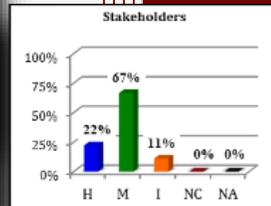
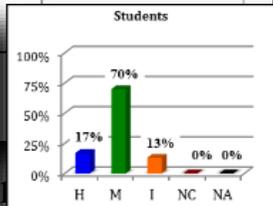
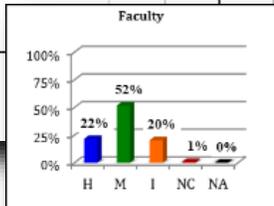


University of Gondar-The Ohio State University
OIE Veterinary Education Twinning Program

Evaluation Tool for OIE Day 1 Graduating Veterinarian Competencies

c.) Outbreak Investigations		THE OHIO STATE UNIVERSITY COLLEGE OF VETERINARY MEDICINE					
Phase/Steps in an Outbreak Investigation	Collecting, Handling, and Transporting Appropriate Specimens						
Is the average Day 1 OI/VI graduate able to:	Highly Proficient	Highly Competent	Moderately Competent	Proficient	Not Competent	Other	Comments
Identify the different phases/steps of an outbreak investigation and understand the role and importance of a veterinarian during the process? (i.e. case definition, development, geographical distribution, and animal demographics)							
Collect, handle, and transport appropriate specimens for the investigation of reportable animal disease or foodborne outbreak?							
Identify appropriate sources of information during an outbreak/control of disease to develop intervention plans?							



INTRODUCTION

As part of the World Organisation for Animal Health PVS Pathway program, the OIE has created a series of recommended competencies that veterinary students must fulfill before completing the professional program. The goal of the Day 1 Competencies is to assure that young veterinary professionals can support their Country's National Veterinary Services. To assess these competencies in regards to the proficiency level of the average Day 1 veterinary graduates, the University of Gondar (UoG) and The Ohio State University (OSU) Twinning partners have developed an ***Evaluation Tool for OIE Day 1 Graduating Veterinarian Competencies***. Through this tool, administrators and stakeholders will be able to systematically assess new veterinary graduates' level of understanding and competency of the skills and knowledge base outlined in the OIE Day 1 Competencies.

This Evaluation Tool consists of a series of charts and tables, in which the components of the 11 specific and 8 advanced competency guidelines are expanded by breaking down the components of the OIE recommendations to more narrow subcomponents (many of them highlighted in the OIE Veterinary Education Core Curriculum Guidelines). This approach allows to specifically and systematic qualify and quantify competence in each particular area of veterinary medicine covered in the Day 1 Competencies. This Tool also provides examples and definitions of knowledge and performance expectations that allows to qualify a newly veterinary graduate from highly competent to insufficient or not competent.

The Evaluation Tool defined a *Highly Competent* new DVM graduate as one who is very knowledgeable/skillful about the topic and is able to perform the task/activity without additional support or guidance. *Moderately Competent* individuals are knowledgeable or skillful about the topics but need some support or guidance to perform the task or activity. New DVM graduates who are aware of the topic but require substantial support or assistance with the task or activity are classified as *Insufficiently Competent*. Those who are unaware of the topic and are unable to perform the task or activity without further education or training are considered *Not Competent*. If the topic is not currently in the veterinary curriculum being evaluated, then that topic should be recorded as such (*Not in Curriculum*). If the evaluator is unfamiliar with the competency level of new graduates regarding a particular competency, they have the option to select "*Not Sure*".

The results of the evaluation allow the users to define a specific and detail profile of the Day 1 veterinary graduates at their institutions with respect to the OIE Day 1 Competencies. Information from this Evaluation Tool can subsequently be used to identify potential gaps or areas for improvement in the veterinary curriculum to strengthen the veterinary graduate's education. Additionally, the unique metrics from this tool could also be applied throughout the implementation of curricular revisions to assess their impact over time, as it provides a more objective measurement that can be determine pre and post intervention.

The Evaluation Tool described herein was originally designed to be used in small-facilitated groups (or workshop format). Still, this Tool can be adapted for different formats such as town hall meeting or face-to-face interviews, depending on the audiences that must be reach. Nevertheless, no matter what format is been used, at the end this method will allow the systematic collection and analysis of the perception of faculty, veterinary students, recent graduates and stakeholders in regards to Day 1 graduates in a specific institution. Details and instructions on how to use this Tool in a workshop format are later provided in this manuscript.

Development and Deployment. While a curriculum review and mapping is needed to determine fulfillment of the OIE recommended topics and courses in the veterinary curriculum. These approaches lack the ability to evaluate the effectiveness of the pedagogy methods used in the curriculum as well as the depth of knowledge and skills retained by the new graduates. Thus, an exclusive review based approach of the curriculum could potential miss deficits that will affect the “final product” coming out of a professional program. No because a topic is present in the curriculum, it means that it is properly taught and/or that the students will be competent in the subject by time of graduation. Therefore, to supplement the curriculum review and mapping process, the UoG and OSU Veterinary Twinning Partners designed an Evaluation Tool to rate the proficiency level of the average veterinary graduate’s skills and knowledge base regarding the OIE Day 1 Competencies.

After several rounds of editing and reviewing of this Tool, it was distributed to Ohio State veterinary faculty and new veterinary graduates for them to evaluate the OSU program. This pilot study allowed the partners to assess the ease of using the Evaluation Tool as well as to collect data regarding the competency level of the average OSU veterinary graduate with the OIE recommended guidelines. Minor changes were made to the Evaluation Tool based on the suggestions from the OSU veterinary faculty and new graduates, prior to its utilization in the Faculty Retreat to assess the average UoG veterinary graduate.

Using the metrics provided by the Evaluation Tool, the UoG and OSU Twinning partners were able to identify specific competencies that were fulfilled as well as others that required further development or improvement, recognizing at the same time other areas that newly graduates were completely missing. Then, using a backward analysis and curricular mapping (also using as a reference the OIE Veterinary Education Core Curriculum Guidelines), multiple disparities or weak points were identified in our veterinary curriculums. From this point, the Twinning Partners moved forward in prioritizing these deficiencies and developing an action plan to address them in the veterinary curriculum. Keeping always in this process as a clear goal to improve the proficiency level of future graduates with respect to OIE Day 1 Competencies. In time, these changes should lead to a more qualified young veterinarians entering the workforce. Thus, in the long term, strengthening the quality of the Country’s veterinary services.

