



Folkhälsomyndigheten
PUBLIC HEALTH AGENCY OF SWEDEN



Jordbruks
verket

Swedish Board
of Agriculture

One Health collaboration in Sweden

- to predict, prevent and control zoonosis and antibiotic resistance

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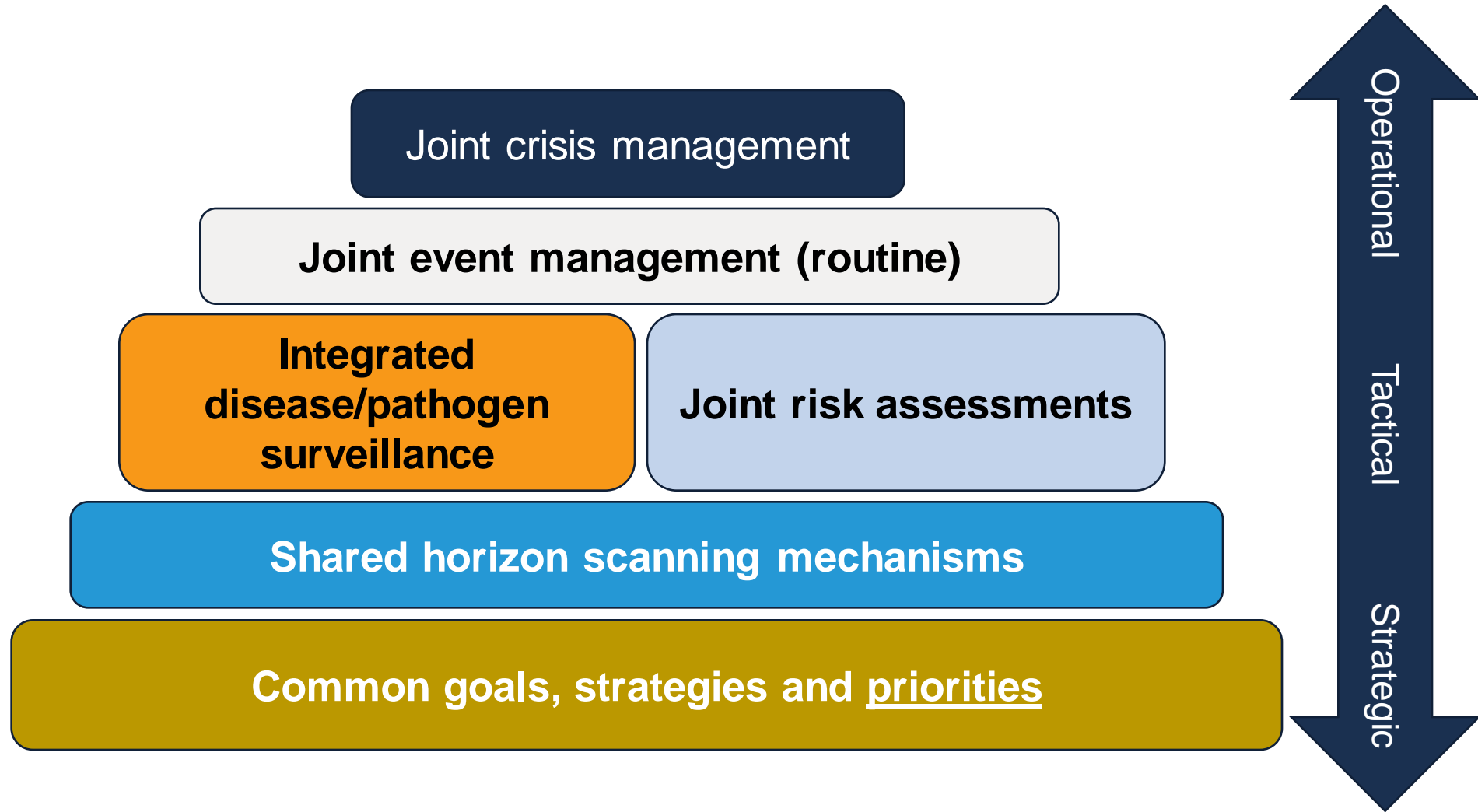


