

'The Dutch Model'

(of controlling antibiotic use in animals)

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UCD Dublin Ireland December 16, 2014



Federation of
Veterinarians of Europe



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The NL, a small big country?

Globally today the Netherlands is the third (flowers excluded) exporting country of agricultural products

Two thirds of the production is exported

Pretty amazing for such a small country

Livestock Density in the NL



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**It went so well
... we thought!**



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'Mega stable'





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'Plofkip' (chicken which can explode???)

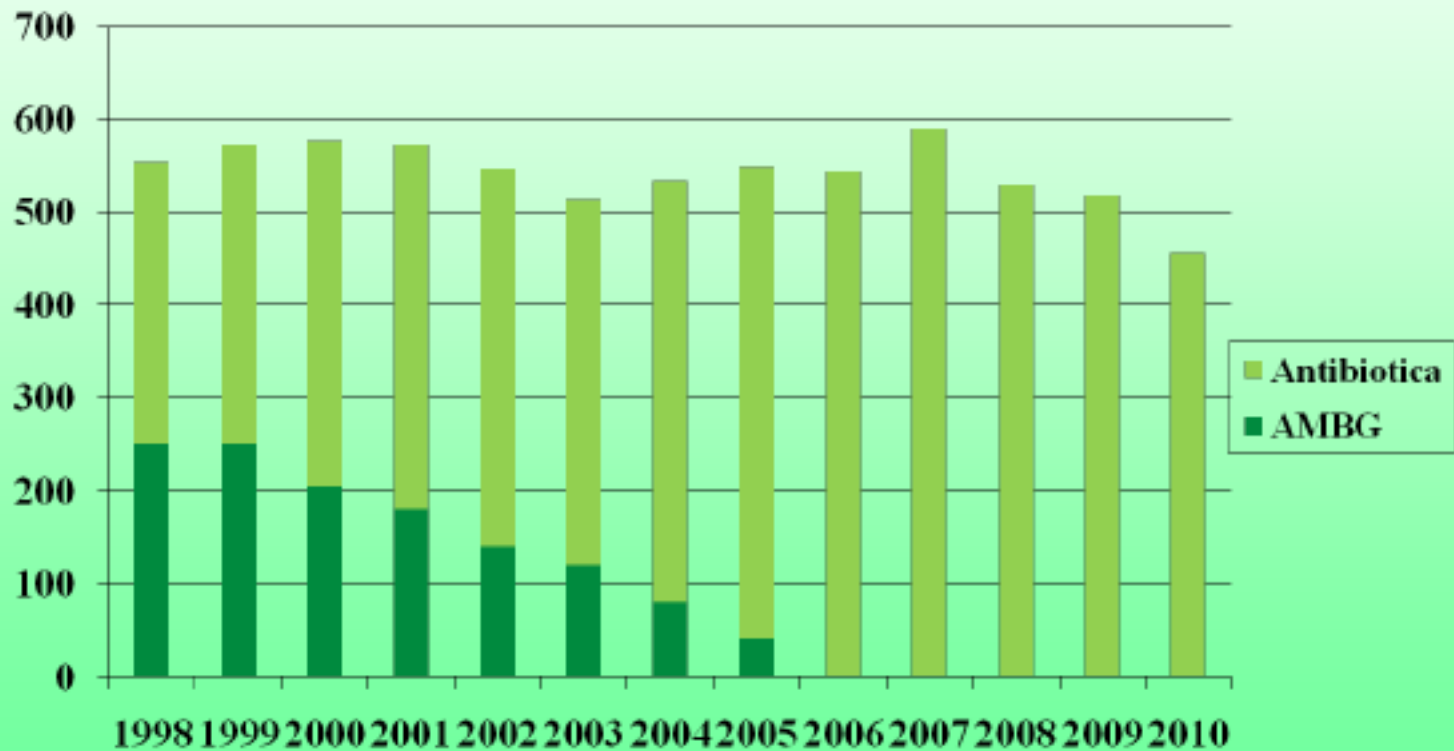




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Veterinair gebruik antimicrobiële stoffen totaal





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Antibiotics in Dutch society

- **Antibiotics in animals, a public issue**
- **The national parliament discusses**
- **Television, internet, papers**
- **Animals Rights party**
- **Strong activity AW organisations**
- **Social acceptance intensive husbandry**
- **Human doctors do pretty well with ab**



Dutch vets realized more and more

- **AMR is a hot topic and will not disappear from the agenda**
- **AMR goes (much) faster than developing new ab products**
- **Defending that ab use in animals does not contribute to AMR is a lost battle**
- **Farmers and veterinarians should be part of the solution**
- **NL should act (although AMR is a global issue)**



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National Health Council

Antibiotics in livestock and resistant bacteria in humans





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Problems according to National Health Council

