such cases.

Clostridial diseases are ever present, with reports of significant problems at least every other month. This month, Vet 86 (Staffordshire) reported an unusual appearance of tetanus. Last year the farm had had some calves with tetanus, 6 calves were affected with two dying. In April, one of his colleagues performed a laparotomy on a cow that he suspected could have an LDA, although he was not convinced. During surgery they realised that the problem was actually tetanus. Despite supportive treatment the affected cow died three days later. The vet does not understand where this tetanus has come from. The affected cow had calved 10 days ago with a perfectly normal calf. He recorded that the general hygiene on the farm was pretty grim, but the cattle were all on concrete floors with bedding. This case highlights the fact that not all tetanus cases have the classic 'sawhorse stance'

CALVES

Like lameness, the involvement of NADIS veterinarians in treating calf diseases is on a long slow decline. Again like lameness, this is not necessarily a bad thing as the best use of the vet in relation to calf disease is in prevention. In contrast to lameness, our ability to prevent calf disease has probably improved with better understanding of how to improve the environment, better understanding and monitoring of colostrum management, and more use of better vaccines.

However, no matter how good our potential preventative regimes are, they need applying to work. Vet 46 (North Yorkshire) reported a typical problem of poor-doing calves on a clients farm. Post-mortem investigation diagnosed rotavirus and cryptosporidia as the main disease problems but also identified problems with colostrum intake. In this case management changes were leading to problems in the calves as the herd was expanding and buying cows in from all over – so the level of immunity to the pathogens present on the farm would have been low – and they were also trying to reduce the risk of Johnes disease spreading by not feeding shared waste milk and shared colostrum. This is an increasing problem as we try to control Johnes as sharing colostrum greatly enhances calves' passive immunity as it allows more colostrum to be fed for longer, but appreciably increases the risk of Johnes. So if we want to control Johnes by not sharing colostrum we need to ensure that other aspects of calf management are improved at the same time.

Furthermore on a farm such as this one that is expanding, the risk of importing Johnes with purchased cattle is far greater than the risk from shared colostrum so it's probably unlikely that the changes in calf management would have had much of an impact on Johnes risk!

Even with good preventative regimes in place things do not always go to plan. Vet 81 (Northumberland) illustrated this nicely in April. Firstly, he reported the apparent failure of a vaccination programme - a rotavirus outbreak in a vaccinated farm. Investigations are ongoing. Secondly, he was confronted with the Achilles heel of any preventative programme – unexpected disease. Post-mortem examination of a month old calf scouring with severe bloody enteritis identified Giardia as the cause. Giardia is a recognised cause of calf scour but is not common enough to have its own line in the VLA/SAC diagnosis. The vet thought that the disease had probably been present in 2008 as a calf had developed similar signs before dying that year but had not been necropsied. A second calf in the group which had a non bloody scour was treated with fenbendazole and responded. All other calves are going to be treated as a precaution and the water will be tested as the shed housing the calves receives water from a spring (as do nearby houses).

The number of joint ill reports in April was half that of last year, nevertheless because of relatively high figures earlier in the year there were still more cases in the first four months of 2008 than in the same period last year – the second year in a row this figure has risen. Overall, though the figures are still well below the numbers from the late 1990s. It would be interesting to know the drivers for calling a vet to treat joint-ill – is it numbers of calves affected, severity of disease or value of the calf?

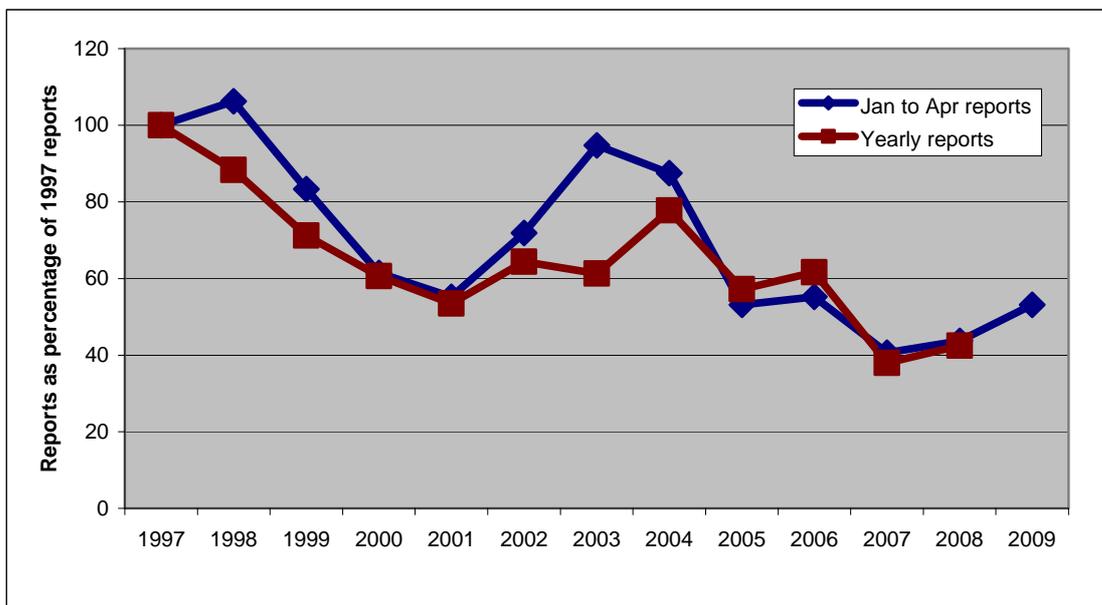


Figure 8: Reports of joint ill in January to April and for the whole year compared to reports in 1997

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