

# Understanding, managing, and improving animal health – The Swiss Animal Health Info System

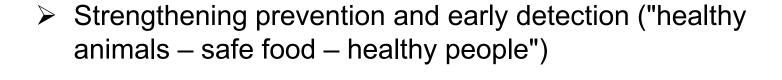
# **Christina Nathues**

AgroVet Strickhof Conference October 28, 2025



# National strategies to strengthen animal health







- > Targeted or reduced use of veterinary medicines
- Confidence in the production and quality of Swiss food



Strengthening herd management (herd diagnostics) as an essential element for achieving the objectives





# Importance of herd management in the context of national strategies



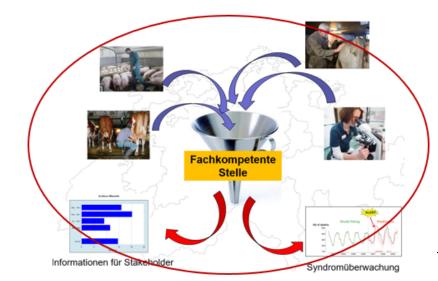




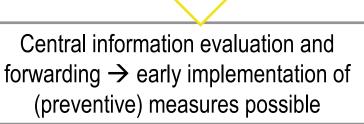




Nationale Ebene



Veterinarian + farmer = herd management







# **Example: pigs: existing programs**

#### PathoPig (since 2014)

- Financial support for investigating herd problems using autopsy diagnostics by the FSVO
- Livestock veterinarian → Livestock visit →
  Selection and submission of the animal(s)
  for autopsy to a participating laboratory

# ZoE-BTA: "Targeted sampling by the herd veterinarian" (since 2023)

- Cooperation with SVSM and VETSUISSE
- Supplement to *PathoPig* (analogous framework conditions for farms)
- Specialized herd veterinarians → "Farm autopsy"
   → Targeted sampling and laboratory submission

→ Central recording of all data (Excel forms) → "Health monitoring" and early detection of trends



Digitization: Viewpoint of the FSVO / Swiss Veterinary

**Service** 

# **Die Schwerpunkte**

Infektionskrankheiten und Zoonosen bleiben ein Schwerpunkt. Sie werden dabei stärker im Sinne von One Health betrachtet: Die Gesundheit von Mensch und Tier soll gemeinsam gefördert und erhalten werden. Nur durch eine ganzheitliche Betrachtungsweise von komplexen Gesundheitsproblemen können Zusammenhänge aufgedeckt und sektorübergreifende Massnahmen ergriffen werden, um die Gesundheit von Mensch und Tier sowie eine intakte Umwelt längerfristig zu bewahren.



Die Digitalisierung schreitet auch in Bereichen der Tiergesundheit voran. In Zusammenarbeit mit den verschiedenen Akteuren sollen die Möglichkeiten zur Stärkung der Tiergesundheit ausgeschöpft werden. Dabei soll unter anderem die Datenerfassung und -auswertung optimal genutzt werden, um allfällig vorhandene Tiergesundheitsprobleme frühzeitig zu erkennen. So können nötigenfalls rasch Massnahmen zur Verbesserung der Tiergesundheit ergriffen werden.

Die strategische Zusammenarheit vieler Beteiligter ist notwendig, um die Tiergesundheit nachhaltig zu sichern. Die Zusammenarbeit des Veterinärdienstes Schweiz mit anderen Akteuren im Bereich Tiergesundheit soll gezielt weiter gestärkt werden.





# Digitalization: FOAG perspective

FOAG leadership for the "Charter on the Digitization of the Swiss"

Agricultural and Food Industry" (2018)

- Strengthening benefits
- Reducing administrative burden
- Transparency in data use/data protection
- Open exchange via interfaces
- Added value through data networking





# Importance of herd management in the context of national strategies









Veterinarian + farmer = herd management

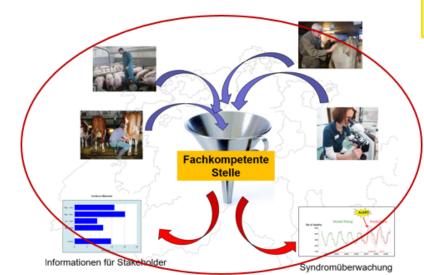


OUALITÄTS SCHWEIZER LAND- UND

STRATEGIE ERNÄHRUNGSWIRTSCHAF

OUALITÉ ALIMENTAIRE SUISSE

Nationale Ebene

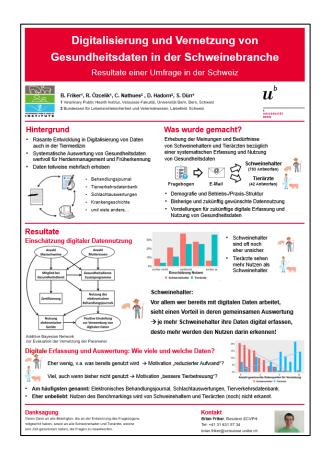


**Prerequisite:** Systematic digital recording and use of data

Central information evaluation and forwarding → early implementation of (preventive) measures possible