- **ESBL**
- **MRSA**
- **Vancomycin resistant Enterococcus**

- **Beta lactam antibiotics (penicillin, amoxicillin, ampicillin, cephalosporins, carbapenems)**



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Government requires compared to 2009

- Minus 20% ultimo 2011
- Minus 50% ultimo 2013
- Minus 70% ultimo 2015

(Kilograms unspecified)

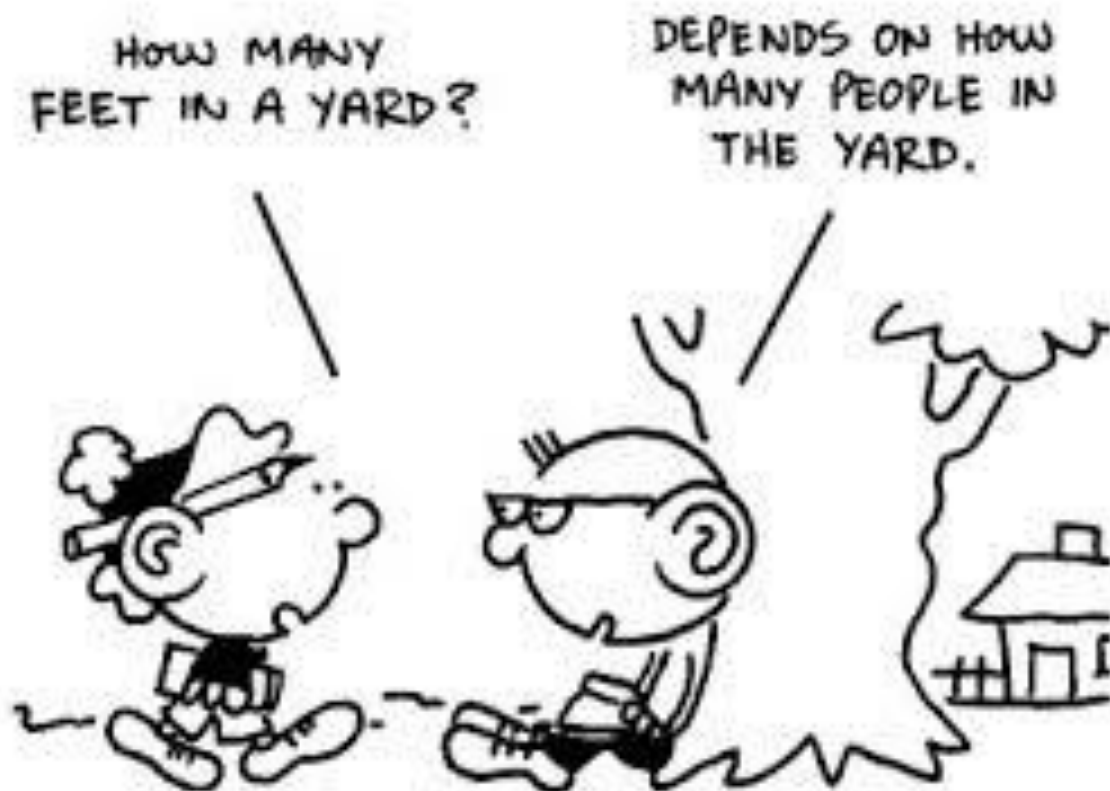
But how?????





