

Current health issues on poultry farms in the Czech Republic

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Statistical data from SVA CR and VFU Brno

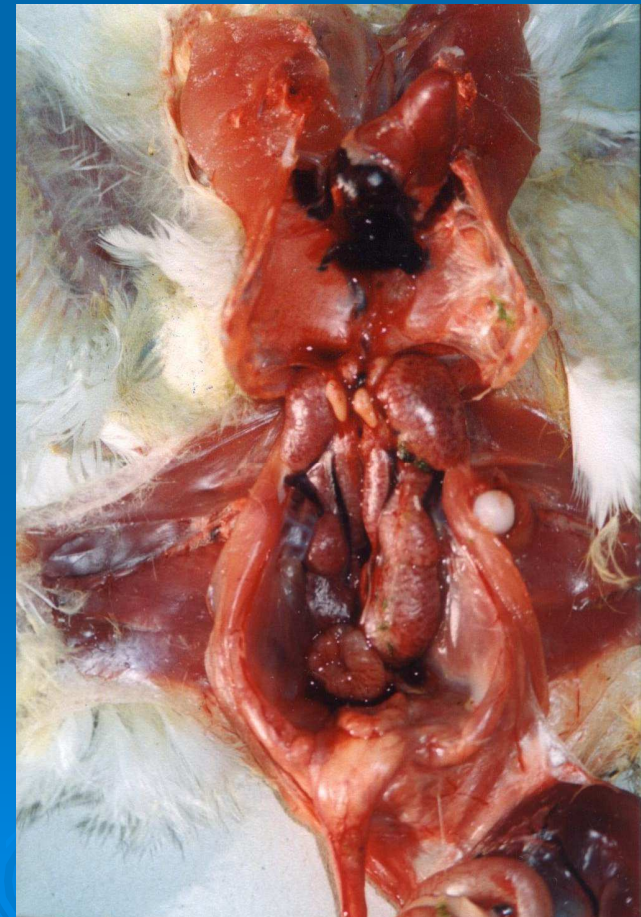


Infectious bronchitis

- A permanent problem in non-vaccinated broiler chicks
- In commercial layers it is usually a subclinical disease caused by variant strains, most often close to 4/91.
- Mostly subclinical course for both broilers and layers

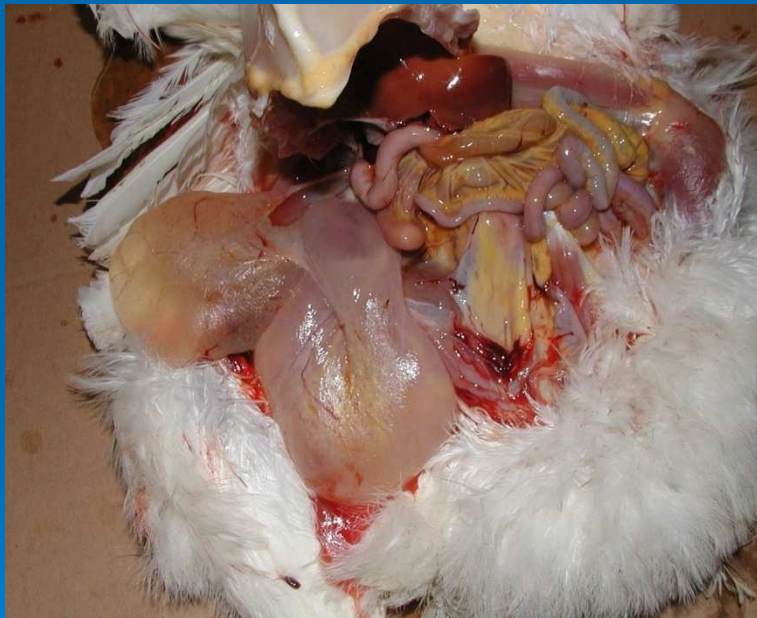
Infectious bronchitis

- Very sporadic findings of nephrogenic virus varieties in broiler chicks
- Diminishing of marked pathological changes in the kidneys
- Most commonly the bivalent vaccine Poulvac IB Primer is used, and vaccines from different companies containing the strain H120



Infectious bronchitis

- Strain QX detected rarely in laying hens



Avian encephalomyelitis

- The last detection in chicks was 10 years ago due to an incorrect vaccination of the breeding flock
- For commercial layers this is not a problem due to the routine vaccination
- The last clinical case in turkey poults was seen 5 years ago: the disease lasted 5 days

