Veterinary Eligibility and Education in Japan

Ryohei Nishimura, DVM, PhD
Chairman of Veterinary Affairs Council, Japan
Professor, Graduate School of Agricultural and Life Sciences
The University of Tokyo
Chapter Ⅰ - Article1 (General Provisions)

Veterinarians shall contribute to the improvement and promotion of animals’ hygiene and health, and public health through the administration of medical care and health guidance of rearing animals (cattle, horse, sheep, goat, pig, dog, cat, chicken...).
Veterinarians in Japan

- Clinicians: 19,600 (50.3%)
  - Farm animals: 4,270 (11%)
  - Small animals: 15,330 (39.3%)
- Public officials: 9,456 (23.9%)
  - Agriculture and forestry field: 3,409 (8.7%)
  - Public health field: 5,430 (13.9%)
  - Education and other fields: 511 (1.3%)
- Private organizations and corporations: 5,586 (14.3%)
- Others (non-active): 4,449 (11.4%)

TOTAL: 38,985 (active; 34,536)

Data by Ministry of Agriculture, Forestry and Fisheries, 2016
Chapter II - Article 3 (Licensing)

A person who wishes to become a veterinarian shall pass the National Examination for Veterinarians and receive a license from the Minister of Agriculture, Forestry and Fisheries.

Chapter IV - Article 17 (Administrative Affairs)

No person except a veterinarian shall engage in veterinary practice for rearing animals.
Exam Eligibility Requirements

Chapter 2 - Article 11

(i) a person who has studied in and graduated from a formal program in veterinary science at a university under the School Education Act (Act No. 26 of 1947).

(ii) a person who has graduated from a veterinary school in a foreign state, or who has acquired a veterinary practitioner’s license in a foreign state, who possesses at least the same level of knowledge and skills as the persons described in the one items above and whom the Minister of Agriculture, Forestry and Fisheries has approved as eligible to take the National Examination for Veterinary Practitioners.
The road to becoming a veterinarian

National Examination for Veterinarians

Veterinarian!

6-year formal program in veterinary science at a university
Veterinary Schools in Japan

- National: 10
- Prefectural: 1
- Private: 6

Locations:
- Tokyo
- Tokyo A & T
- Nippon
- Nippon Vet & Life Sci
- Azabu
- Okayama
- Osaka Prefec
- Gifu
- Tottori
- Yamaguchi
- Miyazaki
- Kagoshima
- Hokkaido
- Obihiro
- Rakunou Gauen
Recently, some of universities of national and prefectural ones have cooperate or joint curriculums.
Veterinary Education System in Japan

1. Liberal arts
2. Core curriculum + Advanced curriculum
3. Participation practices (Clinical Rotation)
4. Graduate school 4 years
5. Achievement test (CBT and OSCE)
6. National Examination
7. PhD
8. Start from every April
9. License of veterinarian (Given the Quality assurance)
10. In every February
### Core curriculum
(subject name recommended: approx. 2550hrs)

<table>
<thead>
<tr>
<th>Introduction and Vet Basic Subjects</th>
<th>Clinical Subjects</th>
<th>Applied Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Veterinary Medicine</td>
<td>General Internal Medicine</td>
<td>Animal Hygiene</td>
</tr>
<tr>
<td>Veterinary Ethics and Animal Welfare</td>
<td>Clinical Pathology</td>
<td>General Public Health</td>
</tr>
<tr>
<td>Veterinary Legislation</td>
<td>Clinical Pharmacology</td>
<td>Food Hygiene</td>
</tr>
<tr>
<td>Anatomy</td>
<td>Respiratory/Cardiovascular Diseases</td>
<td>Environmental Hygiene</td>
</tr>
<tr>
<td>Histology</td>
<td>Gastroenterology</td>
<td>Toxicology</td>
</tr>
<tr>
<td>Embryology</td>
<td>Urogenital Disease</td>
<td>Zoonosis</td>
</tr>
<tr>
<td>Physiology</td>
<td>Endocrinology and Metabolism</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>Clinical Nutrition</td>
<td>Wildlife Medicine</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>Neurological Disease</td>
<td></td>
</tr>
<tr>
<td>Veterinary Molecular Genetics and Breeding</td>
<td>Hematology/Immunity disease</td>
<td></td>
</tr>
<tr>
<td>Animal Ethology</td>
<td>Dermatogry</td>
<td></td>
</tr>
<tr>
<td>Laboratory Animal Science</td>
<td>Clinical Animal Behavior</td>
<td></td>
</tr>
<tr>
<td>Biological Radiology</td>
<td>General Surgery</td>
<td></td>
</tr>
</tbody>
</table>