# "Pig Health Network Platform"



#### Founded in 2017 with the following members:

- BLV (management)
- SUISAG-SGD
- Suisseporcs
- Qualiporc

- Swiss Association for Swine Medicine (SVSM)
- Vetsuisse Faculty, Swine Clinics BE+ZH
- Veterinary Public Health Institute

#### **Objective of the platform:**

- Harness the potential of digitalization to improve animal health → Eliminate duplication in data collection; optimize existing systems
- Leveraging synergies and creating added value



Idea for the "Pig Health Info System" (PHIS) project developed



# Project idea Pig Health Info System (PHIS)









#### Digitale Erfassung

- Strukturierte
  Dokumentation
- Transparente Information
- Nutzbare Daten

#### Analyse

- Zeitnahe Verarbeitung
- Interpretation
- Identifikation von relevanten Veränderungen

# Visualisierung und Kommunikation

- Information und Sensibilisierung
- Früherkennung und Monitoring
- Dashboard

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#### **PHIS - Benefits for stakeholders**

#### For veterinarians:

- Structured recording of findings from pig herds
- Availability of health data
- Improved documentation and communication
- Data collection also for PathoPig & ZoE-BTA ZoE-BTA
- Information/awareness in the event of changes in national animal health

#### For livestock/livestock owners

- Structured, transparent documentation of examinations
- Improved advice

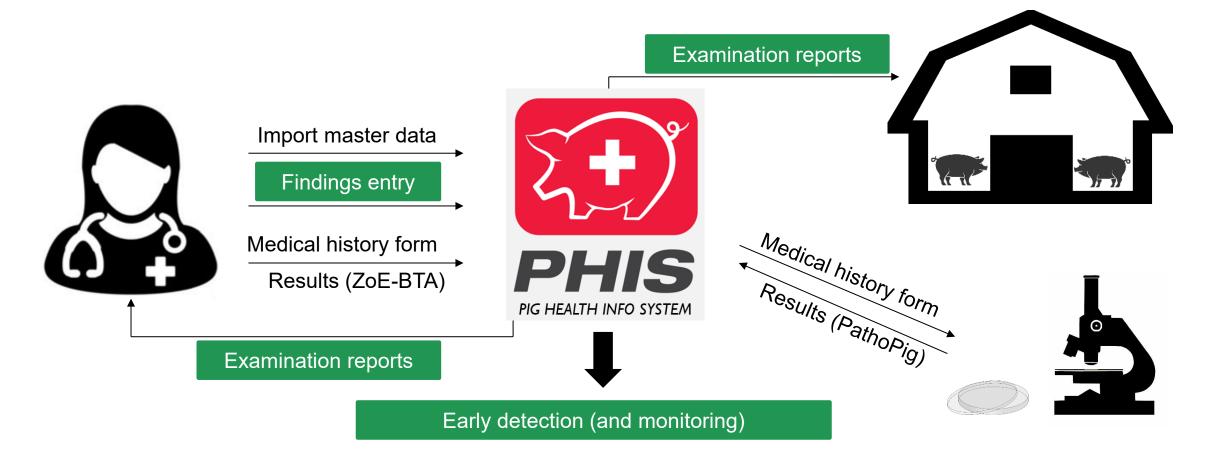
#### For Swiss pig production:

- Monitoring and early detection
- Improvement of animal health and welfare



### data flow

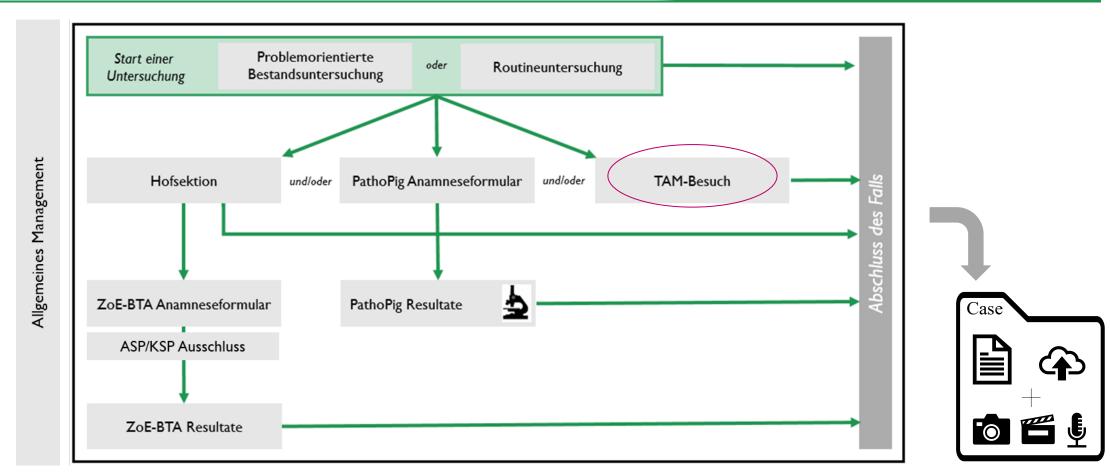






### **Available forms**

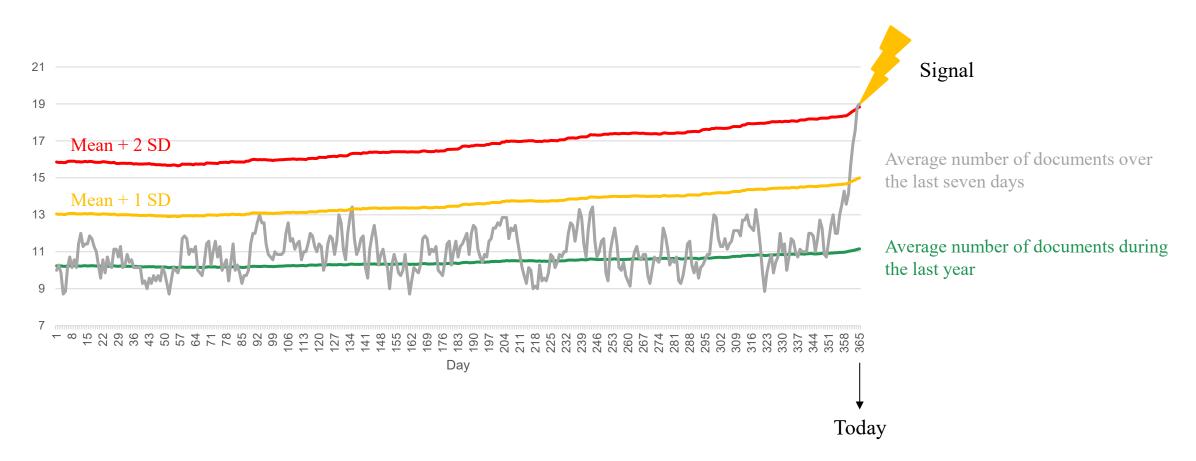






# **Automated data analysis**







## Implementation and operation



Operation of the AHIS: AHIS specialist unit,

Livestock Health Switzerland (NTGS)

**Technical implementation:** Department of Technology and Information Technology,

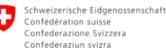
Bern University of Applied Sciences

Financing of the AHIS: Federal Office for Food Safety

and Veterinary Services



Berner Fachhochschule
Haute école spécialisée bernoise
Bern University of Applied Sciences



Bundesamt für Lebensmittelsicherheit und Veterinärwesen BLV Office fédéral de la sécurité alimentaire et des affaires vétérinaires OSAV Ufficio federale della sicurezza alimentare e di veterinaria USAV

#### **Program participation:**

- All veterinarians in Switzerland and Liechtenstein
- Use of the app is free of charge
- Use is generally voluntary, but mandatory for participation in the PathoPig and ZoE-BTA programs



# **Using the PHIS app**



Tab. 1: Accounts im PHIS

	31. August 2025	30. September 2025
Anzahl an Praxis-Accounts	68	68
Anzahl an aktiven Vet-Accounts	164	164
Anzahl an Praxis-Accounts mit Beständen	51	52
Anzahl an Praxis-Accounts mit Berichten (definitiv gespeichert)	45	46
Anzahl an Beständen mit Berichten (definitiv gespeichert)	606	618