One Health collaboration in Sweden

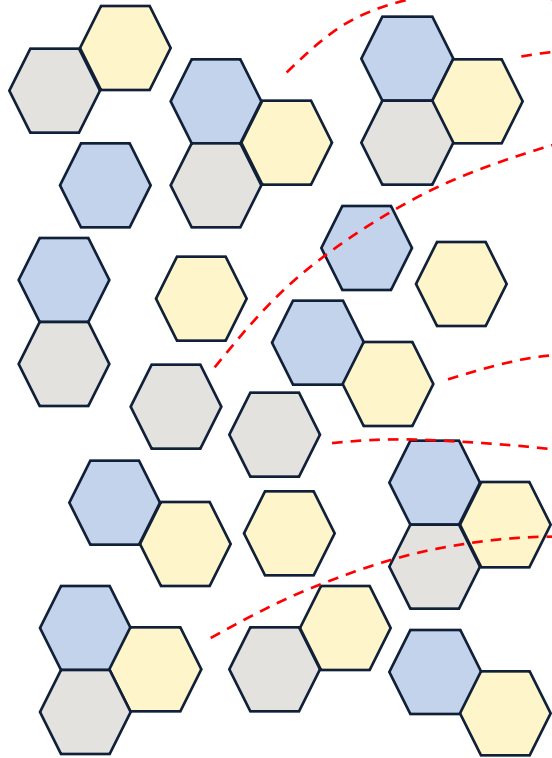
- to predict, prevent and control **zoonosis**






Collaborative capacities needed within the OH system



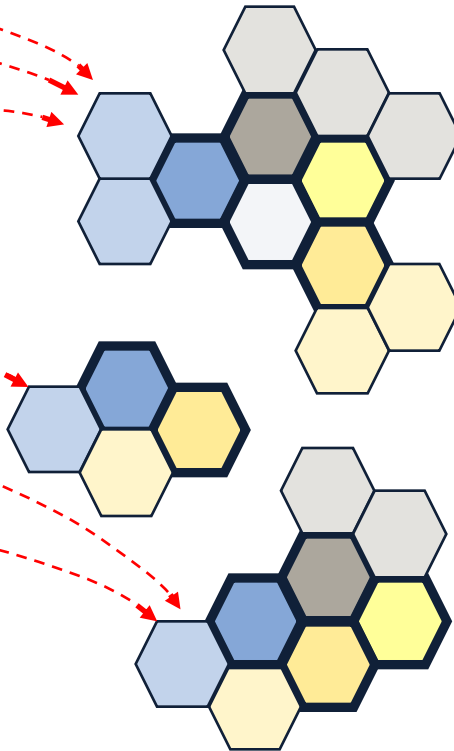
Local/regional zoonotic events



Local/regional authorities

-  = Infection control Unit
-  = County Veterinary Officer
-  = Environmental and Health Protection Administration

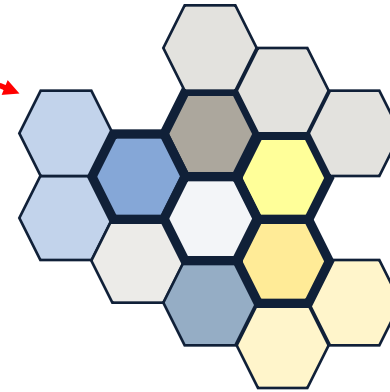
National and unusual zoonotic events





National authorities

-  = National Veterinary Institute
-  = Public Health Agency of Sweden
-  = Swedish Board of Agriculture
-  = Swedish Food Agency
-  = Swedish Work Environment Authority

Particularly serious events



National authorities with supporting and/or role strategic roles

-  = Swedish Civil Contingencies Agency
-  = Government Offices' crisis management organization

Collaboration groups on zoonosis between authorities in Sweden

Groups working at the 3 levels:

Strategic, Outbreaks, Regular issues

Zoonosis Council

"peace-time" forum with a strategic focus

National veterinary institute (SVA)
Public health agency of Sweden
Swedish food agency
Swedish board of agriculture
Work environment authority
Association of County medical officers
Association of County veterinary officers
Association of local authorities and regions
Swedish armed forces

