CONTINUING EDUCATION

CAS One Health

Foreword

Recent epidemic and zoonotic events have highlighted the critical need for intersectoral collaboration to tackle and prevent future health challenges.

Do you think that cooperation between the human, animal and plant health sectors should be improved? What if you were to become the driving force behind this change?

Contents

Context and added value of the programme

Why should you take this CAS?

The **One Health** approach proposes to extend the recognition of the ecosystem-animal-human interconnection into collaborative professional actions, aiming at sustainably maintaining health in the broadest sense.

Food and Agriculture Organization of the United Nations · UN environment programme · World Health Organization · World Organisation for Animal Health Founded as OIE

In October 2022, the Quadripartite (FAO, UNEP, WHO, WOAH) adopted a **Joint Plan of Action**, which calls on its member countries to take priority measures to implement the One Health approach. The Action Track 6.4 pleads for the creation of «*an interoperable One Health in-service training programme for environment, medical and veterinary sector professionals*».

Action Track 6: Integrating the Environment into One Health

The CAS One Health offers such training dedicated to professionals in the fields of environment, human and animal health, but also plant, agriculture, humanities and administration related to health, to equip them with the knowledge, competencies and tools for applying the One Health approach in their professional activities.

In nine modules, the CAS One Health provides the theoretical and practical foundations of the One Health approach from a variety of transdisciplinary and cross-sectoral prisms. You will learn to think and collaborate beyond your area of expertise. You will deepen your knowledge of systemic issues typical of One Health. You will develop reflections or concrete plans to address a One Health problem that you can identify from your professional context, under the supervision of experts from the CAS network.

The CAS One Health is a unique continuing education programme in Switzerland. Lectures and group work take place mainly face-to-face to encourage discussion, networking and the creation of a sense of community within the CAS participants. The content is practically oriented and focuses on Swiss and European health priority issues.

All the modules and lectures have been developed in collaboration with experienced and recognised experts from the academic and public sectors. These specialists in their respective fields bridge the gap between practice and science, offering unique insights or leading field trips.

With this new programme, we hope to provide participants and future One Health stakeholders with a common language and understanding of the approach, bringing together different perspectives and professional cultures across sectors and disciplines. This should foster collaboration and joint strategies at different scales in Switzerland and beyond, to better address current and future health and environmental crises.

We are looking forward to welcoming you to our course!

Camille Doras, director of studies
Salome Dürr, programme director

«*The unifying One Health approach is more crucial than ever. Without a healthy environment and healthy animals, our health is also threatened.*»

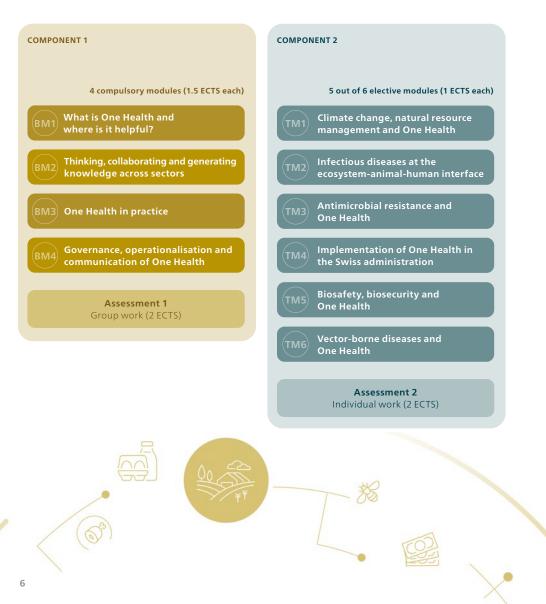**Anne Lévy,**
Director of the Federal Office of Public Health (FOPH)

Structure and academic achievements

Structure

COMPONENT 1

4 compulsory modules (1.5 ECTS each)

BM1 — What is One Health and where is it helpful?

BM2 — Thinking, collaborating and generating knowledge across sectors

BM3 — One Health in practice

BM4 — Governance, operationalisation and communication of One Health

Assessment 1
Group work (2 ECTS)

COMPONENT 2

5 out of 6 elective modules (1 ECTS each)

TM1 — Climate change, natural resource management and One Health

TM2 — Infectious diseases at the ecosystem-animal-human interface

TM3 — Antimicrobial resistance and One Health

TM4 — Implementation of One Health in the Swiss administration

TM5 — Biosafety, biosecurity and One Health

TM6 — Vector-borne diseases and One Health

Assessment 2
Individual work (2 ECTS)

Component 1
The four compulsory basic modules (BMs) will allow participants to learn the fundamentals of One Health and tools for application. A group work validates the cross-curricular assessment of the first component.

- A BM represents 1.5 ECTS credits, 3 days of presence, and 38–45 work hours in total, incl. self-study and assessment.
- It is recommended to follow the BMs in order as there are cross-references.