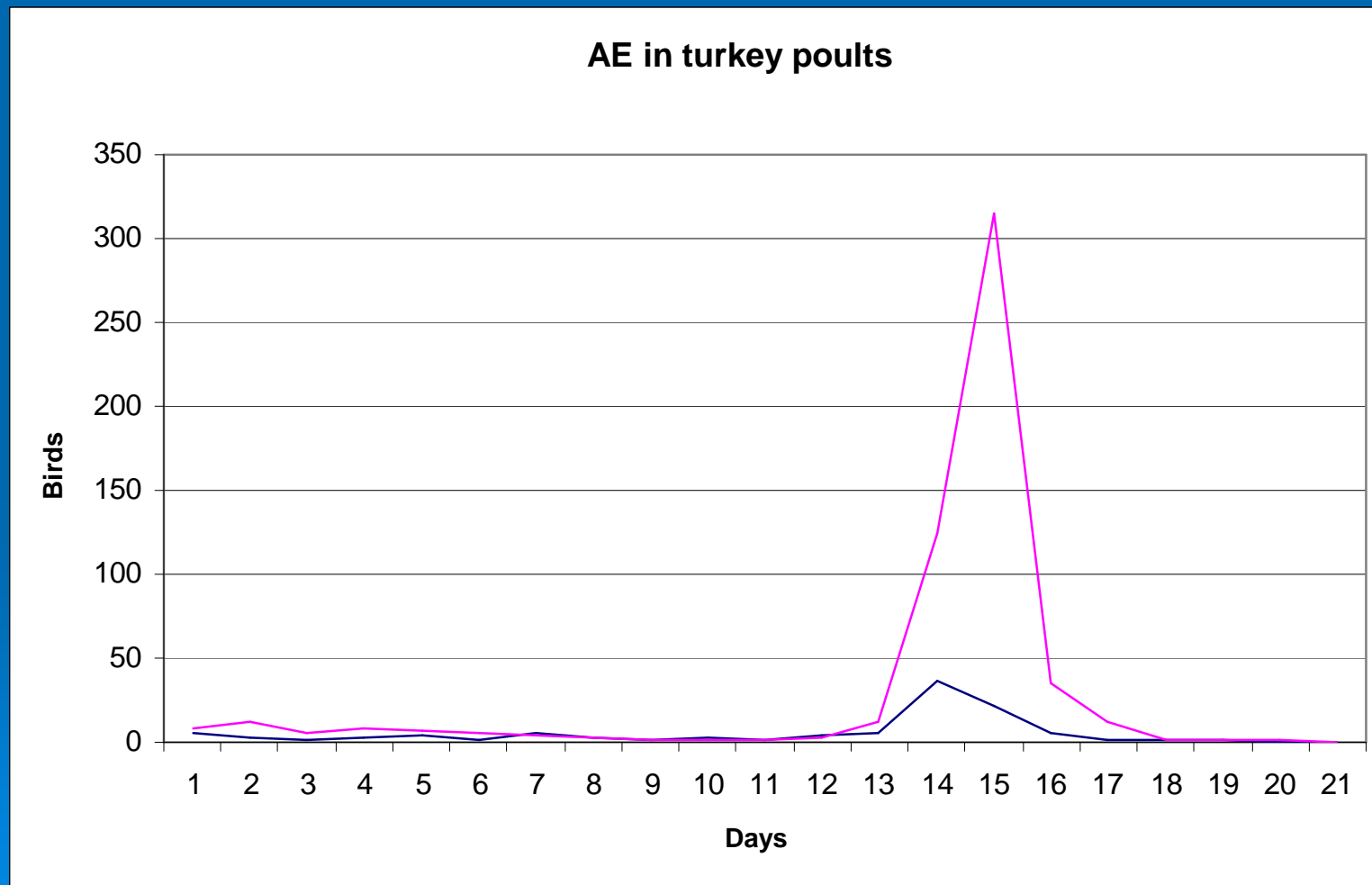
mortality H1 ----- 1,4%

 H2 ----- 9,9%

There was an uncontrolled backyard pullet flock in the immediate vicinity of the turkey house.