In conclusion, with simple adaptations to the circumstances of each country and academic institutions, this Evaluation Tool could be used to assess the profile of young graduates from both, established veterinary curriculums as well as younger programs. Providing future Veterinary Twinning partners with an additional tool and a great resource to assist them on identifying the OIE Day 1 Competency gaps in their educational programs.

WORKSHOP FORMAT INSTRUCTIONS

In the following format, all OIE Day 1 Competencies are reviewed by the participants in 4 thematic sections (see page 8), which are distributed during a one-day long workshop (see model agenda on page 9).

PRE-ACTIVITY

The use of this Evaluation Tool in the Workshop format requires some basic logistical preparation by the **Coordinator(s)** before its use:

- A. Read and familiarize yourself with the Evaluation Tool,
- B. Select and instruct group facilitators,
- C. Reserve appropriate meeting location and assign groups,
- D. Organize participant's packages,
- E. Organize day activities (Agenda) and plan post activity "Evaluation."

Facilitator's Instructions

In this format, all the participants will be distributed among small groups to which a Facilitator will be assigned. Ideally, each Facilitator should be highly familiarized with the OIE Day 1 Competencies and the institution to be assessed. However, to minimize any bias the facilitators should not belong to the institution being considered. This professional level individual will help moderate the conversation among the group members, and encourage participation and timely progression through the Evaluation Tool. The facilitators leadership role should include such activities as providing examples for various evaluation points as necessary to foster pertinent discussion.

- It is recommended to distribute the **Evaluation Tool** along with the OIE Day 1 Competencies in advance to allow Facilitator's time to review and become familiar with them.
- A brief, but essential meeting with the coordinator(s) and all the facilitators to review the Evaluation Tool and walk through the dynamics of the Workshop should take place before the event. This meeting will allow the coordinator(s) to explain the purpose of the exercise and the main expectations.

Location Reservations and Group Assignment

This activity will require only one location: a large conference room in which individual tables can be set to sit 6 to 8 participants per table. All of the activity should take place at a single location, with a large conference room for the attendees to assemble to use during the general points of the agenda. But it should have available several multiple rooms or areas for the different groups to assemble during the workshop components, allowing them to have an open discussion without excessive background noise.

- In order to facilitate a productive discussion environment while maintaining a schedule, it is recommended to limit the group size to a maximum of 7 to 8 individuals per table (ideally 6 per group), as larger group sizes could hinder a good discussion environment.
- It is also recommended to create diverse groups that encourage open discussion and multiple viewpoints (i.e. faculty, staff, stakeholders, etc.). One option for forming groups could be to randomly assign participants to the different tables as they arrive while stratifying based upon individual backgrounds and experiences to achieve diversity. Alternative, group assignments could be made in advance based on backgrounds and experiences of the participants (as was done at the UoG).
- It is also recommended to rotate the participants in each section, to increase the interchange of ideas and comments during the evaluations. See below details on the different groups to be created, in which all the participants must be evenly distributed.

Participant's Packages

Each participant will receive a customized package containing only the charts to evaluate the specific competencies assigned to him/her. The charts to be included in that package will depend upon which group they are assigned (see break out of groups in page 10).

For example: Participant 1's package will contain the following charts based on his group assignment.

Participant 1 was assigned to	Should receive these charts on his/her package
Group 1 in Session 1	2.1 Epidemiology
Group 4 in Session 2	2.3 Zoonosis (including Food Borne Diseases)
Group 6 in Session 3	2.10 General Certification 3.2 Inspection & Certification
Group 8 in Session 4	3.5 Risk Analysis 3.6 Research

ACTIVITY DAY'S GUIDELINES

After the coordinator(s) has welcomed the participants, introduced the facilitator(s) for the activity, and explains the main purpose and objectives of the Evaluation Tool, the coordinator(s) should proceed with the instructions and logistics of the activity explaining the dynamics to be followed during the Faculty Retreat.

The coordinator(s) should then initiate the program by reviewing the competency level definitions (from highly competent to no competent) and review the specific OIE Day 1 Competencies to be evaluated in each session. During this time, the coordinator(s) should give specific examples for the definitions of the level of competency.

- Before the beginning of each thematic session, allow 20 minutes to review each of the OIE Day 1 Competencies and corresponding Evaluation Tool to be completed during one specific session. It is recommended that the coordinator(s) give examples of what is expected from a competent new graduate for each OIE Day 1 competency.
- The coordinator(s) should remind participants that if the competency is not taught in the veterinary curriculum, they should mark the “not in curriculum” response on the Evaluation Tool and move onto the next portion of the chart.
- All the groups will then have 20-25 minutes to discuss their assigned Evaluation Tool charts depending on their group assignment. The participants should discuss what they think would be the best response for each of the questions.
- Each person in the group should try to express their opinion on the graduate’s level of understanding in that specific OIE Day 1 Competency.
- The facilitator should avoid allowing one individual to monopolize the whole conversation.
- Once the time has expired, the facilitator should ask all participants to individually complete the Evaluation Tool and submit it to their facilitator. These responses will be tallied later to determine the gaps in the veterinary curriculum.
- Since not every group will be evaluating the same OIE Day 1 Competencies during each session (due to time constraints), an assembly vote on the overall new graduates’ level of competency for each Evaluation Tool should be collected. This information can be compiled using an anonymous polling system such as iClickers®, TopHat®, or similar system. Later these results will be compared with those obtained in the individual charts to identify potential discrepancies or biases.

- It is recommended to avoid displaying the assembly results in real time, as this might lead to biases in evaluating the next competencies to be discussed and future assembly votes. In our case, we presented OSU results provide them with an example of results from another institution. However, the specific information of the institutions being assessed can be displayed during the closing session as a review of the day's activities.
- During the closing session, the coordinator should present an anticipated timeline of when the results from all 3 groups (faculty, students, and stakeholders) will be compile, analyzed and presented as part of the curricular gap analysis report, as well as approximate timeline for the prioritization activities and development of an action plan.
- ▶ **Post-Activity Evaluation and Assessment.** Once the activity has concluded, the coordinator(s) should provide a short survey for the participants to evaluate the Evaluation Tool and the workshop at-large. This will allow the coordinator(s) to provide feedback to improve the experience for future veterinary education twinning programs.
- ▶ A short meeting to debrief the facilitators post-activity could also provide insight for improvement in the Evaluation Tool or recommendations for future veterinary education twinning programs. Therefore, it is highly recommended.