Zoonossamverkansgrupp

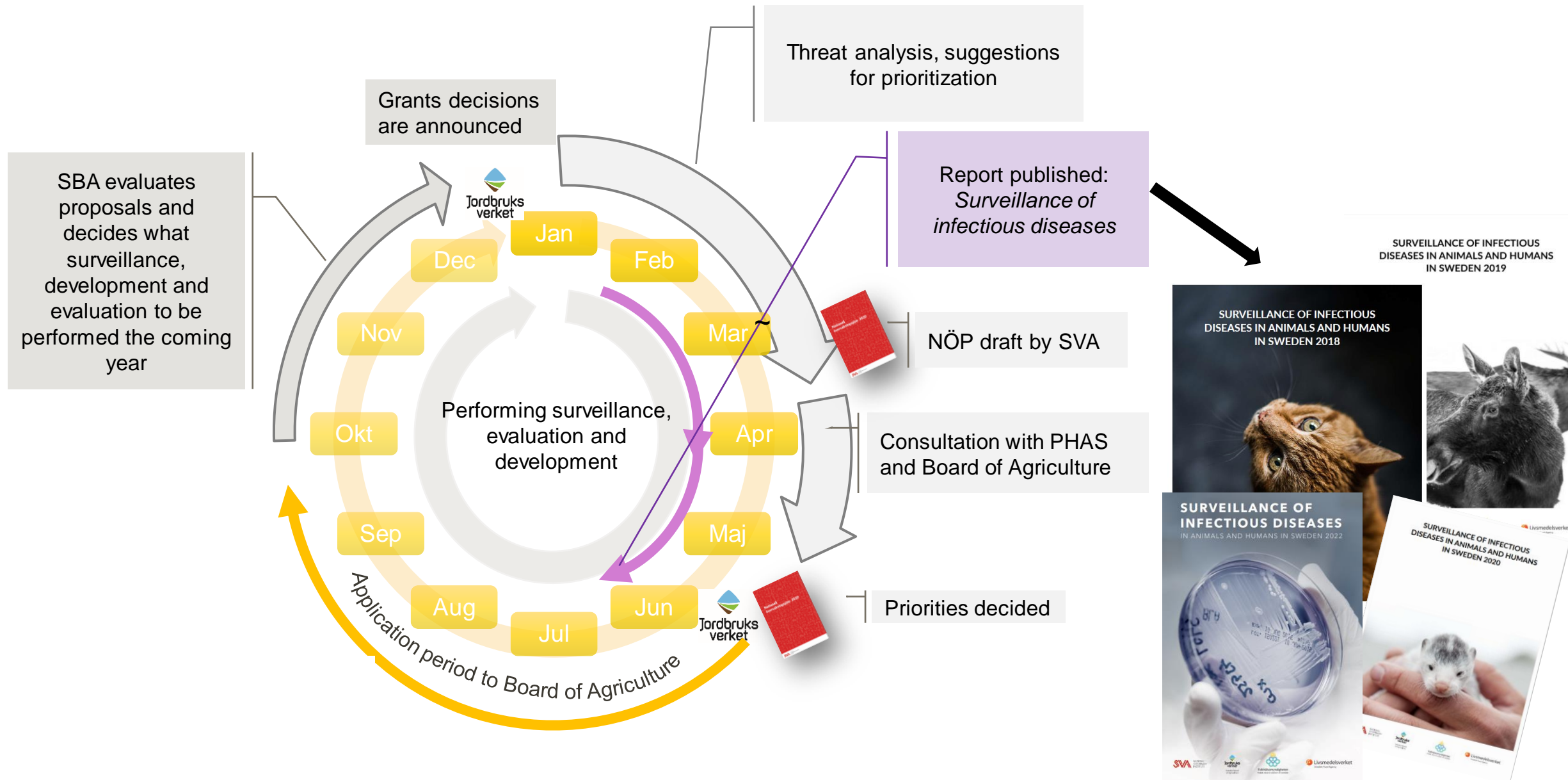
crisis management function

National veterinary institute (SVA)
Public health agency of Sweden
Swedish food agency
Swedish board of agriculture
Work environment authority
Other authorities as deemed necessary

SUBU – for continuous exchange of information
(primarily) regarding zoonotic outbreaks/incidents

National veterinary institute (SVA)
Public health agency of Sweden
Swedish food agency
Swedish board of agriculture