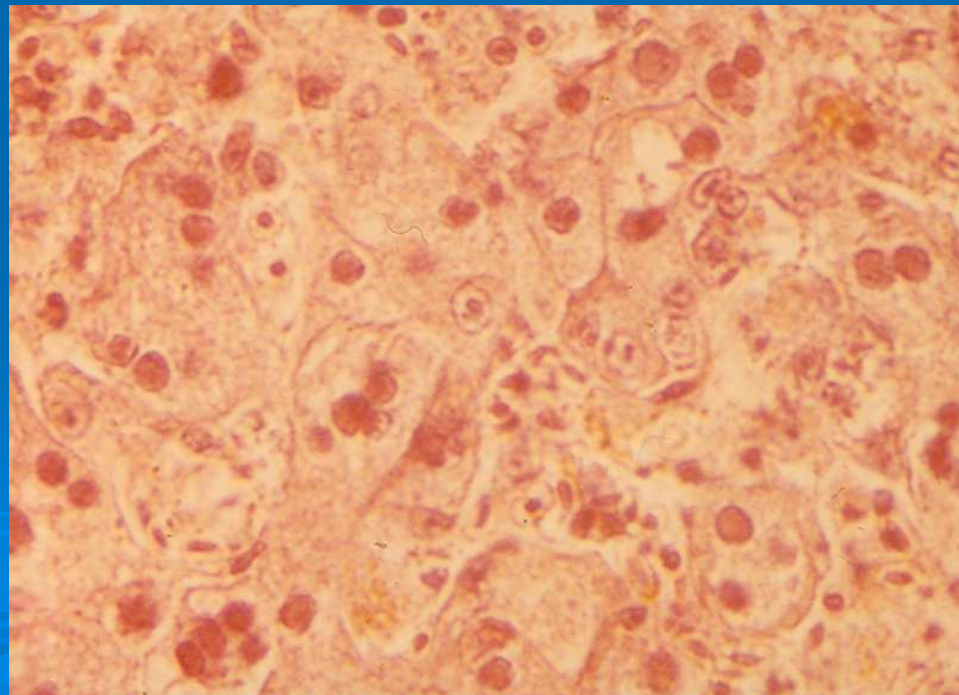
Avian encephalomyelitis

Course of AE in turkey poults in 2 houses



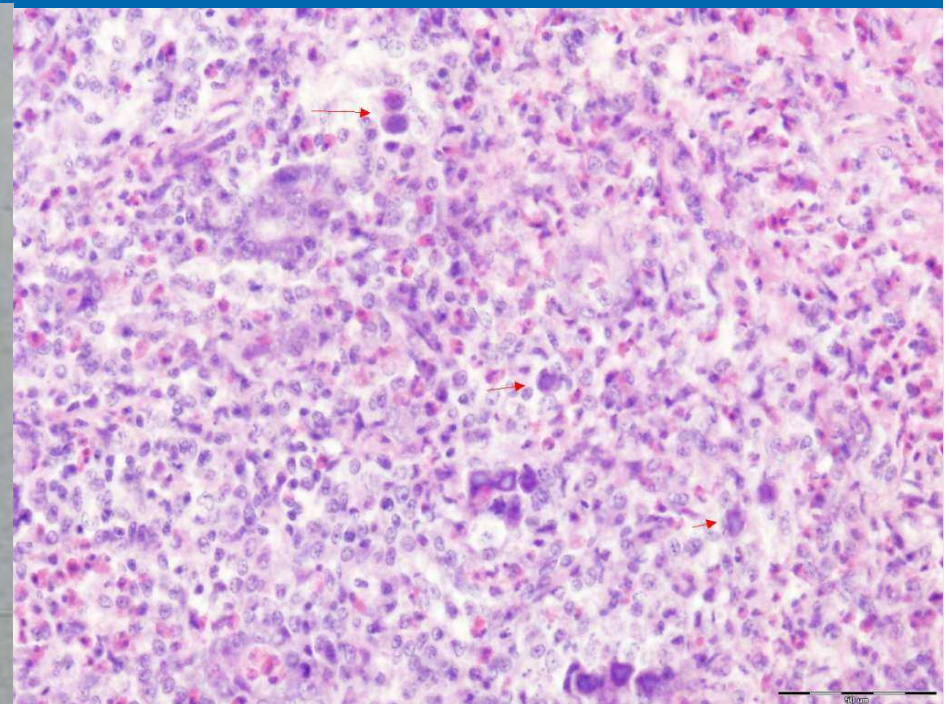
Adenoviruses

- Inclusion hepatitis occurs sporadically in broiler chicks –
– a significant decline compared to previous years



Adenoviruses

- AGE – erosions of proventriculus occur sporadically – a significant decline compared to 2012 and 2013



Adenoviruses

- Haemorrhagic enteritis of turkeys
- Widespread occurrence of subclinical disease connected with immunosuppression
- 1 case of clinical disease detected in fattening turkeys in 2014