OIE Day 1 Competencies for Review During 4 Thematic Sessions

Session 1: Epidemiology and Food Hygiene	Session 2: Infectious Diseases	Session 3: Regulatory Medicine	Session 4: General Topics
2.1 Epidemiology	2.2 Transboundary Animal Diseases	2.9 Vet Legislation and Ethics	2.8 Animal Welfare
2.6 Basic Food Hygiene	2.3 Zoonosis (including Food Borne Diseases)	2.10 General Certification	2.11 Communication Skills
2.7 Veterinary Products	2.4 Emerging and Re-Emerging Diseases	3.2 Inspection and Certification Procedures	3.8 Administration and Management
3.4 Advance Food Hygiene	2.5 Disease Prevention and Control Programmes	3.1 Organization of Vet Services	3.6 Research
	3.3 Management of Contagious Diseases	3.7 International Trade Framework	3.5 Risk Analysis



University of Gondar – Ohio State University OIE Veterinary Education Twinning Program

UoG Faculty Retreat

February 20, 2016

8:00 am Welcome and Opening Statements

Dr. Achenef Melaku, Dean Faculty of Veterinary Medicine

8:15 am OIE Day 1 Competencies and Core Veterinary Curriculum

Dr Samuel Wakhusama, OIE Representative of East Africa

8:35 am UoG Activities to Achieve Quality of Education

Dr. Yemataw Wondie, Quality Assurance and Audit Directorate, Director, UoG

8:45 am Twinning Program, Faculty Retreat Logistics and Expectations

Dr. Armando Hoet, Director OSU Veterinary Public Health Program

9:00 am Session 1: Epidemiology and Food Hygiene

20 minutes: Introduction of Competencies to be covered in this session
20-25 minutes: Group discussion (Chart Completion)
15 minutes: Assembly vote

10:15 am Break

10:45 am Session 2: Infectious Diseases

20 minutes: Introduction of Competencies to be covered in this session
20-25 minutes: Group discussion (Chart Completion)
15 minutes: Assembly vote

12:00 pm General Discussion

12:30 pm Lunch Break

2:00 pm Session 3: Regulatory Medicine

20 minutes: Introduction of Competencies to be covered in this session
20-25 minutes: Group discussion (Chart Completion)
15 minutes: Assembly vote

3:15 pm Break

3:30 pm Session 4: General Topics

20 minutes: Introduction of Competencies to be covered in this session
20-25 minutes: Group discussion (Chart Completion)
15 minutes: Assembly vote

5:00 pm General Discussion and Closing Remarks

Dr Achenef Melaku and Dr Armando Hoet



Groups Distribution for the 4 Thematic Sections

Group	Session 1	Session 2	Session 3	Session 4
Group 1	2.1 Epidemiology	2.2 Transboundary Animal Diseases	2.9 Vet Legislation & Ethics 3.1 Veterinary Services	2.8 Animal Welfare
Group 2	2.1 Epidemiology	2.2 Transboundary Animal Diseases	2.9 Vet Legislation & Ethics 3.1 Veterinary Services	2.8 Animal Welfare
Group 3	2.1 Epidemiology	2.3 Zoonosis (including Food Borne Diseases)	2.9 Vet Legislation & Ethics 3.1 Veterinary Services	2.11 Communication Skills 3.8 Administration and Management
Group 4	2.6 Basic Food Hygiene	2.3 Zoonosis (including Food Borne Diseases)	2.10 General Certification 3.2 Inspection & Certification	2.11 Communication Skills 3.8 Administration and Management
Group 5	2.6 Basic Food Hygiene	2.4 Emerging and Reemerging Diseases 2.5 Prev. & Control Prog.	2.10 General Certification 3.2 Inspection & Certification	2.11 Communication Skills 3.8 Administration and Management
Group 6	2.6 Basic Food Hygiene	2.4 Emerging Diseases 2.5 Prev. & Control Prog.	2.10 General Certification 3.2 Inspection & Certification	3.5 Risk Analysis 3.6 Research
Group 7	2.7 Veterinary Products 3.4 Advance Food Hyg.	2.4 Emerging Diseases 2.5 Prev. & Control Prog.	3.7 International Trade Framework	3.5 Risk Analysis 3.6 Research
Group 8	2.7 Veterinary Products 3.4 Advance Food Hyg.	3.3 Management of Contagious Diseases	3.7 International Trade Framework	3.5 Risk Analysis 3.6 Research
Group 9	2.7 Veterinary Products 3.4 Advance Food Hyg.	3.3 Management of Contagious Diseases		

EVALUATION TOOLS CHARTS



Evaluation of OIE Day 1 Competencies Session 1: Epidemiology and Food Hygiene

Day 1 Competency: 2.1 Epidemiology							
a.) General Principles of Descriptive Epidemiology							
• Measuring Disease				• Measuring Occurrence			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Measure and describe disease? (i.e. calculate morbidity and mortality rates, attack rates, etc.)							
Calculate and describe disease occurrence? (i.e. incidence and prevalence)							
Describe the difference between the various temporal and spatial distributions of disease? (i.e. endemic, sporadic, and epidemic)							



b.) Disease Control Applications of Epidemiology Concepts								
<ul style="list-style-type: none"> • Disease Surveillance • Evaluation of Screening/Diagnostic Tests 					<ul style="list-style-type: none"> • Risk Factors • Study Design 		<ul style="list-style-type: none"> • Statistical Significance 	
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments	
Identify and understand the components and types (active vs. passive) of surveillance programs to monitor diseases?								
Appropriately use epidemiological tools to evaluate screening/diagnostic test? (i.e. what is a gold standard test, specificity, sensitivity, positive and negative predictive values, accuracy, etc.)								
Interpret and apply epidemiological concepts associated to risk factors? (i.e. what does relative risk or odds ratio mean? What is attributable risk? What population is at risk?)								
Recognize different epidemiological study designs and interpret their study data? (i.e. case vs control, cross sectional, cohort studies)								

Continued to the Next Page.....



b.) Disease Control Applications of Epidemiology Concepts / Continued							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Understand statistical significance (i.e. interpretation of confidence intervals and p-values) in scientific publications and reports? (i.e. state hypothesis and test it, interpretation of confidence intervals and p values)							



c.) Outbreak Investigations							
<ul style="list-style-type: none"> Phases/Steps in an Outbreak Investigation 				<ul style="list-style-type: none"> Collecting, Handling, and Transporting Appropriate Specimens 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Identify the different phases/steps of an outbreak investigation and understand the role and importance of a veterinarian during the process? (i.e. case definition development, geographical distribution, and animal demographics)							
Collect, handle, and transport appropriate specimens for the investigation of reportable animal disease or foodborne outbreak?							
Identify appropriate sources of information during an outbreak/control of disease to develop intervention plans?							



