Quarantine System and Regulations on Horse Quarantine in Rep. of Korea

JaeHong CHANG
Deputy director, DVM
Quarantine Policy Division
The Ministry of Agriculture, Food and Rural Affairs
Table of Contents

I  Status of Horse Breeding and Disease Outbreaks

II Livestock Biosecurity System of Korea

III Quarantine Regulations for Horses

IV Animal Import Quarantine System of Korea
Status of Horse Breeding and Disease Outbreaks
The Republic of Korea is composed of 9 provinces, 6 autonomous cities and the Seoul Special City.

I. Status of Horse Breeding and Disease Outbreaks
## I. Status of Horse Breeding and Disease Outbreaks

### Livestock Breeding Status

<table>
<thead>
<tr>
<th>Year</th>
<th>Classification</th>
<th>Korean Beef Cattle</th>
<th>Dairy Cattle</th>
<th>Hogs</th>
<th>Chickens</th>
<th>Horses</th>
<th>Mountain Goats</th>
<th>Sheep</th>
<th>Deer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>NO. of Farm</td>
<td>172</td>
<td>6</td>
<td>7</td>
<td>3.6</td>
<td>1.9</td>
<td>15</td>
<td>0.2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>NO. of Head</td>
<td>2,922</td>
<td>430</td>
<td>9,881</td>
<td>149,200</td>
<td>30</td>
<td>243</td>
<td>8</td>
<td>65</td>
</tr>
<tr>
<td>2011</td>
<td>NO. of Farm</td>
<td>163</td>
<td>6</td>
<td>6</td>
<td>3.4</td>
<td>1.9</td>
<td>14</td>
<td>0.2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>NO. of Head</td>
<td>2,950</td>
<td>404</td>
<td>8,171</td>
<td>149,511</td>
<td>30</td>
<td>248</td>
<td>3</td>
<td>51</td>
</tr>
<tr>
<td>2012</td>
<td>NO. of Farm</td>
<td>153</td>
<td>6</td>
<td>962</td>
<td>3.1</td>
<td>1.9</td>
<td>12</td>
<td>0.1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>NO. of Head</td>
<td>3,059</td>
<td>420</td>
<td>9,916</td>
<td>146,836</td>
<td>30</td>
<td>257</td>
<td>3</td>
<td>48</td>
</tr>
</tbody>
</table>

Livestock Species under the Act on the Prevention of Contagious Animal Diseases (17 species): cattle, pigs, sheep, goats, donkeys, mules, chickens, ducks, geese, turkeys, deer, rabbits, dogs, cats, honey bees, and ostriches
# I. Status of Horse Breeding and Disease Outbreaks

## Breeding Status of Horses

29,698 horses bred at 1,912 farms households as of 2012 – 68.5% in Jeju, 0.5% in Incheon

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Farms</th>
<th>No. of Heads</th>
<th>Note (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seoul</td>
<td>3</td>
<td>110</td>
<td>0.4</td>
</tr>
<tr>
<td>Busan</td>
<td>4</td>
<td>1013</td>
<td>3.4</td>
</tr>
<tr>
<td>Daegu</td>
<td>5</td>
<td>46</td>
<td>0.2</td>
</tr>
<tr>
<td>Incheon</td>
<td>21</td>
<td>157</td>
<td>0.5</td>
</tr>
<tr>
<td>Gwangju</td>
<td>7</td>
<td>93</td>
<td>0.3</td>
</tr>
<tr>
<td>Daejeon</td>
<td>6</td>
<td>61</td>
<td>0.2</td>
</tr>
<tr>
<td>Ulsan</td>
<td>13</td>
<td>91</td>
<td>0.3</td>
</tr>
<tr>
<td>Sejong</td>
<td>7</td>
<td>28</td>
<td>0.1</td>
</tr>
<tr>
<td>Gyeonggi</td>
<td>158</td>
<td>4206</td>
<td>14.1</td>
</tr>
<tr>
<td>Gangwon</td>
<td>79</td>
<td>389</td>
<td>1.3</td>
</tr>
<tr>
<td>Chungchung</td>
<td>169 (north 65, south 104)</td>
<td>738 (north 317, south 421)</td>
<td>2.5</td>
</tr>
<tr>
<td>Jeolla</td>
<td>153 (north 72, south 81)</td>
<td>1198 (north 732, south 466)</td>
<td>4.0</td>
</tr>
<tr>
<td>Gyeongsang</td>
<td>206 (north 129, south 77)</td>
<td>1231 (north 846, south 385)</td>
<td>4.1</td>
</tr>
<tr>
<td>Jeju</td>
<td><strong>1,081</strong></td>
<td><strong>20,337</strong></td>
<td><strong>68.5</strong></td>
</tr>
<tr>
<td>Total</td>
<td><strong>1,912</strong></td>
<td><strong>29,698</strong></td>
<td></td>
</tr>
</tbody>
</table>
I. Status of Horse Breeding and Disease Outbreaks