Adenoviruses

EDS 76

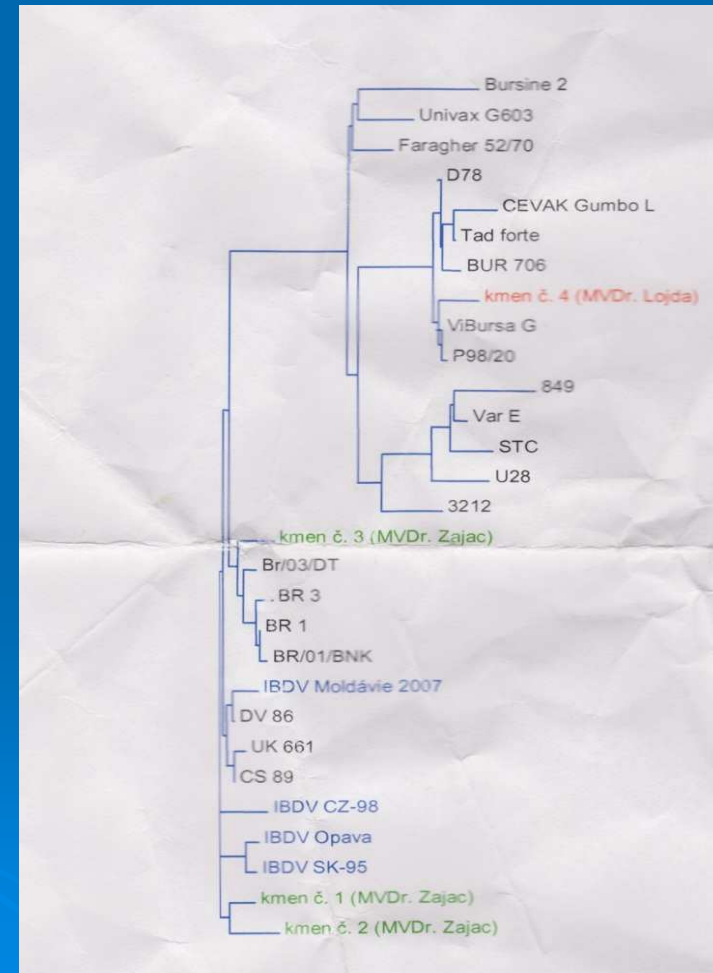
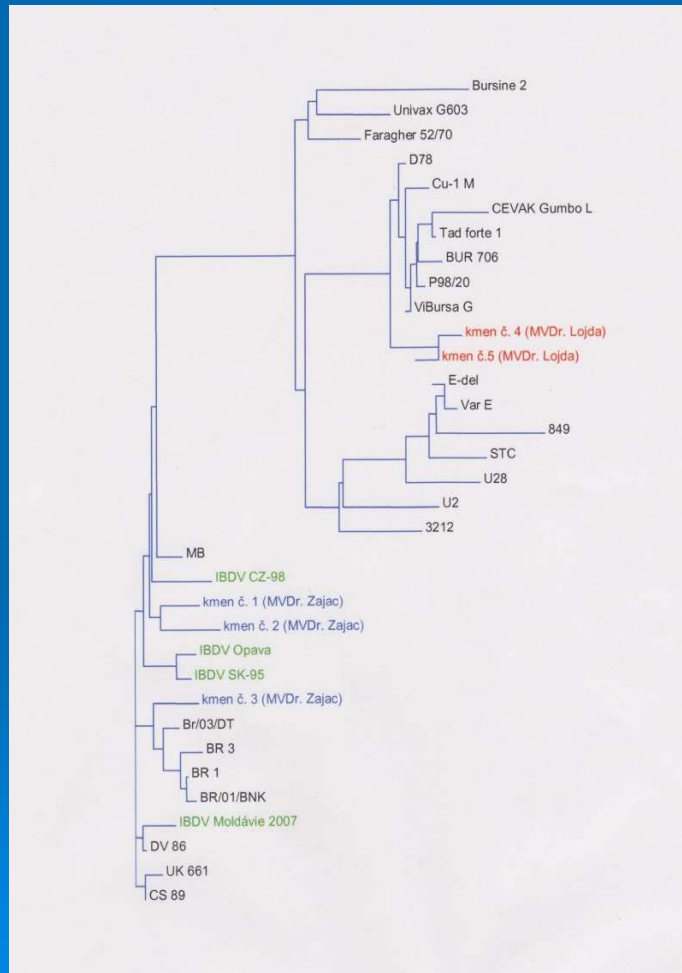
- No cases observed in the past 10 years
- Currently about a half of commercial laying hen flocks are vaccinated

Infectious bursal disease

- No clinical cases were observed last year
- Mostly subclinical course, diagnosed serologically (ELISA) and histologically
- The situation in the Czech Republic has been stabilized
- Vaccination of problem broiler flocks takes place usually between 16 -20 days of age
- Disinsectisation at the end of each batch is necessary (because of mealworm beetles)

Infectious bursal disease

PCR screening tests for strain identification
performed at VFU Brno:



REO viruses


- The outcome of serological tests must be assessed in relation to the morphology changes and clinical signs in the flock.
- Infectious stunting (in broilers) is a constant problem in flocks with poor hygiene
- Viral arthritis in broiler flocks is on the decline
- Occurrence of ruptured tendons and gastrocnemius muscle in broiler breeders



Avian pneumovirus SHS-TRT

- Due to mostly subclinical course escapes attention
- About 15% of asymptomatic chicken flocks are serologically positive
- Unvaccinated turkeys remain to be the main problem to solve – a subsequent incidence of bacterial airsacculitis