FINAL ASSESSMENT OF EPIDEMIOLOGY							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the <u>Epidemiological Principles</u> applied to veterinary preventive medicine and public health?							

***Definitions:**

DVM: Doctoral graduates of the veterinary medicine program

Not in Curriculum: This topic is currently not covered in the veterinary curriculum.

Highly Competent: The average new DVM graduate is very knowledgeable/skillful about the topic and is able to perform the task/activity without additional support or guidance.

Moderately Competent: The average new DVM graduate is knowledgeable/skillful about the topic and is able to perform this task/activity with some support or guidance.

Insufficiently Competent: The average new DVM graduate is aware of the topic but is unable to perform the task/activity without substantial assistance.

Not Competent: While this topic is covered in the DVM curriculum, the average new DVM graduate is unaware of the topic and is unable to perform this task without further training or education.

Not Sure: Do not know how the average DVM graduate is able to perform this competency.



Evaluation of OIE Day 1 Competencies Session 2: Infectious Diseases

Day 1 Competency: 2.2 Transboundary Animal Diseases (TAD)							
a.) Disease Recognition							
<ul style="list-style-type: none"> • Common TAD Pathogens • Transmission Pathways 				<ul style="list-style-type: none"> • Country Level Points of Entry • Clinical Course 			
Is the average Day 1 DVM graduate able to:	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
List and describe common and important TAD pathogens? (i.e. OIE reportable and important country foreign and notifiable animal diseases such as highly pathogenic avian influenza, ND, AHS, CBPP, PPR, rinderpest, classical swine fever, FMD, LSD, RVF and etc.)							
List the most common transmission pathways for TAD?							
List the likely country level points of entry for TAD?							
List important animal clinical signs associated with important TAD?							



b.) Global Distribution of TAD							
<ul style="list-style-type: none"> • Surveillance Programs • Knowledge of Current Distributions 				<ul style="list-style-type: none"> • Research Status of TAD 			
Is the average Day 1 DVM graduate able to:	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
Identify current national surveillance programs and related agencies monitoring for important TAD?							
Identify current international surveillance programs and related agencies monitoring for important TAD?							
Describe the current global distribution of TAD?							
Identify important sources to determine the current status and/or updated information on TAD distribution both nationally and internationally? (i.e. World Animal Health Information System (WAHIS), Promed)							



c.) Diagnostic and Therapeutic Tools for Prevention and Control							
<ul style="list-style-type: none"> • Selection and Interpretation of Appropriate Diagnostic Tests • Collection and Handling of Samples 				<ul style="list-style-type: none"> • Result Interpretation • Therapeutic Tools 			
Is the average Day 1 DVM graduate able to:	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
Appropriately select a diagnostic technique needed for important TAD?							
Appropriately determine the samples to collect for specific TAD and how to handle such samples?							
Appropriately interpret results from important TAD diagnostic techniques?							
Appropriately select a therapeutic tool to prevent and combat TAD? (i.e. vaccines, antiserum, antitoxins, antimicrobials)							



d.) Implications of TAD							
• Economic and Trade Impact				• Public Health and Agriculture Impact			
Is the average Day 1 DVM graduate able to:	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
Describe the economic implications of TAD in their country? (i.e. trade, cost for producers and companies, cost of health for individuals)							
Describe the public health implications of TAD in their country? (i.e. physical health concerns, mental health concerns)							
Describe the agriculture implications of TAD in their country? (i.e. morbidity, mortality, abortions, decrease in productions)							



e.) Regulatory Framework of TAD							
<ul style="list-style-type: none"> • Reportable Diseases • National and International Reporting Systems 				<ul style="list-style-type: none"> • Reference Sources 			
Is the average Day 1 DVM graduate able to:	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
List the notifiable or reportable TAD in their country?							
List the OIE notifiable terrestrial and aquatic animal diseases?							
Identify the proper national authority and correctly follow the chain of reporting for TAD?							
Understand the international reporting process for TAD? (i.e. that the country's Chief Veterinarian should report directly to OIE)							



Know where to find a list and up to date information of all the reportable and important TAD for your Country and OIE?							
FINAL ASSESSMENT OF TRANSBOUNDARY ANIMAL DISEASES							
	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in their knowledge of <u>Transboundary Animal Diseases</u> that are important to veterinary preventive medicine and public health?							

***Definitions:**

DVM: Doctoral graduates of the veterinary medicine program

Not in Curriculum: This topic is currently not covered in the veterinary curriculum.

Highly Competent: The average new DVM graduate is very knowledgeable/skillful about the topic and is able to perform the task/activity without additional support or guidance.

Moderately Competent: The average new DVM graduate is knowledgeable/skillful about the topic and is able to perform this task/activity with some support or guidance.

Insufficiently Competent: The average new DVM graduate is aware of the topic but is unable to perform the task/activity without substantial assistance.

Not Competent: While this topic is covered in the DVM curriculum, the average new DVM graduate is unaware of the topic and is unable to perform this task without further training or education.

Not Sure: Do not know how the average DVM graduate is able to perform this competency.



Evaluation of OIE Day 1 Competencies Session 2: Infectious Diseases

Day 1 Competency 2.3: Zoonosis (Including Foodborne Diseases)							
a.) Disease Recognition							
<ul style="list-style-type: none"> • Foodborne and Zoonotic Pathogens • Transmission Routes in Animal Populations 				<ul style="list-style-type: none"> • Clinical Signs 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
List and describe common and important zoonotic and foodborne pathogens? (i.e. rabies, brucellosis, <i>Salmonella</i> , <i>E. coli</i> , anthrax, TB, RVF, taeniasis, hydatidosis, toxoplasmosis, leishmaniasis, etc.)							
List the most common routes of transmission for zoonotic and foodborne agents in animal populations?							
List important animal clinical signs associated with both zoonotic and foodborne diseases?							