The Status of Horse Disease Outbreaks

• Horse Disease Outbreaks: None
  * African horse sickness, Vesicular Stomatitis, Glanders, Equine infectious anemia, Equine viral arteritis, Dourine, Equine contagious metritis, EEE, WEE, Venezuelan equine encephalomyelitis, West Nile fever

• OIE-listed Equine Disease Outbreak: two cases of Equine piroplasmosis (2010, Jeju-island, 2011, Gyeonggi)
  * African horse sickness, Equine contagious metritis, Dourine, Glanders, EEE, WEE, Venezuelan equine encephalomyelitis, Equine infectious anemia, Equine Influenza, Equine piroplasmosis, Equine rhinopneumonitis, Equine viral arteritis

• Outbreak of other horse diseases
  - Japanese encephalitis(pigs): None after a single outbreak in Gyeongsangnam-do in 2007
  - Anthrax: None after a single outbreak in Gyeongsangbuk-do in 2008
  - Rabies: Sporadic Outbreaks only in Gyeonggi-do and Gangwon-do (4 in 2011 → 7 in 2012 → 6 in 2013)

* No Surra, Nipah and Hendra virus infections occurred.
Livestock Biosecurity System of Korea
II. Livestock Biosecurity System of Korea

Veterinary Agencies

Ministry of Agriculture, Food and Rural Affairs (MAFRA)

- Animal and Plant Quarantine Inspection Agency (QIA)
- 17 Provincial Gov. (Livestock Division)
  - 249 Cities (Divisions in charge of livestock)
  - 43 Livestock Health Labs

Livestock Farms

Related associations: KRA, NACF, NLCF, KAHPA, etc

Governmental
Non-governmental
II. Livestock Biosecurity System of Korea

**MAFRA**
- Enforces Livestock Biosecurity Laws and Systems
- Establishes and Implements Livestock Biosecurity Strategies and Policies
- Establishes and Implements Quarantine Measures for Import/Export Animals and Livestock Products

**QIA**
- Reviews Techniques to Develop National Biosecurity Measures
- Provides Expertise in Implementing National Biosecurity Related Works and Biosecurity Techniques
- Produces and Supplies Diagnostic Kits, Evaluates Diseases and Checks Serums of Sick Animals
- Quarantine and Inspection of Import/Export Animals, Licensing and Approvals of Veterinary Drugs and Quality Control
- Develops Diagnoses and Veterinary Science Technologies

**Government Organization**
- Executes National Biosecurity Policies (for Si/Do and Si/Gun/Gu)
- Gives Instructions for Farming Households
- Approves Licenses and Monitors Veterinary Pharmacists
- Evaluates Livestock Diseases, Conducts Serum Tests, and Teaches Biosecurity Techniques to Farming Communities
- Conducts Tests on Slaughter/Crude Milk/Processed Products (some 44 Livestock Quarantine Agencies)

**Province/City/County**
What to Do When an Epidemic Breaks Out

- **(Reporting)** When livestock infected with diseases are found, the person working in the field of the livestock industry (breeders, veterinarians, transporters, etc.) must immediately report to veterinary authority.
  