National surveillance plan (NÖP) & The yearly surveillance report



Activities within collaboration groups on zoonosis

- **Strategic discussions and identification of needs**
 - Forming expert groups/working groups
 - Collaborative projects
 - Campylobacter survey
 - Information for pregnant women
 - Common risk assessments
 - The most recent on highly pathogenic avian influenza
 - **Multisectoral training workshops on fictive outbreaks**
 - Joint handbook for outbreak investigations
-

Challenges in OH collaboration on zoonosis

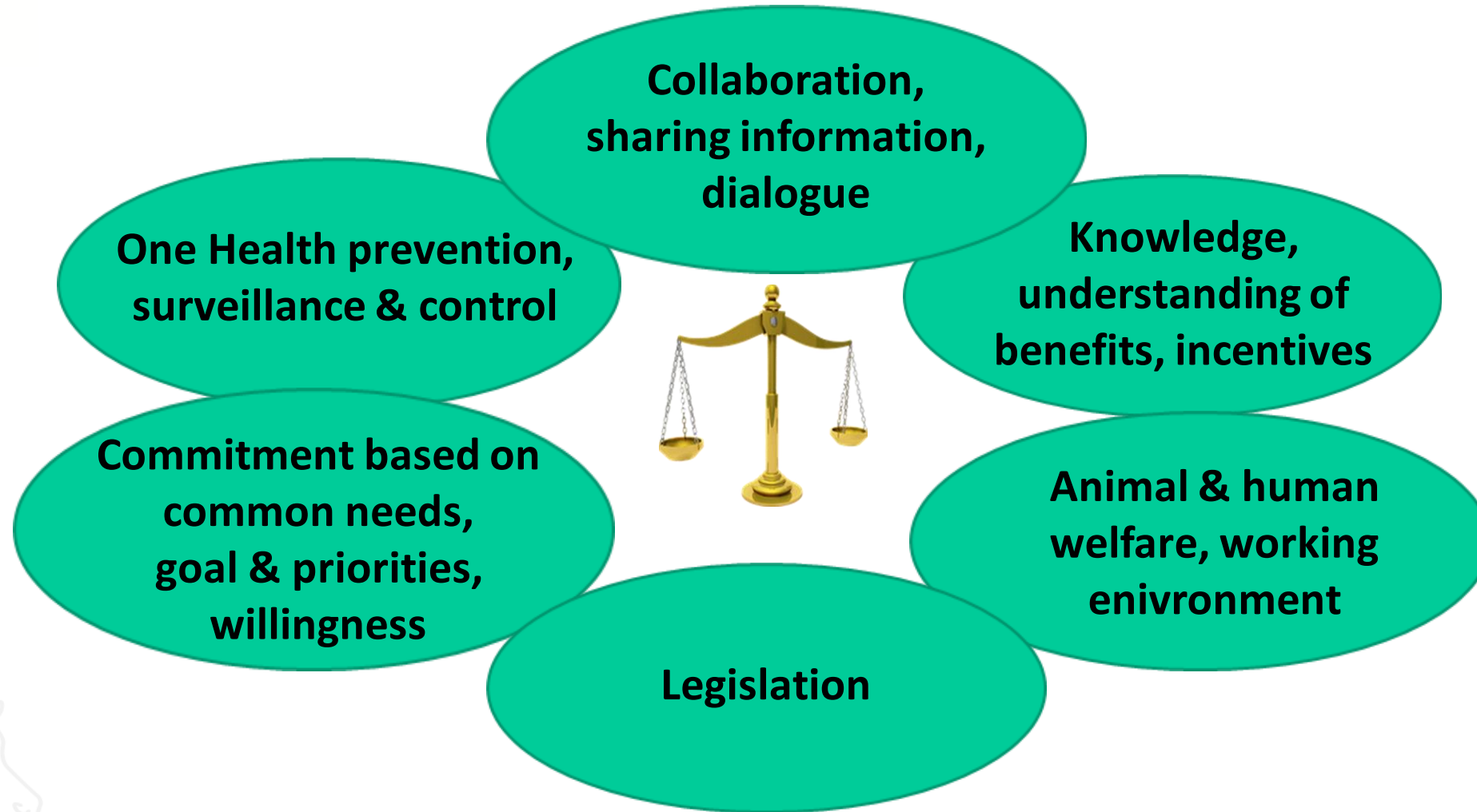
- Different actors have different missions/interests/legislation/tools
 - zoonotic diseases often not epizootic diseases, other legislation
e.g. Campylobacter, Yersinia vs Salmonella
- Interests of the public and private sector may not match
 - Potential financial losses
e.g. detection of Listeria in own checks, information sharing from voluntary control program for Campylobacter
- Trade and exchange at European level increase but surveillance & control may differ
 - Difficulties in tracing the source and recurrent outbreaks
e.g. Salmonella in poultry and eggs