b.) Diagnostic Applications							
<ul style="list-style-type: none"> • Collection and Handling of Samples • Selection of Appropriate Diagnostic Tests 				<ul style="list-style-type: none"> • Interpretation of Diagnostic Test Results • Therapeutic Tools 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Appropriately determine the samples to collect for specific zoonotic and foodborne diseases and how to handle and analyze such samples?							
Appropriately select a diagnostic technique needed for important zoonotic and foodborne diseases?							
Appropriately interpret results from important zoonotic and foodborne disease diagnostic techniques?							
Appropriately select a therapeutic tool to prevent and combat zoonotic and foodborne diseases? (i.e. vaccines, antiserum, antitoxins, antimicrobials)							



c.) Implications of Zoonotic and Foodborne Diseases							
<ul style="list-style-type: none"> Economic Impact Public Health Impact 				<ul style="list-style-type: none"> Agriculture Impact 			
Is the average Day 1 DVM graduate able to:	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not in Curriculum	Not Sure	Comments
Describe the economic implications of zoonotic or foodborne disease in their country? (i.e. trade, cost to companies and/or producers, cost of health care for affected individual)							
Describe the public health implications of zoonotic or foodborne disease in their country? (i.e. physical health concerns, mental health concerns)							
Describe the agriculture implications of zoonotic or foodborne disease in their country? (i.e. morbidity, mortality, abortions, decrease in production)							



d.) Regulatory Framework of Zoonotic and Foodborne Diseases							
<ul style="list-style-type: none"> • Reporting Authority • Reportable Diseases 				<ul style="list-style-type: none"> • Reference Sources 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Identify the authority to whom zoonotic and foodborne infections should be reported, both nationally and internationally?							
Identify the proper chain of reporting of zoonotic and foodborne diseases, both nationally and internationally?							
Know where to find a list and up-to-date information of all the reportable and important zoonotic and foodborne diseases for Ethiopia and OIE?							



FINAL ASSESSMENT OF ZONOTIC AND FOODBORNE DISEASES							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in their knowledge of <u>Zoonotic and Foodborne Diseases</u> that are important to veterinary preventive medicine and public health?							

***Definitions:**

DVM: Doctoral graduates of the veterinary medicine program

Highly Competent: The average new DVM graduate is very knowledgeable/skillful about the topic and is able to perform the task/activity without additional support or guidance.

Moderately Competent: The average new DVM graduate is knowledgeable/skillful about the topic and is able to perform this task/activity with some support or guidance.

Insufficiently Competent: The average new DVM graduate is aware of the topic but is unable to perform the task/activity without substantial assistance.

Not Competent: While this topic is covered in the DVM curriculum, the average new DVM graduate is unaware of the topic and is unable to perform this task without further training or education.

Not in Curriculum: This topic is currently not covered in the veterinary curriculum.

Not Sure: Do not know how the average DVM graduate is able to perform this competency.



Evaluation of OIE Day 1 Competencies Session 2: Infectious Diseases

Day 1 Competency: 2.4 Emerging and Re-Emerging Diseases							
a.) Definitions							
<ul style="list-style-type: none"> • Emerging Diseases and Re-Emerging Diseases • Early Detection • Reporting Authority 							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Define the difference between an emerging and re-emerging disease?							
Recognize the common and high risk emerging and re-emerging pathogens, as well as their clinical signs in animal populations?							
Apply the concepts of early detection to identify an emergence of an infectious disease in a particular region or zone?							
Determine the appropriate reporting authority if these infectious diseases are suspected?							



b.) Risk Factors							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
List and understand common risk factors that increase the likelihood of an outbreak of an emerging or re-emerging infectious disease?							
Recognize the difference between factors that drive an emergence versus factors that cause an outbreak?							

c.) Using Appropriate Information Sources							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Find current and reliable information regarding emerging and re-emerging infectious diseases?							



FINAL ASSESSMENT OF EMERGING AND RE-EMERGING DISEASES							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in regards <u>Emerging and Re-Emerging Infectious Diseases</u> in veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 2: Infectious Diseases

Day 1 Competency 2.5: Disease Prevention and Control Programmes							
a.) Establishment of Prevention and Control Programs for Contagious Diseases							
<ul style="list-style-type: none"> • Develop Prevention and Control Programs 				<ul style="list-style-type: none"> • Reference Sources 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Establish preventive measures and control programs for different animal commodities? (i.e. horses, cattle, goats, etc.)							
Establish preventive medicine and control programs for various population levels? (i.e. small farmer, urban, pastoral, etc.)							
Identify sources of up to date and reliable information on specific diseases, prevention and control measures?							



b.) National Programs							
• Regulatory Authority				• Current Programs			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Identify the proper regulatory authority for prevention and control programs for animal diseases and diseases of animal origin at the national level? (i.e. control and eradication of brucellosis or tuberculosis, rabies, <i>Salmonella</i> , <i>E. coli</i> , anthrax, RVF, taeniasis, hydatidosis, toxoplasmosis, leishmaniasis, etc.)							
Describe the current established prevention, control, and eradication national programs targeting common zoonotic, foodborne, or emerging and re-emerging diseases?							



c.) Implementation of Contingency Plans							
<ul style="list-style-type: none"> • Animal Identification and Traceability • Euthanasia 				<ul style="list-style-type: none"> • Vaccination Programs • Eradication Programs 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Understand the concept of animal identification and traceability as it applies to outbreak investigations?							
Understand and participate in humane euthanasia for large quantities of animals?							
Understand and participate in regular or emergency vaccinations programs?							
Understand and participate in regular test and cull or treatment programs?							



FINAL ASSESSMENT OF DISEASE PREVENTION AND CONTROL PROGRAMMES							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in <u>Prevention and Control Programmes Important in Veterinary Preventive Medicine and Public Health?</u>							

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Evaluation of OIE Day 1 Competencies Session 1: Epidemiology and Food Hygiene

Day 1 Competency: 2.6 Food Hygiene							
a.) Pre-Harvest							
<ul style="list-style-type: none"> Management Practices and Conditions to Ensure Safe and Wholesome Food 							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Assess on-farm food safety practices to ensure the safety and suitability of food of animal origin in different production systems? (i.e. general hygienic practices, proper feed “sources”, proper use of antibiotics and pesticides, pharmaceutical residues)							
Understand and recognize safe preharvest management practices in animals to keep them free of zoonotic foodborne pathogens? (i.e. Biosecurity, herd health checks, proper carcasses disposal, detection of important zoonotic foodborne diseases)							



b.) Harvest							
<ul style="list-style-type: none"> • <i>Ante Mortem</i> Exam • <i>Post Mortem</i> Exam 				<ul style="list-style-type: none"> • Humane Slaughter 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Perform a complete <i>ante mortem</i> examine? (i.e. identification of ill animals that might have been on pharmaceutical treatment, decrease contamination on the killing the floor, ensure that animals are treated humanely, identify reportable disease)							
Perform a complete <i>post mortem</i> examine? (i.e. carcass inspection, proper disposal of condemned carcasses, facility and equipment inspection to prevent contamination)							
Familiar with humane slaughter procedures? (i.e. use of captive bolt, gas (CO ₂), etc.)							