Component 2
Five of the six proposed thematic modules (TMs) can be chosen. The TMs provide more in-depth knowledge of One Health systemic issues. Component 2 is validated by a personal project assessment.

- A TM represents 1 ECTS credits, 2 days of presence, and 25-30 work hours in total, incl. self-study and assessment.
- It is not needed to follow the TMs in order. There may be cross-references to BMs.

Each individual module is made of blended learning components, active participatory forms of teaching and case studies, and is subject to a learning assessment.

Academic achievements
The whole CAS represents 15 ECTS credits. Completion of the CAS involves around 23 days of attendance plus 210 to 285 hours of personal work.

A **CAS certificate from the University of Bern** is awarded upon successful completion of the full course.

Learning objectives
At the end of the training, the participants will be able to:
- understand the fundamentals and governance of the One Health approach
- have a good understanding of key One Health methods and topics
- acquire competencies of systems thinking
- are able to evaluate and communicate the added value of the One Health approach
- are able to implement the One Health approach in their professional activities and collaborate across sectors.

Credit equivalence
The CAS course is in the process of being recognised by: Swiss Public Health Doctors (SPHD); Swiss Veterinarians Society (GST-SVS).

Basic Modules – 8 ECTS

SEPTEMBER – DECEMBER 2025

8–10 SEPTEMBER

BM1 What is One Health and where is it helpful?

In BM1, the history and foundations of One Health will be introduced. The currently accepted definition of One Health, its relationship to related concepts and its meaningful use are presented. A panel of experts will share their respective perceptions of One Health in theory and practice. Participants will engage with systems thinking through exercises, while case studies at the environment-animal-human interface will be integrated into a systemic approach.

Day 1: a panel discussion of experts; history and concepts of One Health
Day 2: introduction to systems thinking related to health
Day 3: case situations and active exercise through board play

---

22–24 SEPTEMBER
IN BERN AND WALLIS

BM2 Thinking, collaborating and generating knowledge across sectors

In BM2, social and human sciences will reflect on knowledge generation, problem formulation and identification, and collaboration across disciplines and sectors. Participants will be encouraged to question their own systems of thinking. Collaboration tools are presented and put into practice. The ethical values and philosophical concepts of One Health will be illustrated and discussed. The concept of common pool resources management is presented from a socio-anthropological angle, and an excursion to a village in Wallis will demonstrate its practical application for sustainability.

Day 1 (with td-net): tools for intersectoral/transdisciplinary collaboration
Day 2: the humanities and social sciences perspective on the One Health approach
Day 3: an excursion to Törbel (Wallis)

10–12 NOVEMBER

BM3 One Health in practice

BM3 presents concrete examples of One Health applications, including transdisciplinary project management, integrated health prevention, surveillance and control, and cross-sectoral data management. Theories of change are used to illustrate and apply the impact of health changes on stakeholders. The session also explores the benefits and challenges of cross-sectoral data collection, management, sharing, presentation, and protection.

Day 1 (with td-net): tools for stakeholder analysis and engagement; theories of change for impact orientation
Day 2: integrated One Health surveillance, healt risk preparedness and response
Day 3: intersectoral data management

1–3 DECEMBER

BM4 Governance, operationalisation and communication of One Health

The current global, European, and Swiss governance of the One Health approach is presented in BM4. The concept of operationalisation is illustrated, and methods for quantitative and qualitative evaluation of the benefits of One Health are explored and applied. Demonstrating the added value of One Health provides a foundation for advocating its adoption and developing evidence-based policy orientations. Communication strategies to promote One Health to various audiences, including decision-makers, are discussed.

Day 1: One Health governance
Day 2: One Health operationalisation, evaluation methods
Day 3: One Health policy making and communication

«One Health creates added value for the health of people, animals and plants that arises from closer cooperation. In this course we learn how to provide evidence of these benefits.»

Jakob Zinsstag,
Professor - Head of the Human and Animal Health Unit, Swiss Tropical and Public Health Institute (SwissTPH)

Assessement Component 1   **2 ECTS**   **JANUARY 14, 2026**

It consists of group work with an oral presentation based on a cross-module topic.

Thematic Modules – 7 ECTS

JANUARY – JUNE 2026

JANUARY 12–13

TM1 **Climate change, natural resource management and One Health**

Preserved ecosystems are the foundation for the health of species in the broadest sense, but also for the food security of our societies. Climate change and the over-exploitation of resources such as water and soil threaten these systems. In TM1, we will explore the impact of climate change and resource degradation on population health. We will also present examples of strategies for mitigating and managing tensions over resources in rural and urban environments.