Challenges in OH collaboration



- Legal constraints for sharing data
 - Sharing procedures often slow & very little metadata can be shared
- Information may have dead ends
 - Outcomes of investigations are not always reported back to all involved
Both a national and international issue – what happened after?
- No specific funding allocated, constraints in resources
- Political engagement and coordination is needed for a long term strategy

Success factors for Swedish One Health Collaboration on Zoonosis



One Health collaboration in Sweden

- to predict, prevent and control **antibiotic resistance**

Overarching goal:

Preserve the possibility of effective treatment of bacterial infections in humans & animals

[amr_strategi_eng_web_ny2.pdf\(government.se\)](#)



Prevention is Better than Cure

Reduce the need

Avoid spread

Remove unnecessary use

Optimize use when treatment is needed

Monitor resistance & use



**Healthy humans
and animals do not
need antibiotics**

**Collaboration
is crucial!**



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The Inter-sectoral Coordinating Mechanism (ICM) to combat antibiotic resistance

- Coordinated by
 - Public Health Agency of Sweden
 - Swedish Board of Agriculture



Preserve the possibility of effective treatment of bacterial infections in humans & animals



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Inter-sectoral Coordinating Mechanism (ICM)



Jordbruks
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Swedish Board
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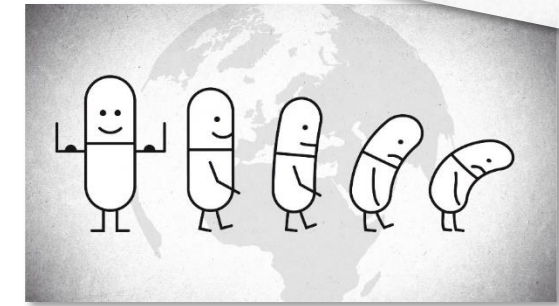
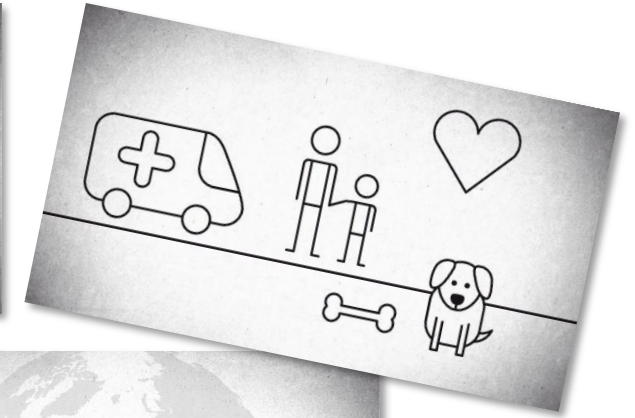
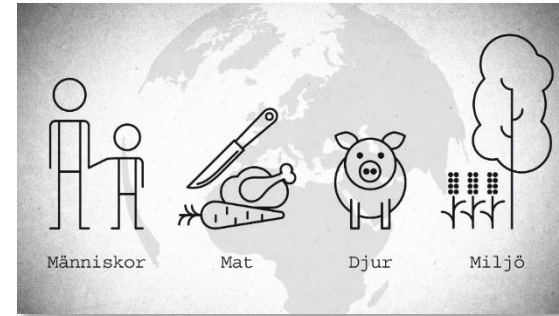
25
governmental
agencies and
organizations
(9 in core group)

Collaboration
across
human health,
animal health,
environmental
health, and food
safety sectors

Coordinates
national efforts,
monitor
progress,
adjusts
strategies

Activities within ICM

- Cross-sectoral action plan
 - Developed jointly by all actors in the ICM
 - The action plan has a clear One Health focus
 - Current version applies for the period 2021-2024
Recently prolonged to 2025
- Coordination of joint One Health country visit by ECDC/SANTE-F for evaluation of the Swedish work
- Coordination on international issues
 - TrACSS (tracking AMR Country Self-assessment Survey)
- Antibiotic forum
- Joint communication <https://saveantibiotics.se/>