c.) Post-Harvest							
<ul style="list-style-type: none"> • Good Sanitary and Management Practices 				<ul style="list-style-type: none"> • HACCP 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Knowledgeable of concepts and practices to determine good sanitary practices to reduce the risk and control foodborne pathogens and prevent secondary contamination? (i.e. carcass fecal contamination, worker hygiene, equipment disinfection)							
Understand Hazard Analysis and Critical Control Point (HACCP) concepts?							



d.) Integrating Human and Animal Health in Food Safety							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Coordinate the integration between animal health controls and veterinary public health by combining the role of the veterinarian with physicians, public health practitioners, and risk analysts to ensure safe food sources?							
Recognize and integrated food safety inspection services and agencies from farm to fork across various animal production systems?							
Understand the role of veterinarians and other professionals in food safety? (i.e. veterinarians in meat inspection and milk processing, physicians in management of clinical cases and public health education, epidemiologists in outbreak investigations and surveillance programs, risk analysts, and public health practitioners in food safety education and outbreak investigation)							



FINAL ASSESSMENT OF FOOD HYGIENE							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in <u>Food Hygiene</u>?							

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**Evaluation of OIE Day 1 Competencies
Session 1: Epidemiology and Food Hygiene**

Day 1 Competency: 2.7 Veterinary Products							
a.) Appropriate and Rational Use							
<ul style="list-style-type: none"> • Knowledge and Skills • Record Keeping • Proper Disposal 							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Differentiate various products, routes of administration, pharmacokinetics, mechanisms of action, efficacy, and potency of commonly used veterinary drugs? (i.e. toxoids, vaccines, serum, antitoxins, etc.)							
Properly use veterinary products such as anesthetics, antimicrobials, antihelmintics, insecticides/acaricides, vaccines, and biological products in different survival populations including dosage, application, follow-up, storage, and disposal?							

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a.) Appropriate and Rational Use / Continued							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Manage and use cold chain or other storage methods of drug and biological products?							
Knowledgeable of their Country's laws and regulations for use of veterinary products?							
Maintain accurate drug use records that are legible and up-to-date?							



b.) Drug Residues							
<ul style="list-style-type: none"> Withdrawal Times 				<ul style="list-style-type: none"> Food Safety and Environmental Impact 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Explain and utilize drug withdrawal times as a means to prevent drug residues in animal products such as meat, eggs, and milk?							
Find and use current and reliable information regarding specific withdrawal times for each drug, route, and species?							
Explain the food safety impact of drug residues?							
Explain the environmental impact of drug residues?							



c.) Antimicrobial Resistance							
<ul style="list-style-type: none"> • Common Pathogens 				<ul style="list-style-type: none"> • Mechanisms that Lead to the Development of Resistance 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
List common pathogens associated with antimicrobial resistance and the risk factors that lead to their development? (i.e. not finishing prescriptions of antimicrobial medications, using antimicrobial products without confirming diagnosis, etc.)							
Interpret current and reliable information regarding the link between use of antimicrobials in food animals and the development of antimicrobial resistance in human pathogens?							



FINAL ASSESSMENT OF VETERINARY PRODUCTS							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the rational and legal use of <u>Veterinary Products</u> that are important to veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 4: General Topics

Day 1 Competency: 2.8 Animal Welfare							
a.) Animal Welfare Definition and Application							
<ul style="list-style-type: none"> • Definition and Applications • Animal Welfare Education and Outreach 				<ul style="list-style-type: none"> • Problem Identification and Corrective Actions 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Define animal welfare and describe the different elements or components?							
Explain the scientific and economic implication of animal welfare?							
Explain animal welfare responsibilities to owners, handlers, producers, veterinarians, and different audiences?							
Using a science-based approach, identify animal welfare problems for individual animals as well as animal populations and participate in corrective actions?							



b.) Standards and Regulations							
<ul style="list-style-type: none"> Local, National, International Regulations and Standards Humane Methods of Transportation 				<ul style="list-style-type: none"> Humane Methods of Euthanasia for Human Consumption and Disease Control Reference Sources 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Explain the national animal welfare standards and regulations for animal production? (i.e. gestation pens, free range poultry, etc.)							
Explain the international animal welfare standards and regulations for animal production? (i.e. gestation pens, free range poultry, etc.)							
Explain the national animal welfare standards and regulations for animal transportation?							

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b.) Standards and Regulations							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Explain the international animal welfare standards and regulations for animal transportation?							
Explain the national animal welfare standards and regulations for euthanasia for human consumption and disease control?							
Explain the international animal welfare standards and regulations for euthanasia for human consumption and disease control?							
Identify up-to-date information regarding changes in local, national, or international standards and regulations?							



FINAL ASSESSMENT OF ANIMAL WELFARE							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in <u>Animal Welfare Applications and Regulations</u> important to veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 3: Regulatory Medicine

Day 1 Competency: 2.9 Veterinary Legislation and Ethics							
a.) Legislation							
• Rules and Regulations Governing the Veterinary Profession				• National Veterinary Legislation			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Describe the fundamentals of the national veterinary legislation such as: - Laws and regulations, - Regulatory programs in place (i.e. eradicating plans and/or surveillance programs)							
Recognize and follow the specific rules and regulations that apply to the veterinary profession? (i.e. license requirements, pharmacy and prescription laws, prescription of controlled drugs, etc.)							
Find current information on veterinary legislations?							



b.) Ethics							
<ul style="list-style-type: none"> Understand and Apply High Standards of Veterinary Ethics 				<ul style="list-style-type: none"> Ethical Considerations with Animal Use and Care by Humans 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Define, recognize and apply high veterinary ethical standards to day-to-day duties?							
Apply and communicate to clients and/or the community ethical principles of proper animal use and care during their routine veterinary work?							
Manage common ethical dilemmas faced in veterinary practice? (i.e. euthanasia of animals with treatable illnesses or injuries, prophylactic use of antibiotic in large animal populations, etc.)							



