

## From reaction to pro-action

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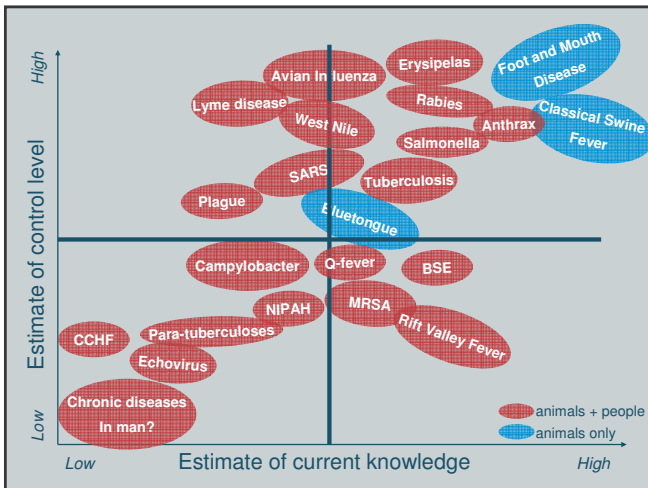


## React on what?

In this presentation focus on vaccine availability

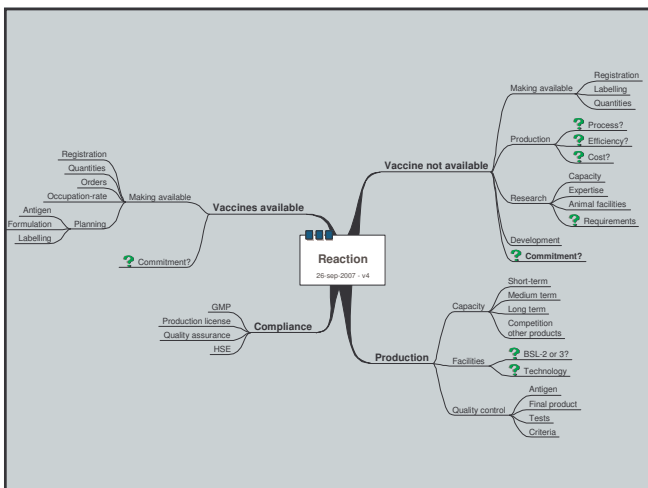
- Sudden and unexpected increase of a known disease (e.g. Newcastle disease)
  - (Re-)occurrence of a known disease in a formerly free geographic area (e.g. FMD)
  - Outbreak of a new variant (e.g. BTV8)
  - Outbreak of an unknown disease (e.g. SARS)
- } research

Zoonosis?

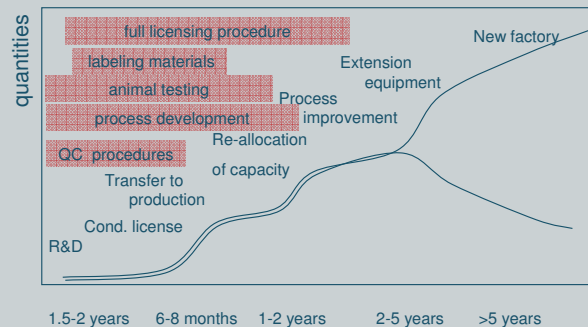


## Drivers for reaction

- Animal owners (industry, pets, hobby animals)
- Government:
  - Contingency plan in place
  - No contingency plan
    - Animals only: Ministry of Agriculture decision upon political pressure from animal owners
    - Zoonosis: Ministries of Public Health and Agriculture: decision upon pressure from complete society



## Emergency availability in time and quantities



## Biosecurity well embedded in legislation



## Risk based classification

- Risk analysis:
  - ❖ Transmission mechanisms micro-organism and risk in relation to vaccine production
  - ❖ Controls in place (due to various legislation)?
  - ❖ Risk management procedures
- Vaccine production in BSL-3 facilities considerably more expensive than BSL-2
- Rational classification vaccine production BSL-2 to BSL-3

## Future of bio-containment laboratories

### Research laboratories

- Academic and industrial required
- Fundamental research is necessary:
  - ❖ micro-organisms: biology and epidemiology
  - ❖ technology platforms for antigen production and delivery

### Production facilities

- Vaccine production capacity in relation to potential events?

## Summary

- **New diseases, mostly zoonotic, will continue to occur**
- **Are we prepared or can we do better??**
  - ❖ Room for improvement in aligning academic and industrial research
  - ❖ More commitment towards vaccination policies facilitates investments in the industry
- **Rational classification into BSL-2 to BSL-3**
- **Society spends considerably more on reaction than on pro-action:**
  - ❖ The problem is recognized when it arises
  - ❖ Investment in emergency preparedness is more cost-effective in "peacetime" than in the reaction during an outbreak
- **Animal health and emergency preparedness needs to have a much higher priority on the political agenda**