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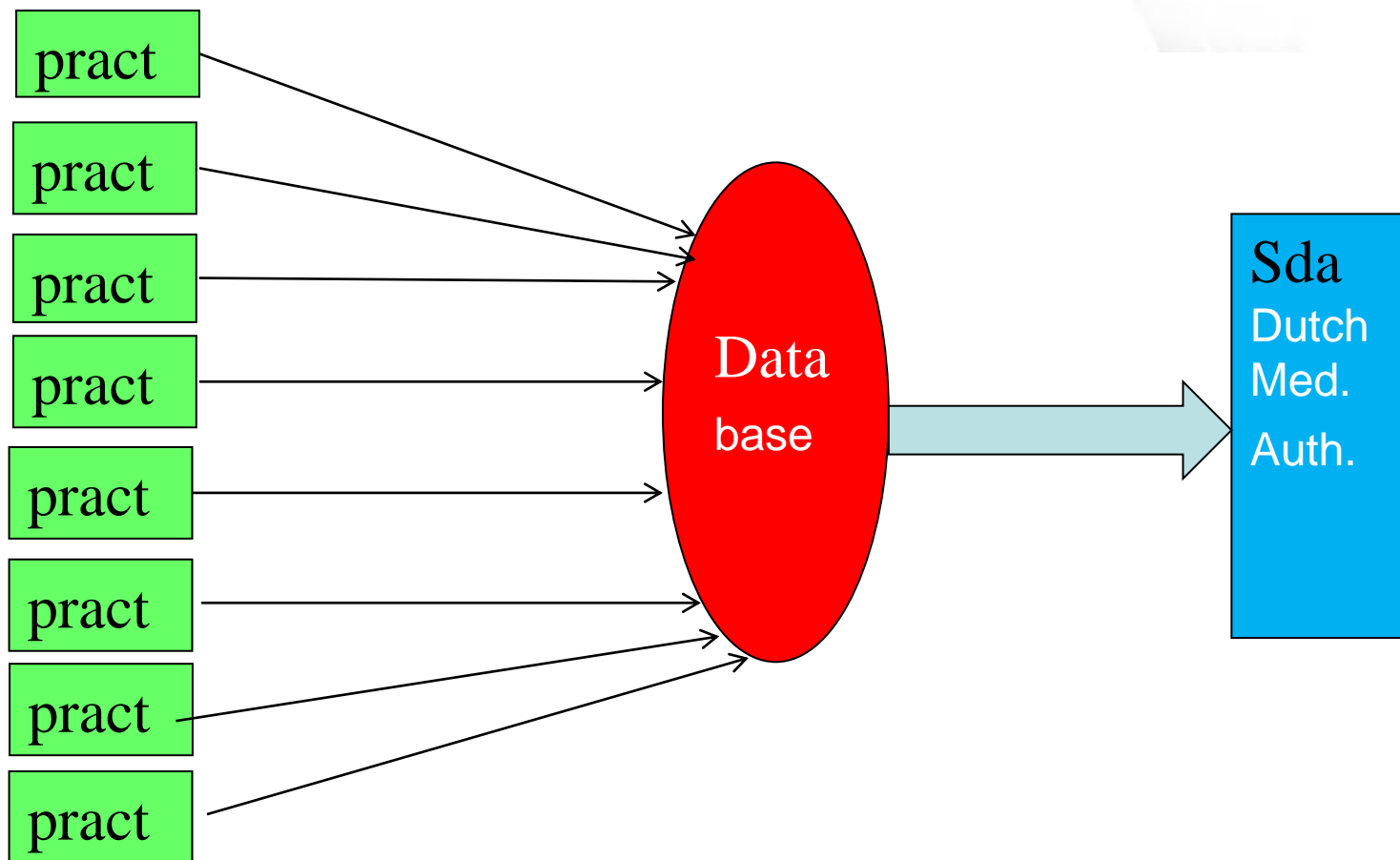
Only if you measure you can be sure!



We need a database



VetCIS, the Dutch Digital Database





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Dutch Medicine Authority

- This **private** organisation is financed by
- Swine farmers
- Dairy farmers
- Poultry farmers
- Veal farmers
- Veterinary practitioners
- Government



Diergeneesmiddelen



Annual Daily Doses

- = How many daily doses an average present animal receives in one year
- This is compared to a guideline per animal species, issued by the Dutch Medicine Authority which can monitor on vet practice level as well as farm level
- The system is 'voluntary'. Quality systems (milk/meat/eggs) require participation of vet and farmer



Monitoring Farms

- Broilers: ≤ 15 ; > 15 < 30 ; ≥ 30
- Fattening pigs: ≤ 10 ; > 10 < 13 ; ≥ 13
- Dairy ≤ 4 ; > 4 < 6 ; ≥ 6

direct action

under attention

no action



Veterinary Benchmark Indicator (since March 2014)

$\geq 0,3$

direct action

$\leq 0,1 \leq \text{VBI} \leq 0,3$ **under attention**

$\leq 0,1$

no action



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New Dutch Animal Law 2013

- **Prophylactic use of antibiotics prohibited (and removed from leaflets)**
- **Antibiotics only administered by vet except if**
- **Fluoroquinolons (2^e gen) and Cephalosporins (3^e and 4^e gen) only after sensitivity testing**
- **'No stock' on the farm**
- **Individual decoupling of prescribing and dispensing (sanction)**



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But there is more. Private actions

- **Feedmill industry stopped mixing ab (covenant)**
- **Swine sector required ban on CIA mass medication**
- **Dairy sector banned CIAs totally**
- **Guideline Vet Ass criteria drying cows with antibiotics**
- **Idem streptococcus suis treatment**
- **Formularies adapted to conclusions National Health Council**
- **Farm specific Health Plans and Treatment Plans**



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Three years after the start of intensive monitoring ab use, the Dutch government announced a decrease of >50% ultimo last year

**CONCLUSION:
Monitoring is a worthwhile instrument for restrictive use!**



Conditions for success!

- **Measuring ab consumption is key**
- **Farmers and veterinarians have to cooperate**
- **If the government does not subsidise, ‘everybody’ has to put in some money**
- **Companion animals?**



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Thanks for your attention!