FINAL ASSESSMENT OF VETERINARY LEGISLATION AND ETHICS							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in their understanding of the <u>Veterinary Legislation and Ethical Topics</u> that are important to veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 3: Regulatory Medicine

Day 1 Competency: 2.10 General Certification Procedures							
a.) Health Certificates							
<ul style="list-style-type: none"> • Animal or Herd Health Evaluations 				<ul style="list-style-type: none"> • Preparation of Health Certificates 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Appropriately evaluate an individual animal, herd of animals, or animal products for signs of infectious diseases or other conditions with the purpose to provide a health certificate? (i.e. for transportation, for sale, etc.)							
Appropriately complete health certificates and other transport or mobilization paperwork based on national regulations?							



FINAL ASSESSMENT OF GENERAL CERTIFICATION PROCEDURES							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in <u>General Certification Procedures</u> for veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 4: General Topics

Day 1 Competency: 2.11 Communication Skills							
a.) Scientific and Technical Communication							
<ul style="list-style-type: none"> • General Public 				<ul style="list-style-type: none"> • Health Professionals 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Clear and concise verbal communication to different audiences on veterinary and scientific information? (i.e. producers, animal owners, government officials, academics, general public)							
Effectively communicate to the general public through writing?							
Communicate to other health professionals through scientific writing?							



FINAL ASSESSMENT OF COMMUNICATION SKILLS							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in <u>Communication Skills</u> for veterinary preventive medicine and public health topics?							

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Evaluation of OIE Day 1 Competencies Session 3: Regulatory Medicine

Day 1 Competency: 3.1 Organization of Veterinary Services							
a.) National Veterinary Services (V.S.)							
• Definition and Organization of National Veterinary Services				• Cooperation of Private and Public Sector Veterinarians			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Describe how the national veterinary service is structured and organized at the central and local levels in your country?							
Describe the role of V.S. in protecting agriculture, public health and the economy? (i.e. surveillance of infectious diseases, outbreak investigations, food safety inspections, etc.)							
Describe the roles and the relationship between private and public sector veterinarians to deliver National veterinary services to Ethiopia? (i.e. How is the private sector structure from individual private practice to “corporative” practice in the industry?)							



b.) Veterinary Authority							
<ul style="list-style-type: none"> • Governmental Veterinary Services 				<ul style="list-style-type: none"> • International Cooperation 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Describe the governmental authority (both structure and function) that is responsible for ensuring the implementation of national animal health and animal welfare measures, international veterinary certification, and international standards and recommendations (i.e. OIE Terrestrial Code)							
Identify the laws and regulations that provide the Governmental V.S. their authority?							
Describe how the National Veterinary Authorities interact with other countries V.S. and international authorities? (i.e. Who is the official veterinary representative?)							



c.) Veterinary Statutory Body							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Describe the national authority that regulates veterinary professionals? (i.e. approves veterinary licenses/practice)							

d.) Evaluation of Veterinary Services							
<ul style="list-style-type: none"> OIE Performance of Veterinary Services (PVS) 							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Recognize the OIE PVS tool used to evaluate National Veterinary Services?							



FINAL ASSESSMENT OF ORGANIZATION OF VETERINARY SERVICES							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the <u>Organization of Veterinary Services</u> that are important for veterinary preventive medicine and public health?							

***Definitions:**

Veterinary Services: Refers to governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the OIE *Terrestrial and Aquatic Animal Health Codes* in the territory.

Veterinary Authority: Implies the governmental authority of a country, territory, or region that comprises veterinarians, other professionals, and paraprofessionals and with the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification, international standards and recommendations such as those in the OIE *Terrestrial Code*, and other relevant legislation related to animal and public health and animal welfare. The Veterinary Authority typically accredits or approves private-sector organisations, veterinarians, and veterinary paraprofessionals to deliver veterinary service functions.

Veterinary Statutory Body: Means an autonomous authority (typically at the national level) that regulates veterinarians and veterinary para-professionals.

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Not Sure: Do not know how the average DVM graduate is able to perform this competency.



Evaluation of OIE Day 1 Competencies Session 3: Regulatory Medicine

Day 1 Competency: 3.2 Inspection and Certification Procedures for Exportation							
a.) Health Status and Animal Product Inspection							
<ul style="list-style-type: none"> Health Evaluation and Certification for Export 							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Assess the health status of animals for certification purposes?							
Assess the safety of animal products for the purpose of drafting health certificates for transportation, domestic consumption, or exportation?							



b.) Health Certificates							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Appropriately complete health certificates and related paperwork based on international or national standards and regulations?							



FINAL ASSESSMENT OF INSPECTION AND CERTIFICATION PROCEDURES							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the <u>Inspection And Certification Procedures</u> important in veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 2: Infectious Diseases

Day 1 Competency: 3.3 Management of Contagious Diseases							
a.) Outbreak Investigation							
<ul style="list-style-type: none"> • Disease Surveillance • Identify the Source and Route of Transmission 				<ul style="list-style-type: none"> • Risk Communication 			
Is the average Day 1 DVM graduate:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Acquainted with monitoring and conducting disease surveillance?							
Able to use outbreak investigation tools to identify the source and route of transmission of an infectious disease?							
Able to communicate the epidemiological information obtained during the investigation to other public health professionals?							



b.) Components of Disease Prevention and Control Programs							
<ul style="list-style-type: none"> • Movement Control and Quarantine • Traceability • Humane Euthanasia 				<ul style="list-style-type: none"> • Carcass Disposal • Disinfection and Sanitization • Zoning 			
Is the average Day 1 DVM graduate Knowledgeable with:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Control of animal movement, animal products, equipment and people?							
Quarantine procedures and regulations of infected or at risk areas?							
Animal identification and traceability of animal movement during an outbreak investigation?							
Mass humane euthanasia methods of infected or exposed animals?							
Appropriate disposition of infectious carcasses and animal products?							

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b.) Components of Disease Prevention and Control Programs / Continued							
Is the average Day 1 DVM graduate Knowledgeable with:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Methods to disinfect premises and equipment as well as to destroy contaminated materials, in a manner that protects animal, human and environmental health?							
Zoning and compartmentalization principles applied during management of contagious diseases?							