  * The failure to do so may result in imprisonment up to one-year, and fined up to 5M Korean won.

- **(Epidemiological Surveys)** Veterinary authority performs epidemiological surveys when it is recognized that livestock diseases broke out or may have broken out.

- **(Movement Restrictions)** When notifiable livestock diseases under the Act on the Prevention of Contagious Disease occur, livestock animals infected or thought to have been infected are subject to movement restrictions.

- **(Disinfection)** Those in the Livestock Industry have obligations to install disinfection facilities and disinfect their own facilities pursuant to government standards.

- **(Stamping out)** Animals infected with type 1 and type 2 diseases are subject to stamping out, and animals in areas likely to have been affected may be slaughtered.
II. Livestock Biosecurity System of Korea

Equine Disease Monitoring – National Livestock Biosecurity

• (Equine Disease Monitoring) Carry out serum tests on 1,300 heads of horses every year against 6 type horse diseases

  – Target Disease: Japanese Encephalitis, Equine Viral Arteritis, Vesicular Stomatitis, African Horse Sickness, Equine Infectious Anemia, West Nile Fever

☞ Establish & adjust national livestock biosecurity policies in accordance with the monitoring result.
Quarantine Regulations for Horses
Ⅲ. Quarantine Regulations for Horses

- Act on The Prevention of Contagious Animal Disease
  - Enforcement ordinances and Enforcement regulations

- Import Health Requirement for Horses
  - Notification of MAFRA
65 kinds of livestock epidemics are grouped into 3 types according to their risk level/damage level/propagation velocity.

### Type 1 Animal diseases
- 15 types including FMD, Classical swine fever, HPAI, etc.
  * Equine(2) : AHS, VS

### Type 2 Animal diseases
- 32 types including Brucellosis, Swine Influenza, Fowl cholera, etc.
  * Equine(9) : Glanders, EIA, EVA, Dourine, EIM, EEE, WEE, VEE, WNF

### Extra Type 2 diseases
- 18 types including Bovine Ephemeral fever, Swine Erysipelas, Marek’s disease, etc.

Ⅲ. Quarantine Regulations for Horses

Status of Livestock Epidemics Designated by the Court
### III. Quarantine Regulations for Horses

<table>
<thead>
<tr>
<th>Criteria</th>
<th>IHR for horses (common IHR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease free status</td>
<td>○ <strong>Disease free for two years prior to shipment (region)</strong>&lt;br&gt;There has been no outbreak of <em>Dourine, Glanders, African Horse Sickness, Venezuelan Equine Encephalomyelitis</em> and <em>Vesicular Stomatitis</em> and vaccination against the above mentioned diseases has not been practiced during the <strong>two years prior to shipment</strong>.</td>
</tr>
<tr>
<td></td>
<td>○ <strong>Disease free for 60 days prior to quarantine (region)</strong>&lt;br&gt;There has been no outbreak of <em>West Nile fever</em> for at least 60 days prior to pre-export quarantine isolation.</td>
</tr>
<tr>
<td></td>
<td>○ <strong>Disease free for 6 months prior to shipment (premises)</strong>&lt;br&gt;The premises where the horses for export have been born and raised must have been free from <em>equine infectious anemia, equine contagious metritis, equine piroplasmosis, equine viral arteritis, strangles, rabies, horse pox, horse mange, equine infectious abortion, Surra, pseudofarcy and anthrax</em> for 6 months prior to export shipment.</td>
</tr>
</tbody>
</table>
### Ⅲ. Quarantine Regulations for Horses

<table>
<thead>
<tr>
<th>Criteria</th>
<th>IHR for horses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-export isolation</strong></td>
<td>The horses for export shall have been continuously resident for at least 7 days immediately preceding export in a quarantine facility or premise which has been approved and supervised by an official veterinarian of the exporting country.</td>
</tr>
<tr>
<td><strong>Testing</strong></td>
<td>During the pre-export isolation period the horses for export must be subjected to tests to a laboratory approved by the exporting country, where the diseases listed in Appendix 1* must be carried out with negative results.</td>
</tr>
</tbody>
</table>