Day 1: impact of climate change on health, ecosystems and food production; adaptation strategies
Day 2: health issues and resource management in an urban environment

---

FEBRUARY 26–27

TM2 **Infectious diseases at the ecosystem-animal-human interface**

Although many zoonoses have been eliminated in most European countries, emerging pathogens represent a constant risk to the health of humans, wildlife and domestic animals. Living in a densely populated and highly mobile world allows pathogens to spread, adapt and emerge. TM2 presents concrete examples of the prevention and control of infectious diseases, with particular emphasis on zoonoses. The impact of the collapse of biodiversity and biosecurity needs are also addressed.

Day 1: ecology of zoonotic diseases
Day 2: systemic approach to infectious diseases

MARCH 16–17

TM3 **Antimicrobial resistance and One Health**

Antimicrobial resistance (AMR) is considered one of the greatest threats to plant, animal and human health and food security. It exemplifies the need for an integrated One Health approach, given the horizontal transmission of resistance genes between organisms and the necessity for intersectoral interventions. In TM3, the complexity of AMR is explored, with a focus on antibiotic use in hospitals and on farms, the challenges associated with the development of new antimicrobial treatments, and AMR-related policy actions and their implementation within the Swiss context.

Day 1: AMR epidemiology and surveillance in Switzerland
Day 2: One Health in the governance and implementation of AMR policy

---

APRIL 23–24

TM4 **Implementation of One Health in the Swiss administration**

In Switzerland, there are several positive examples of cross-sector collaboration at national, cantonal and community levels from which lessons can be learned. In TM4, such examples are presented by those involved first-hand. They will share the difficulties and solutions generated while co-creating strategies or co-developing projects. They will discuss the results of evaluating these initiatives in terms of health and socio-economic added value. This module will help participants to successfully plan and implement One Health projects in the Swiss administration.

Day 1: the organisational and legal framework for initiatives in administrations
Day 2: lessons learned from case studies

«Understanding the dimensions of One Health and the link between human and ecosystem health is a priority today for effectively addressing current and future public health crises.»

Ana Vicedo,
Professor – Head of the Climate Change and Health group
Institute of Social and Preventive Medicine (ISPM)

«In the federal, cantonal, and municipal administrations, we are increasingly faced with issues that must be tackled jointly by several authorities and directly and indirectly impact health. Whether the One Health approach is needed is no longer a debate but a factual application.»

Jörg Allmendinger, Cantonal physician Glarus

TM5 Biosafety, biosecurity and One Health

Biosafety and biosecurity are disciplines that developed tools to prevent health hazards for humans, animals and plants. In TM5, the theoretical principles of biosecurity and biosafety are introduced, followed by a discussion on their application within a One Health approach, supported by concrete case studies. Participants will visit the Spiez Laboratory, which specialises in highly infectious diseases, and engage in real-life, hands-on exercises. The module is taught in collaboration with the Swiss Biosecurity Network (SBNet).

Day 1: biosafety and biosecurity linked to One Health
Day 2: an excursion to the Spiez Laboratory (Canton of Bern); visit and simulation exercise in the case of an outbreak

TM6 Vector-borne diseases and One Health

Vector-borne diseases (VBDs), transmitted by midges, mosquitoes, or ticks, are emerging across many European countries due to the spread of their vector hosts. Factors such as warmer temperatures, globalised transport, and the management of water and wetlands in both rural and urban environments contribute to this trend. Integrated solutions are essential to mitigate the impact of these diseases. In TM6, the complexity of VBD emergence is illustrated through examples in humans and animals. Integrated and community-based surveillance and control strategies are presented, along with practical field exercises. This module is taught in collaboration with SUPSI and will take place in Mendrisio in June, when the vectors are active.

Day 1: presentation of SUPSI; surveillance for VBDs and vectors with a systemic approach
Day 2: observation of control measures in the field; participative approach for mosquito control

---

Assessment Component 2 2 ECTS **DEADLINE AUGUST 31**

It consists of individual work with a written assignment based on a cross-module topic.

The CAS One Health is a brand new programme. Training content is subject to change as the programme develops and in response to feedback from future participants. Stay updated on our web page.

Module developers

The courses were developed and are delivered in collaboration with the following institutions (non-exhaustive): University of Bern (Unibe), Swiss Tropical and Public Health Institute (SwissTPH), Institute for Fish and Wildlife Health (FIWI), Veterinary Public Health Institute (VPHI), University of Fribourg (UniFr), One Health Institute University of Zürich, University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Swiss Biosafety Network (SBNet), and Network for Transdisciplinary Research (td-net) affiliated to the Swiss Academies of Arts and Sciences.