FINAL ASSESSMENT OF MANAGEMENT OF CONTAGIOUS DISEASES							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the <u>Prevention and Management of Contagious Disease</u> that are important in veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 1: Epidemiology and Food Hygiene

Day 1 Competency: 3.4 Advanced Food Hygiene							
a.) Residue Testing Programmes							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Perform residue testing to ensure that animal products are free of adulterants such as antimicrobials, pesticides, hormones and metals that would pose risk to human health if consumed?							
b.) Animal Product Traceability							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Apply appropriate methods to trace animal products (i.e. foodborne outbreaks, food product recalls)							



c.) Food Safety							
<ul style="list-style-type: none"> • Sanitation of Food Processing Plant • Storage of Processed Animal Products 				<ul style="list-style-type: none"> • Safe Consumer Food Storage and Preparation • Health and Cleanliness of All Food Preparers from Farm to Fork 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Adequately review food processing sanitation procedures including worker health and cleanliness from farm to fork?							
Describe proper preparation or processing of animal products and their storage? (i.e. pasteurization and preservation methods for different products)							
Explain kitchen hygiene and good at-home practices to safely store and prepare food? (i.e. cooking temperatures, refrigeration temperature, etc.)							
Explain the proper health and cleanliness guidelines that food chain employees must follow?							



FINAL ASSESSMENT OF ADVANCE FOOD HYGIENE							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in their understanding of the <u>Application of Food Safety Practices</u> that are important to veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 4: General Topics

Day 1 Competency: 3.5 Application of Risk Analysis							
a.) Risk Analysis							
<ul style="list-style-type: none"> • Components of Risk Analysis • Risk Analysis Application(s) <li style="margin-left: 400px;">• Reference Sources 							
Is the average Day 1 DVM graduate:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Knowledgeable with the four main components of risk analysis (hazard identification, risk assessment, risk management, and risk communication) promoted by the OIE?							
Able to understand how risk analysis can be used to assess the risk of animal disease and residues of veterinary drugs? (i.e. during importation of animals or food products)							

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a.) Risk Analysis / Continued							
Is the average Day 1 DVM graduate:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Able to understand how risk analysis can be used to ensure veterinary services adequately protect the health of animals, humans, and the environment?							
Able to find up-to-date and reliable information on risk analysis? <i>(i.e. the OIE Handbook on Import Risk Analysis)</i>							



FINAL ASSESSMENT OF RISK ANALYSIS							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in their understanding of the <u>Basic Concepts of Risk Analysis</u> that are important in veterinary preventive medicine and public health?							

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Evaluation of OIE Day 1 Competencies Session 4: General Topics

Day 1 Competency: 3.6 Research							
a.) Study Design							
<ul style="list-style-type: none"> • Scientific Methods and Translational Research • Experimental Design 				<ul style="list-style-type: none"> • Sampling Strategies 			
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Identify different scientific methods in designing research?							
Aware of the concept of translational research?							
Understand how to formulate a scientific study and recognize the pros and cons of different study designs?							
Identify strategies for determining sample size and sampling strategies to minimize bias and ensure validity of the results?							



b.) Hypothesis Development and Testing							
<ul style="list-style-type: none"> Null vs Alternative Hypothesis Type I vs Type II Errors 				<ul style="list-style-type: none"> Statistical Significance 			
Is the average Day 1 DVM graduate:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Able to formulate a research hypothesis that summarizes the goals of the study?							
Knowledgeable with bias and type I and type II errors and their impact on research and scientific interpretation?							
Evaluate the statistical significance in a scientific study or manuscript?							



c.) Data Analysis and Scientific Writing							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Determine appropriate statistical test based on data collected? (i.e. continuous, ANOVA, T-Test proportions, Chi-square)							
Use common statistical software packages to analyze collected data?							
Write a scientific manuscript to communicate his or her research?							

d.) Conclusions							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Review a study to determine the appropriateness of the design, the validity of the results, and the strength of the conclusions?							



FINAL ASSESSMENT OF RESEARCH							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in veterinary preventive medicine and public health <u>Research Relating to Hypothesis Testing, Analyzing Data and Drawing Conclusions?</u>							

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Evaluation of OIE Day 1 Competencies Session 3: Regulatory Medicine

Day 1 Competency: 3.7 International Trade Framework							
a.) World Trade Organisation (WTO) and Standard Setting Organisations							
<ul style="list-style-type: none"> • Sanitary and Phytosanitary Measures • World Organisation for Animal Health (OIE) • <i>Codex Alimentarius</i> Commission (CAC) 							
Is the average Day 1 DVM graduate:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Acquainted with the WTO Sanitary and Phytosanitary Measures? (i.e. SPS Agreement)							
Aware of the roles and responsibilities of the OIE in developing science-based regulations governing international trade in animals and animal products?							
Aware with the <i>Codex Alimentarius</i> Commission (CAC) in developing science-based regulations governing international trade in food products of animal origin?							



b.) International Regulations							
<ul style="list-style-type: none"> • Implications of Disease on International Trade • Import Control Mechanisms and Certification Processes <li style="margin-left: 400px;">• Reference Sources 							
Is the average Day 1 DVM graduate:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Aware of the roles and responsibilities of the <i>current international regulations</i> for safe trade of animals and animal products?							
Knowledgeable of the implications of transboundary diseases on international trade? (i.e. understands the risks of loss of international trade of the affected animal and animal products)							
Acquainted with import control mechanisms and certification processes that protect the health of animals, the public, and the ecosystem in the importing country?							
Able to research current and reliable information regarding international trade? (i.e. current status of TADs in other countries, current international regulations, etc.)							



FINAL ASSESSMENT OF INTERNATIONAL TRADE FRAMEWORK							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the <u>Framework that Regulates International Trade in Animals and Animal Products</u> ?							

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Evaluation of OIE Day 1 Competencies Session 4: General Topics

Day 1 Competency: 3.8 Administration and Management							
a.) Good Management and Administration Practices							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Plan, organize, and lead people and resources to efficiently achieve common goals and objectives?							
b.) Interpersonal Communication Skills							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Effectively exchange information through verbal and non-verbal forms of communication? (i.e. tone of voice, facial expressions, gestures, and body language)							



c.) Effective Public Communication Skills							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Effectively communicate both written and orally with the public to improve public awareness or advocate for important veterinary issues?							

d.) Proficiency in at Least One OIE Language							
Is the average Day 1 DVM graduate able to:	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Proficiently speak, write, and read in at least one of the OIE official languages? (i.e. English, French, and/or Spanish)							



FINAL ASSESSMENT OF ADMINISTRATION AND MANAGEMENT							
	Not in Curriculum	Highly Competent	Moderately Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
In conclusion, is the average Day 1 DVM graduate competent in the <u>Management of Business or Organizational Operations</u> in veterinary preventive medicine and public health?							

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