Communication of surveillance data

Common yearly report

- Holds statistics on antibiotic sales and antibiotic resistance in bacteria from both humans and animals
- The report is a co-production between the Public Health Agency of Sweden (PHAS) and the National Veterinary Institute (SVA)
- This report is mainly aimed at professionals



Swedish success factors



- Continuous work, with political and legislative support
- Consensus and cooperation locally, regionally and nationally, within and between sectors – the ICM is truly inter-sectoral
- Disease prevention – healthy people & animals do not need antibiotics
- Transparent & reliable data for action and monitoring, incl. benchmarking of data on antibiotic consumption and feedback
- Active involvement in international efforts

Challenges

- Changes in animal production
- Collaboration is time-consuming
- Administrative load
- Maintaining structure and commitment
- Constraints in resources
- A changing world...



**It is challenging but
possible to make a
significant impact
against AMR and
zoonosis**



***Thank you for
your attention!***



Thank you

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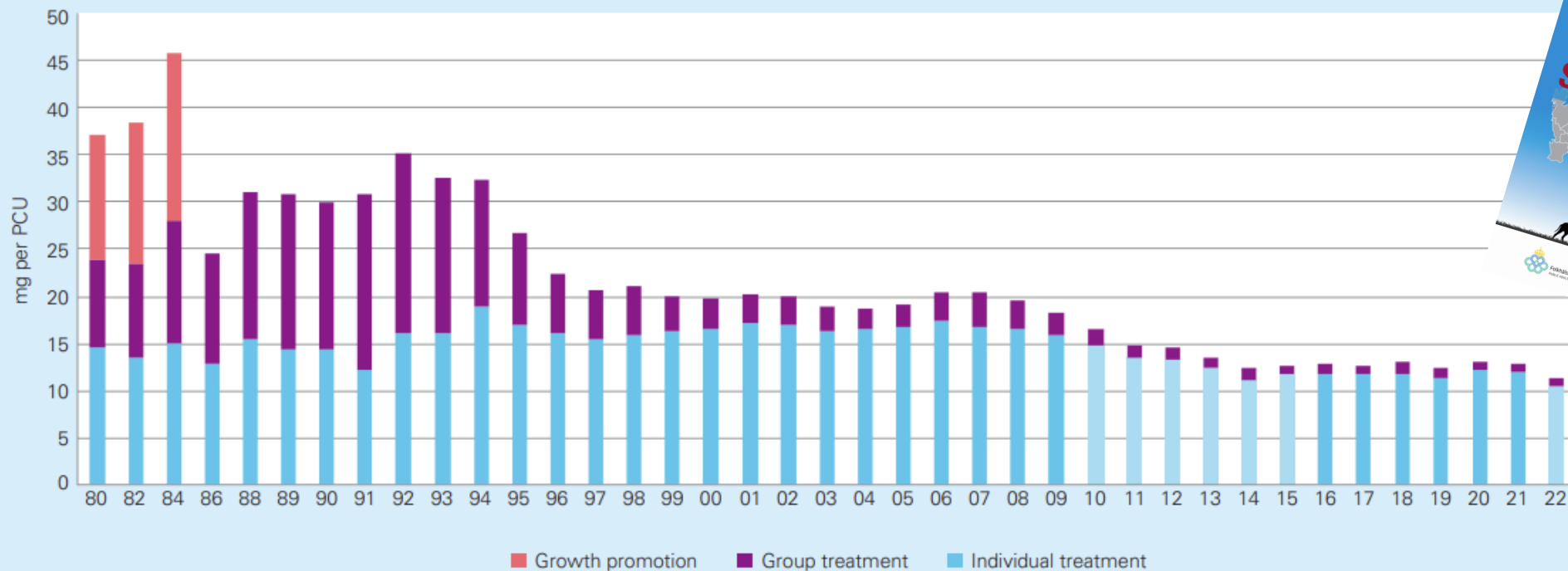
Antibiotic consumption in Sweden

- Animal use vs human use



Sales of prescriptions for animal use 1980 - 2022

Figure 2.1. Yearly sales of veterinary medicines with antibiotics expressed as mg per population correction unit (PCU)^a. Uncertain figures are indicated with a lighter shade.