A list of experts who have made a substantial contribution to the development of the CAS content and who also teach (not an exhaustive list of all lecturers and subject to change):

Irene Adrian-Kalchhauser, Prof. Dr., Head of Institute for Fish and Wildlife Health, Unibe

Jörg Allmendinger, MD, Cantonal physician, Canton of Glarus; FMH; One Health Unterorgan

Christian Althaus, PD Dr., Deputy Head Infectious Diseases and International Cooperation Section, FOPH

Claus Beisbart, Prof. Dr., Institut of Philosophy; MCID, Unibe

Camille Doras, Dr. med. met., MPH, scientific collaborator, VPHI, Unibe

Salome Dürr, Prof. Dr. med vet., Head Epi Section of VPHI; MCID, Unibe

Eleonora Flacio, Dr., Head of Vector Ecology, Institute of Microbiology, SUPSI

Tobias Haller, Prof. Dr., Head of Institute of Social Anthropology, Unibe

Ioannis Magouras, Dr. med vet., group leader, VPHI, Unibe

Angela Martin, Dr., lecturer, Environmental Sciences and Humanities Institute, UniFr

Stefan Müller, Dr., Project leader, td-net

Francesco Origgi, Prof. Dr., Head of Institute of Microbiology, SUPSI

Giulia Paternoster, Dr. med. vet., Vigilance assessor, Swissmedic

Theres Paulsen, MSc ETH Environ. Sc., Director of td-net

Simone Pisano, Dr. med. vet, co-Head of wildlife division, Institute for Fish and Wildlife Health, Unibe

Chantal Ritter, Dr. med. vet., Head of veterinary service, Canton of Solothurn; GST-SVS

Simon Ruegg, Dr. med. vet., Senior scientist, Section of epidemiology, UZH

Caroline Schlaufer, PD Dr., Ethics and Policy Lab, KPM; MCID, Unibe

Kathrin Summermater, Dr., Head of Biosafety Centre, IFIK; MCID, Unibe; SBNet

Muriel Surdez, Prof. Dr., Social Sciences departement, UniFr

Ana Vicedo, Prof. Dr., Head of the Climate Change and Health group, ISPM; MCID, Unibe

Barbara Wieland, Dr. med. vet., Head of Institute of Virology and Immunology, Swiss Confederation

Jakob Zinsstag, Prof. Dr. med. vet., Head of Unit Human and Animal Health, SwissTPH

Practical information

Target audience
The CAS One Health is aimed at professionals working in One Health-relevant positions, particularly in environmental, plant, animal, and human health, agronomy, social and humanities sciences, economics, and law.

Admission
Prerequisites: university degree and professional experience in fields related to One Health. Admissions without university degree or experience in One Health may be considered based on application file on a case-by-case basis by the programme board.

Language
The course language is adapted to the composition of the audience: German or English. Course materials are generally in English. Assessments can be performed in the preferred language (German, English, French).

Duration
9 modules completed over the course of one year to maximum 3 years.

Course locations
University of Bern
Hallerstrasse 6

(5 minutes walk from the main station)

Excursions:
BM2, day 2 in Törbel, Canton of Wallis
TM5, day 2 in Spiez, Canton of Bern
TM6, day 1 and 2 in Mendrisio, Canton Ticino

Costs
CAS price: 9'980 CHF

The price includes courses, materials, refreshments during breaks, registration fees and examination fees. The price does not include on-site lunches during module sessions, transport to excursion sites and on-site accommodation during TM6.

If you require accommodation in Bern during the sessions, please contact us for prices negotiated with Unibe.

Modules can also be booked individually, subject to the availability of places.
Individual module price:
Basic Module: 1'300 CHF
Thematic Module: 850 CHF

Registration
Registration online via the CAS webpage. Please refer to the registration dates on the webpage.

More information
For more information, including on the conditions of registration, please refer to the terms and conditions available on the CAS webpage:

weiterbildung.unibe.ch/onehealth

in **CAS One Health**

Contact

✉

For questions relating
to the CAS One Health programme
or individual modules, write to:
cas-onehealth.vphi@unibe.ch

Director of studies
Camille Doras, Dr. med. vet, MPH

Programme Director
Salome Dürr, Prof. Dr. med. vet.,
Dipl. ECVPH

Partners
The CAS One Health was developed with the financial support of
the Multidisciplinary Center for Infectious Diseases (MCID),
Vetsuisse Faculty and the Zentrum für universitäre Weiterbildung (ZUW).

u^b

UNIVERSITY OF BERN

MCID
MULTIDISCIPLINARY CENTER
FOR INFECTIOUS DISEASES

Universität Bern | Universität Zürich
vetsuisse-fakultät

WEITER BILDUNG. UNIBE.CH

STIFTUNG
vinetum

University of Bern
Veterinary Public Health Institute (VPHI)
Multidisciplinary Center for Infectious Diseases (MCID)
Hallerstrasse 6
CH-3012 Bern

E-Mail cas-onehealth.vphi@unibe.ch
www.weiterbildung.unibe.ch/onehealth