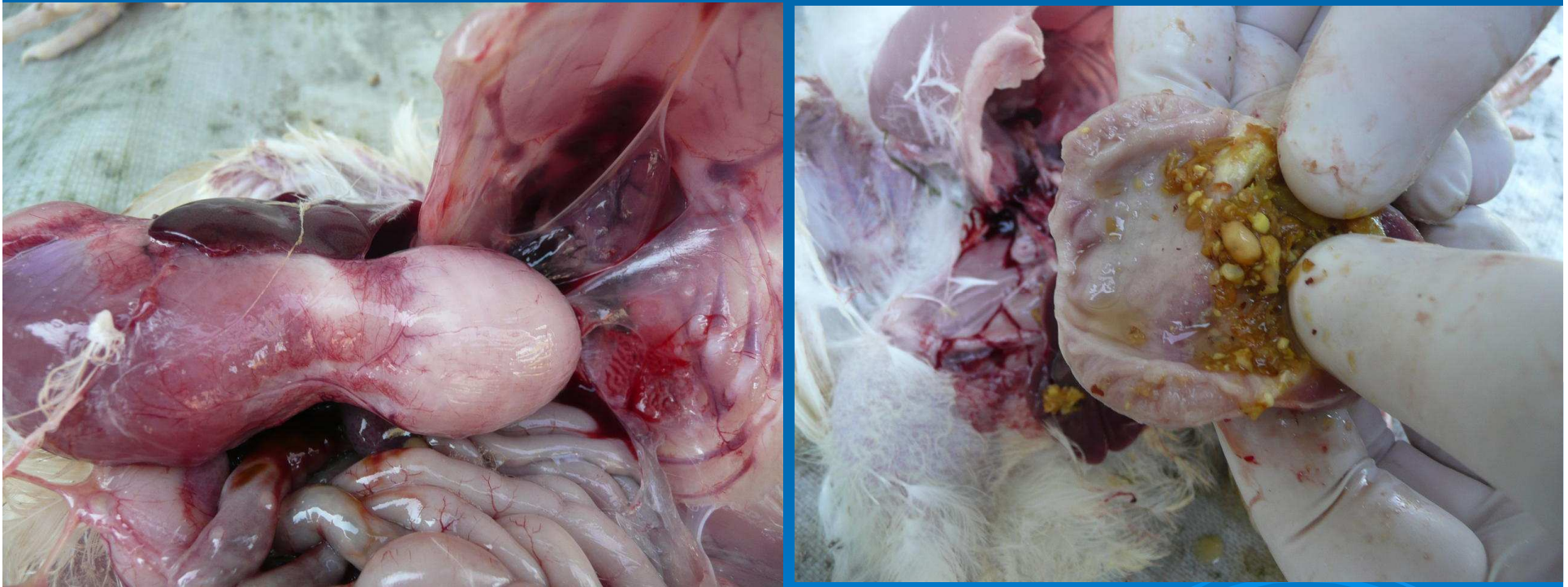
Marek's disease

- In large-scale layer farms it has not been detected in the past year
 - Occurs only in non-vaccinated hobby layer flocks
 - Immunosuppression in broilers related to the vaccination protocol used
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Acute MD in broiler chicks

- Only 1 outbreak in broilers in 2012
- Broilers at 35 days of age
- Fundamental violation of biosecurity rules
- Clinical signs included poor flock uniformity, occasionally paralysis of the legs
- P.A. – in all cases proventriculus tumours were present
- Marek's disease was histologically confirmed
- Losses due to mortality and culling exceeded 20%

Acute Marek's disease in broiler chicks



Avian leucosis

- In large-scale poultry holdings has not been observed for several years
- Occurred only in older birds of hobby flocks



Mycoplasmosis

- Everlasting problem in commercial layers (*M.synoviae* is detected most often)
- Due to its mainly subclinical course the disease often remains unnoticed
- Has not been diagnosed in broiler chicks yet
- Sporadic clinical findings of MG and MS in backyard fattening turkeys
- MM has not been detected in the past years