# **Using the PHIS app**



Tab. 2: Anzahl an definitiv gespeicherten Formularen im PHIS

	30. Juni 2025	31. Juli 2025	31. August 2025	30. September 2025
Allgemeines Management	1105	1127	1142	1178
Problemorientierte Bestandsuntersuchung	461	476	492	512
Routineuntersuchung	1046	1065	1076	1099
TAM-Besuch	920	953	982	1020
Hofsektion	190	200	209	220
PathoPig Anamneseformular	253	256	262	271
ZoE-BTA Anamneseblatt	138	148	156	167
ZoE-BTA - ASP/KSP Ausschlussuntersuchung	121	130	138	147
ZoE-BTA Untersuchungsresultate	109	122	128	136
Weitere Angaben zum Fall	18	18	18	19
PathoPig Untersuchungsresultate	233	239	241	251
qualiporc Gesundheitsservice	465	477	487	504
Total	5059	5211	5331	5524



# **Data protection / Data use**



#### Excerpt from the General Terms and Conditions:

- Data collection only with the consent of the animal owners
- The animal owners receive the reports
- Publication/disclosure of data exclusively in aggregated/anonymized form
- The obligation to report suspected animal diseases remains unchanged

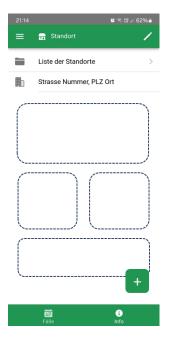


#### **Outlook PHIS**



- Health services app
- National animal health dashboard
- Dashboard at herd level





#### Past examinations

Last routine examination: January 10, 2025

Last TAM visit: January 10, 2025

#### **Biosecurity**

Distance to nearest pig farm [m]: 400

Animal categories with outdoor access: Non-lactating sows, boars Contact with animals/persons from outside the farm possible: No

Indirect contact with wild boars possible: Yes

Clear separation between outdoor and indoor areas: No

#### Latest findings with prevalence

December 27, 2024: suckling piglets, diarrhea 20% 07/06/2024: Lactating sows, hooves/lower limbs 10%

06/07/2024: Lactating sows, fever 5%



# **Animal Health Info System**



- Since January 1, 2024, based at Livestock Health Switzerland (NTGS)
- Includes PHIS and CHIS (Cattle Health Info System)





# **Cattle Health Info System**



- Project launch in 2021 at VETSUISSE in collaboration with BFH
- App currently in pilot phase
- Objectives and structure essentially analogous to PHIS
- Cattle-specific functions
  - Operating communities
  - Individual animal level (medical history of a cow)
  - Offline mode
- Multilingual



 Since April 1, 2025, managed by the AHIS specialist unit at Livestock Health Switzerland (NTGS)



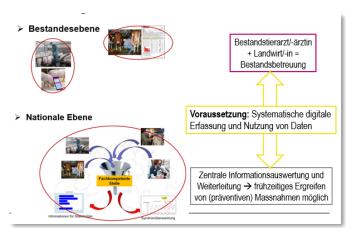
## **Summary**

#### **Objective: Promotion of herd health management**

- Supporting systematic documentation of examination findings
- Improving the availability of health data for livestock owners and veterinarians
- Simplifying the exchange of information
- Increased use of recorded health data

# Data is NOT held by the federal government, and it does not receive it (→private law)

- Data use (cross-inventory trends)
   as a 'side effect'
- Ultimately also for TH/TA/stakeholders
- Exception: animal diseases (reporting obligation in any case)





# **Challenges**

#### **Technical**

- Interfaces (especially animal movement database, practice software)
- Standardization ("diagnosis codes")
- User-friendly systems (app use in the barn)

#### **Political**

- 'Data = power' → Willingness and trust to cooperate must be present (not everyone 'doing their own thing')
- Data protection / data use
- Awareness of the importance of veterinarians in 'agricultural issues' (animal health)
- Veterinary profession: effort return 'data'
- Willingness to co-finance all participants and beneficiaries



### **Opportunities**

- Exploiting synergies → saving resources
- Elimination of duplication in data collection ('once only') → administrative simplification
- Improved availability of health data at herd and population level 

   strengthening animal health and early detection
- Investment in contacts and networks along the food chain →
   Promotion of mutual trust and understanding → Crisis prevention



# Thank you very much!

















vetsuisse-fakultät

Universität Bern | Universität Zürich

# Program participation and contact

Further information at www.animalhealthinfosystem.ch

Pig Health Info System
- Registration form



#### **KONTAKT PHIS:**

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