### Subjects related to Pathological analysis and infection

- Pathology
- Immunology
- Bacteriology and Virology
- Poultry Disease
- Fish diseases
- Epizootiology
- Parasitology

<table>
<thead>
<tr>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice of Anatomy</td>
</tr>
<tr>
<td>Practice of Histology</td>
</tr>
<tr>
<td>Practice of physiology</td>
</tr>
<tr>
<td>Practice of Biochemistry</td>
</tr>
<tr>
<td>Practice of Pharmacology</td>
</tr>
<tr>
<td>Practice of Laboratory Animal</td>
</tr>
<tr>
<td>Practice of Pathology</td>
</tr>
<tr>
<td>Practice of Bacteriology and Virology</td>
</tr>
<tr>
<td>Practice of Parasitology</td>
</tr>
<tr>
<td>Practice of Animal Hygiene</td>
</tr>
<tr>
<td>Practice of Public Health</td>
</tr>
<tr>
<td>Practice of Food Hygiene</td>
</tr>
<tr>
<td>Practice of Toxicology</td>
</tr>
<tr>
<td>Practice of Small Animal Internal Medicine</td>
</tr>
<tr>
<td>Practice of Small Animal surgery</td>
</tr>
<tr>
<td>Practice of Image diagnosis</td>
</tr>
<tr>
<td>Practice of Domestic/farm Animal Medicine</td>
</tr>
<tr>
<td>Practice of Theriogenology</td>
</tr>
<tr>
<td>Participative Practices ((Clinical Rotation))</td>
</tr>
</tbody>
</table>

51 subjects and 19 practices + Graduate Thesis (119 credits and 60 credits + 6 credits)
Example of Advanced curriculums (approx. 1000hrs)

<In each University>
Emergency medicine, Dentistry, Hospital management, Exotic Animal Disease, Practice of Epidemiology, etc....

<Internships>
Clinical
Livestock Experiment Station, Pet Clinic, Farm, Gricultural Mutual Aid, etc ....

Applied Veterinary Medicine
Institute of Public Health, Quarantine, Slaughter House (carcass inspection), Infectious Disease Surveillance Center, etc....
Achievement test

CBT: Computer-based Testing
To evaluate the minimum vet knowledge of a student
  • Introduction and Vet Basic Subjects
  • Subjects related to Pathological analysis and infection
  • Applied Subjects (minimum without special/detail)
  • Clinical Subjects (minimum without special/detail)

OSCE: Objective Structured Clinical Examination
To evaluate the ability of a student for minimum veterinary clinical and communication techniques

Responsible Body of CBT and OSCE is NPO Veterinary Education Support Organization (vetESO)
The National Examination

- A paper-based test with 330 multiple-choice questions
- Covering basic medicine, clinical medicine and hygienics
  - 50 essential questions covering essential veterinary medical knowledge, ethics and animal welfare
  - 140 questions for basic medicine
  - 140 questions for clinical medicine
The Japanese National Examination for Veterinarians

- once a year
- at 3 sites (Tokyo, Sapporo and Fukuoka)
- for two days in mid to late February
- by the Ministry of Agriculture, Forestry and Fisheries
The standard of national examination