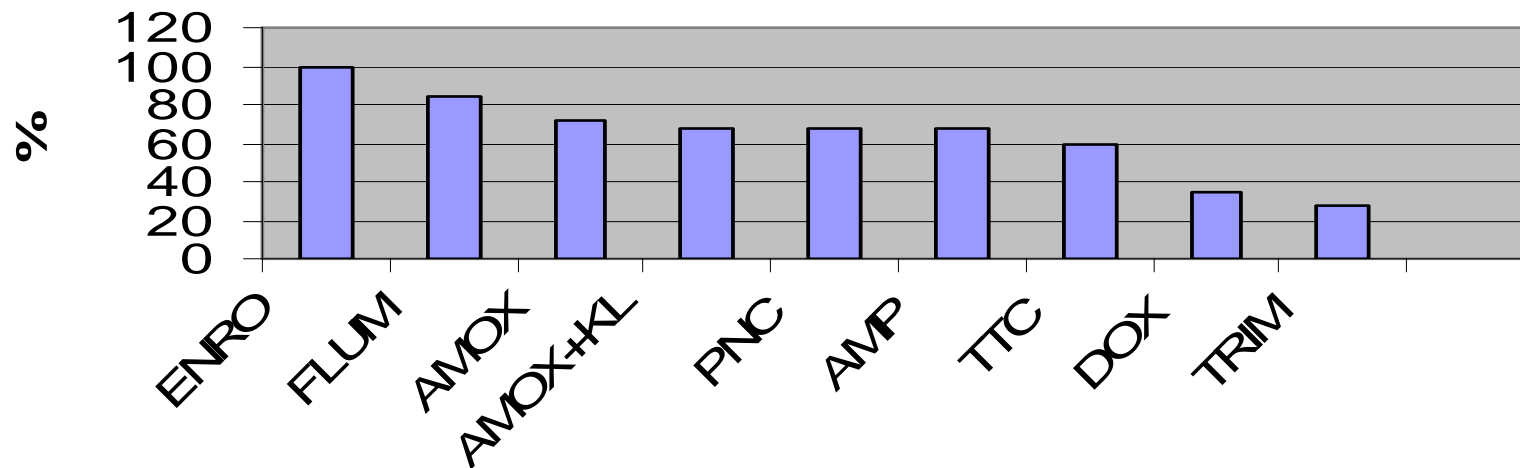


Fowl cholera

1 locality in laying hens – acute course, serositis

In recent years the disease has not been detected in turkeys

Sensitivity of *P.multocida* to ATB

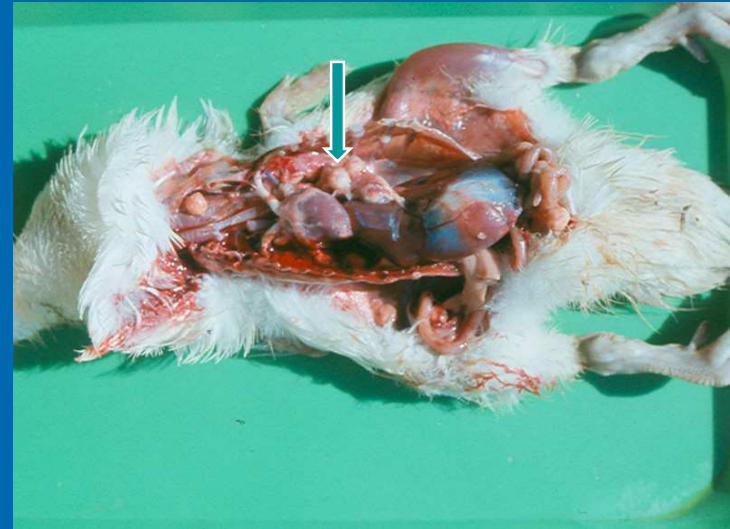
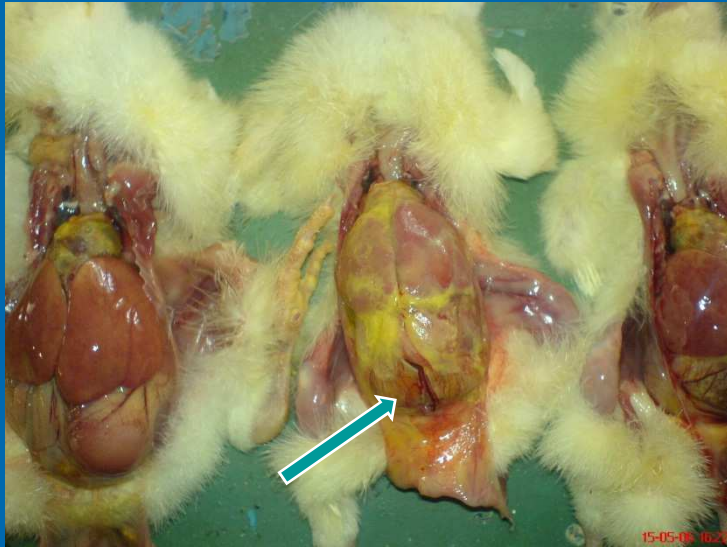


E. coli infections in poultry (APEC)

- Early post-hatching infections
- Significantly contributes to airsacculitis in broilers and pneumonia in laying hens
- A slightly declining trend has been observed in the context of improved animal hygiene on farms

APEC infections

(Avian Pathogenic *E. Coli*)



APEC infections

(Avian Pathogenic E. Coli)

Situation in broiler fattening

➤ **Yolk sac inflammation**

- Still a relatively frequent finding
- Solved by culling and ATB therapy according to historical sensitivity

➤ **Colisepticemia in chicks**

- Prevalence declined in the past 5 years
- The effect of IB vaccination, and adjustment of ventilation and stocking density