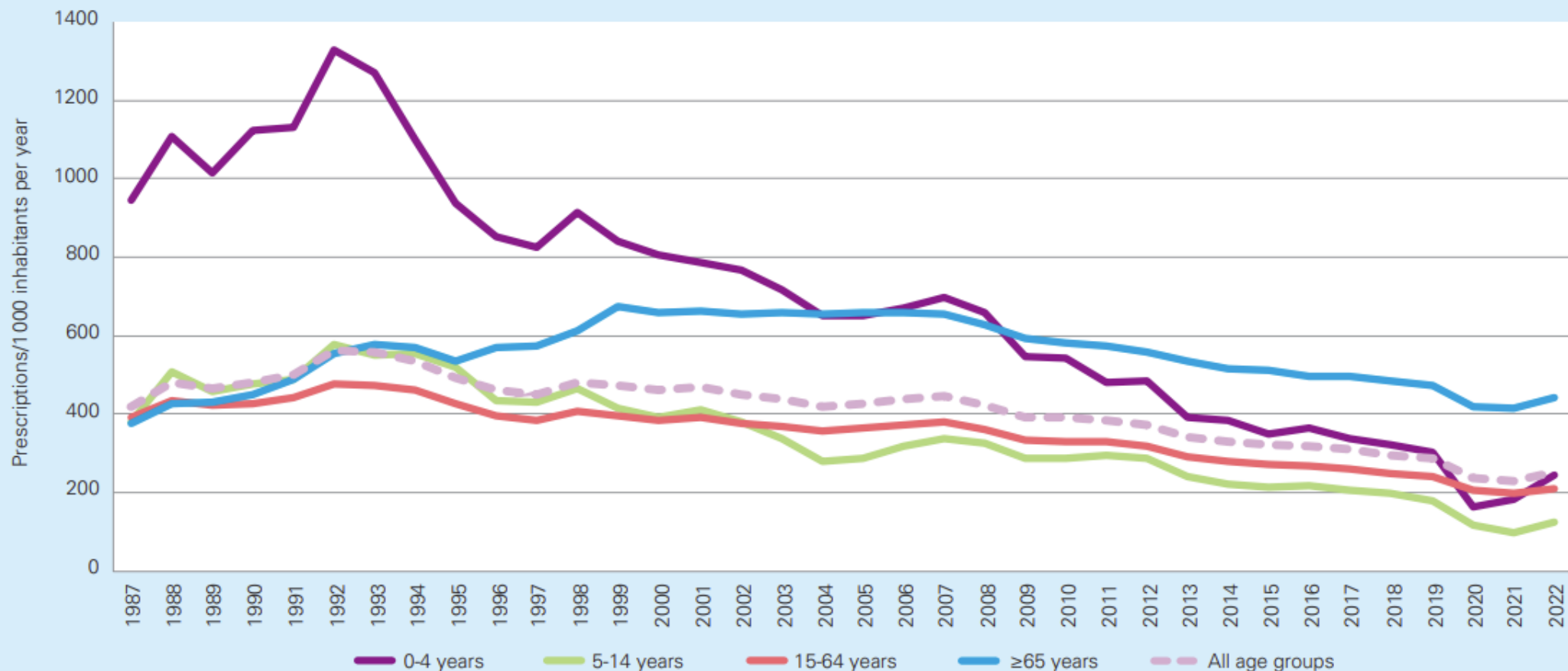
^aData for 2022 may be subject to change. Data from 2010-2015 are uncertain because of a lack of completeness mainly affecting injectable products. Data for 2022 are also uncertain as a full explanation is lacking. This is indicated by a paler colour for antibiotics for individual treatment. In the present figure, all products (including tablets) are included while in data presented in the European surveillance of veterinary antimicrobial consumption tablets are excluded when calculating mg/PCU.





Sales of prescriptions for human use 1987- 2022

Figure 1.3. Sales of antibiotics (J01 excl. methenamine) in outpatient care by age group in 1987-2022.



Source: The Public Health Agency of Sweden



National target outpatient care

250 prescriptions/1000 inh

Figure 1.5. Sales of antibiotics (J01 excl. methenamine) in outpatient care in 2019-2022, by region^a.



^aThe red line indicates the national target of 250 prescriptions or less per 1 000 inhabitants per year.

Source: The Public Health Agency of Sweden