- is published and available for all candidates to view before taking the examination
- Includes 51 subjects
  - anatomy, physiology, pathology, surgery, gastroenterology...
Exam preparer's

- Exam questions are created by the members of the examination committee
  - 51 members
  - Faculty of veterinary schools and teaching hospitals
  - Researchers in veterinary science related institutes
  - Veterinary clinicians

- Used questions will not be publicized
Exam questions creation schedule

- 18 to 23 questions by each member ~ mid-August
  (about 3 times of 330 questions used in the exam)
- Selection and correction of the questions created by other 8 committee members ~ mid-January
  (22 whole day committee meetings)
- Printing
- National exam mid-February
# Time schedule of the national exam

<table>
<thead>
<tr>
<th>1\textsuperscript{st} day</th>
<th>2\textsuperscript{nd} day</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 11:30 category A</td>
<td>9:30 – 11:30 category C</td>
</tr>
<tr>
<td>13:00 – 13:50 essential Q</td>
<td>13:00 – 15:00 category D</td>
</tr>
<tr>
<td>14:50 – 16:50 category B</td>
<td></td>
</tr>
</tbody>
</table>

Category A, B: theory test  
( general, particulars)  
Category C, D: practical test  
( pictures, figures, tables)
The passing level

- A paper-based test with 330 multiple-choice questions
- Covering basic medicine, clinical medicine and hygienics
  - 50 essential questions covering essential veterinary medical knowledge, ethics and animal welfare
  - 140 questions for basic medicine
  - 140 questions for clinical medicine

70% or more correct answers

60% or more correct answers
### Applicants, successful candidates and pass rate

#: includes persons graduated from foreign vet schools

<table>
<thead>
<tr>
<th>year</th>
<th>new</th>
<th>former</th>
<th>total</th>
<th>new</th>
<th>former</th>
<th>total</th>
<th>new</th>
<th>former</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1064</td>
<td>197</td>
<td>1266</td>
<td>968</td>
<td>91</td>
<td>1060</td>
<td>91.0</td>
<td>46.2</td>
<td>83.7</td>
</tr>
<tr>
<td>2013</td>
<td>1058</td>
<td>188</td>
<td>1250</td>
<td>956</td>
<td>64</td>
<td>1023</td>
<td>90.4</td>
<td>34.0</td>
<td>81.8</td>
</tr>
<tr>
<td>2014</td>
<td>1022</td>
<td>208</td>
<td>1237</td>
<td>922</td>
<td>84</td>
<td>1011</td>
<td>90.2</td>
<td>40.5</td>
<td>81.7</td>
</tr>
<tr>
<td>2015</td>
<td>1009</td>
<td>220</td>
<td>1241</td>
<td>856</td>
<td>77</td>
<td>938</td>
<td>84.8</td>
<td>35.0</td>
<td>75.6</td>
</tr>
<tr>
<td>2016</td>
<td>1009</td>
<td>282</td>
<td>1299</td>
<td>888</td>
<td>135</td>
<td>1024</td>
<td>88.0</td>
<td>47.9</td>
<td>78.8</td>
</tr>
<tr>
<td>2017</td>
<td>1028</td>
<td>258</td>
<td>1296</td>
<td>889</td>
<td>98</td>
<td>1000</td>
<td>87.5</td>
<td>38.0</td>
<td>77.2</td>
</tr>
<tr>
<td>2018</td>
<td>966</td>
<td>291</td>
<td>1277</td>
<td>936</td>
<td>181</td>
<td>1128</td>
<td>96.9</td>
<td>62.5</td>
<td>88.3</td>
</tr>
<tr>
<td>Ave.</td>
<td>1022</td>
<td>235</td>
<td>1267</td>
<td>916</td>
<td>104</td>
<td>1026</td>
<td>89.8</td>
<td>43.4</td>
<td>81.0</td>
</tr>
</tbody>
</table>
Thank you for your attention!