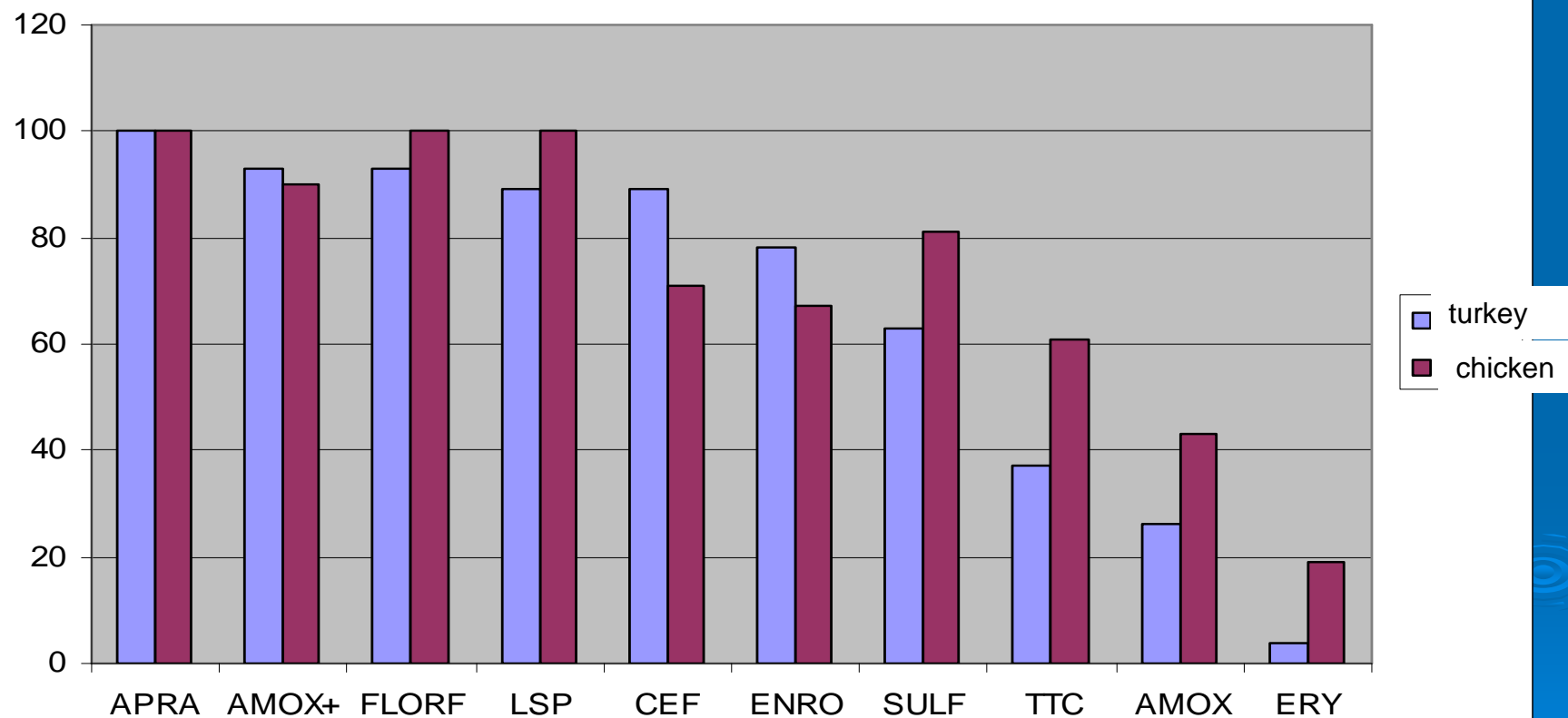
➤ **Cellulitis**

- A slight increase in the incidence (hygiene failures)

APEC infections

(Avian Pathogenic *E. Coli*)