### III. Quarantine Regulations for Horses

<table>
<thead>
<tr>
<th>Criteria</th>
<th>IHR for horses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vaccination</strong></td>
<td>Vaccination recommended: equine influenza, equine Japanese encephalitis, equine rhinopneumonitis, getah virus infection. Tetanus: Antiserum inoculation within 7 days prior to shipment recommended.</td>
</tr>
<tr>
<td><strong>Quarantine</strong></td>
<td>○ During the pre-export isolation period horses for export must have no contact with any other horses not of the same health status. ○ The horses for export must be transported using crates, vehicles, vessels or aircraft disinfected with government approved disinfectants. ○ All feed and litter supplied for the horses during the period of quarantine and transportation must be sanitary and be obtained from the horses’ region of origin.</td>
</tr>
</tbody>
</table>
Animal Import Quarantine system of Korea
Quarantine Procedures

- Arrival of imported horse
- On-board inspection
- On-site inspection (Unloading)
- Transportation
- Deposit in quarantine facility
- Quarantine application
IV. Animal Import Quarantine System of Korea

**Quarantine Procedures**

- **Quarantine Period for Horses**
  - Import: 10 days
  - Export: 5 days
IV. Animal Import Quarantine System of Korea

**Quarantine Procedures**

**Document Review**
- Check import prohibited region or country
- Check animal health requirement

**Clinical Inspection**
- Cross check the animal and health certificate
- Individual clinical inspection

**Laboratory Test**
- Microbiological Test
- Serological Test
- Pathological Test
IV. Animal Import Quarantine System of Korea

1988 Seoul Olympic
IV. Animal Import Quarantine System of Korea

1988 Seoul Olympic

- Animal Health Certificate
  - Must be issued by exporting country
  - Shall comply with 「Temporary Health Requirements for Horse」
- Quarantine Facility and Period
  - 4 official quarantine venues, at least 3 days
- Inspection of Disease
  - Laboratory test: AHS, Dourine, Glanders, EIA, other diseases clinical test
IV. Animal Import Quarantine System of Korea

2002 Busan Asian Games

- Animal Health Certificate
  - Must be issued by exporting country
  - Shall comply with 「Import Health Requirements for Horse」
- Quarantine Facility(Venue) and Period
  - The Equestrian Competition Area of Busan Asian Games
  - At least 10 days
- Inspection of Disease
  - following the Quarantine Measurement and Standard for the Designated Quarantine Items
### IV. Animal Import Quarantine System of Korea

#### 2013 Korea-Japan International Horse Race—Temporary IHR

- A race meeting jointly held by KRA and NAR

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>No. of Runner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Tournament</td>
<td>Sep 1, 2013</td>
<td>KOR (Seoul Race Park)</td>
</tr>
<tr>
<td>2nd Tournament</td>
<td>Nov 13, 2013</td>
<td>JPN (Ohi Racecourse)</td>
</tr>
</tbody>
</table>

- Conclusion of Temporary IHR for horses for the 2013 KOR-JPN Race
  - Agreement on Japan’s IHR for Korean racehorses (‘13.8.7)
  - Agreement on Korea’s IHR for Japanese racehorses (‘13.7.29)
    * Limiting the period of stay in Japan up to 60 days; if the duration is within 14 days, no laboratory test is needed with an additional certificate of Japanese gov’t upon shipment to Korea
IV. Animal Import Quarantine System of Korea

2013 Korea-Japan International Horse Race

◆ Health Certificate
  ▪ Must be issued by exporting country
  ▪ Shall comply with 「Health Requirements for Korea-Japan International Horse Race」

◆ Quarantine Venue and Period
  ▪ Seoul Equestrian Park
  ▪ At least 10 days

◆ Inspection of Disease
  ▪ Following the Health Requirements mentioned above
IV. Animal Import Quarantine System of Korea

2014 Incheon Asian Game

• Establish additional import & export health requirements for Incheon Asian Equestrian Game, consult with participating countries.
  - Considering the application of the HHP and EDFZ concept with OIE
Thank You!!