Sensitivity of *E. coli* septicaemia isolates from chicks and turkeys in 2011-12

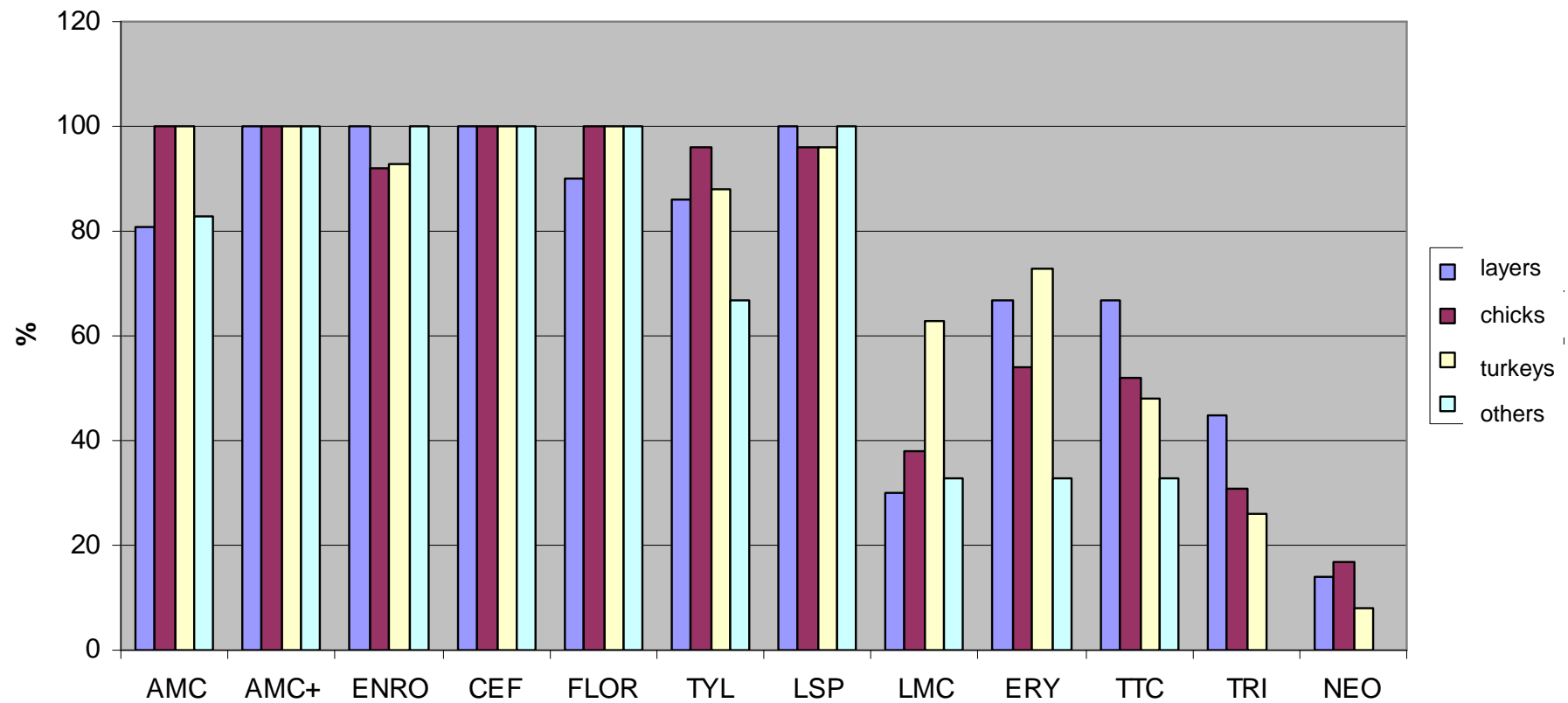


Clostridium infections

- Necrotic enteritis in broilers is diagnosed sporadically
- More frequent findings in chicks from 7 days - flatulence in the small intestine (dysmicrobinaemia)
- *Cl. botulinum* – Sporadic findings in wild ducks in exposed locations; in pheasants the occurrence is limited due to vaccination

Clostridium infections

Sensitivity of *Cl. perfringens* isolates from poultry in 2011-2014



ORT

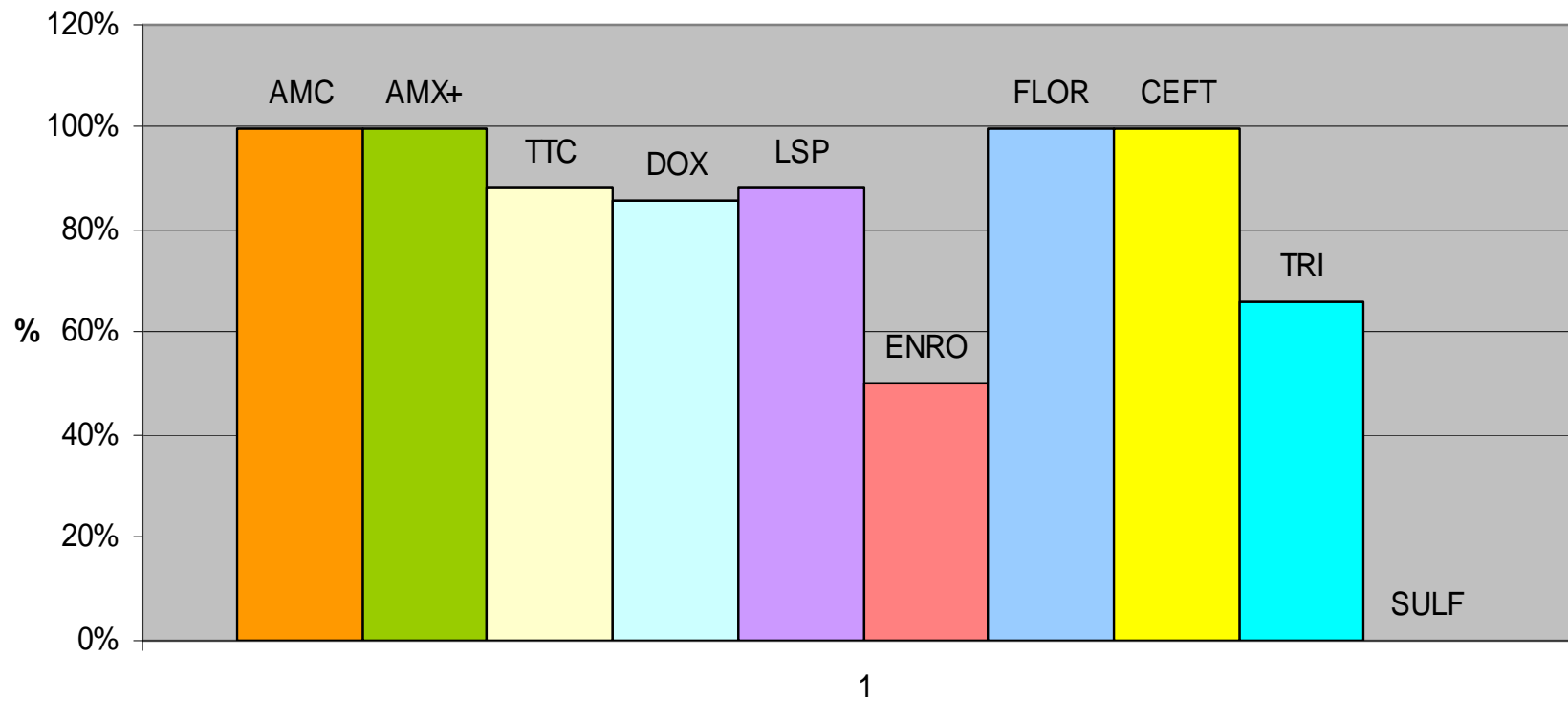
- Most often diagnosed in turkeys and hens in lay
- In chickens from 18 weeks of age, along with subacute pneumonia and salpingitis

ORT

- High serological positivity in fattening turkeys (70 - 76%)
- Isolation of the causative agent is scarce, compared to serology

ORT

ORT sensitivity to ATB



Thank you for your attention

