

AMERICAS: REGIONAL SURVEYS ON AFRICAN SWINE FEVER RISK AND PREPAREDNESS

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Dr. Andrea Ellis, Senior Veterinary Science Advisory to CVO and OIE Delegate for Canada

Acknowledgements

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- OIE Regional Office for the Americas
- FAO
- Participating countries

Background

- To prepare for this meeting, the Executive Board of the OIE Regional Commission for the Americas decided to survey countries of the region to assist in prioritizing areas for strengthening preparedness for ASF and opportunities for exchange.
- Two questionnaires were sent to all countries in the Americas -Member and Non OIE Members- to assess the risk of entry of ASF and state of preparedness.
- The questionnaires were developed by FAO and used successfully in Asia and Africa.

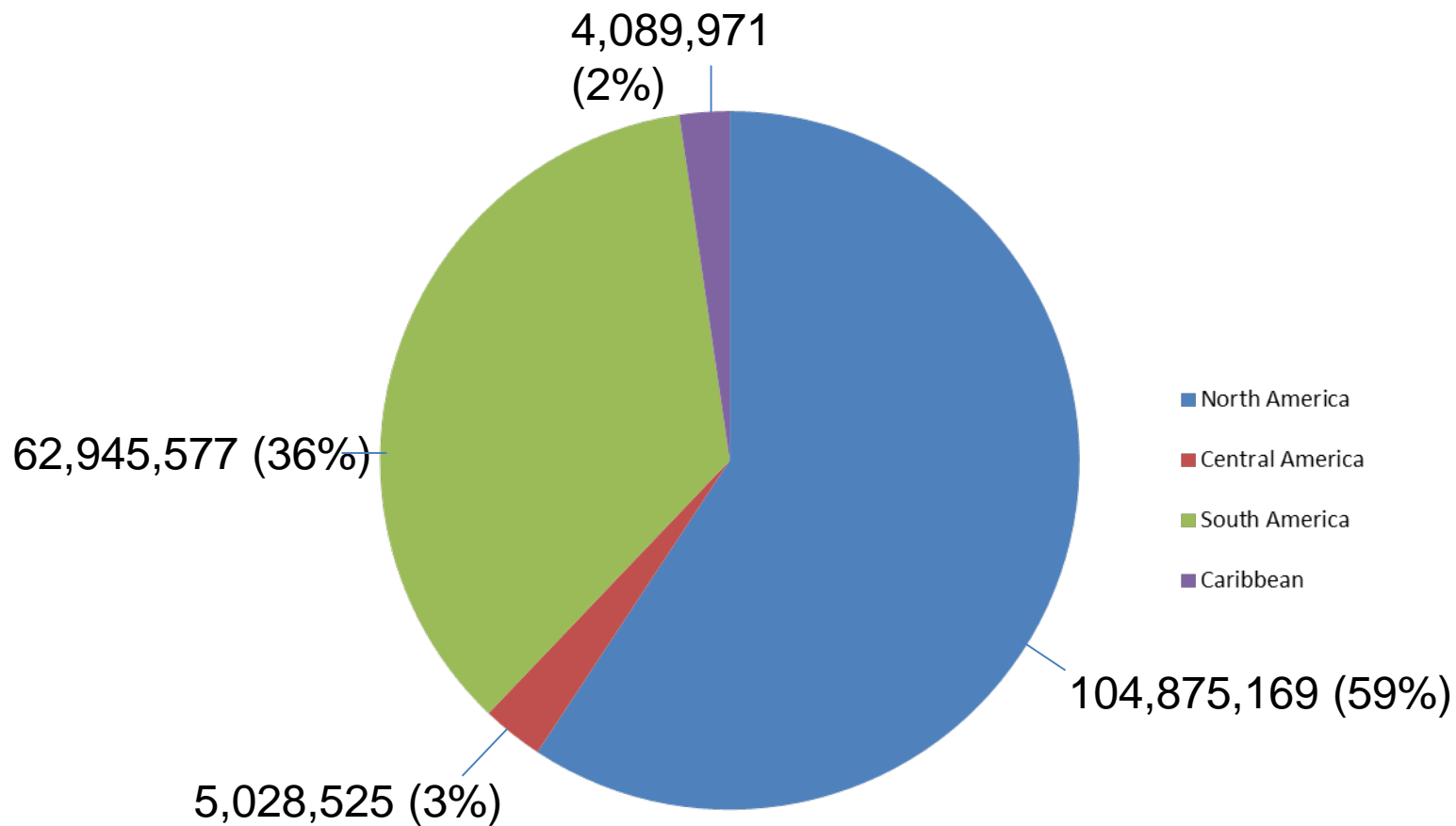
Objectives

- To guide the SGE-ASF for the Americas on the capacities needed to prevent entry and manage a possible incursion of ASF.
- Not intended to single out countries, but to inform where efforts should be focussed.
- To provide a comparative analysis to identify opportunities for sharing of best practices, twinning and training.

Pig production in the Americas

- To provide some context on the pig industry in the Americas FAO STATs were consulted.
- ASF is more important economically for some countries than others, but can be a risk to region if introduced even to subsistence farms.

PIG POPULATION IN AMERICAS REGION (FAO STAT, 2017)



N= 176,939,242

RISK PATHWAYS ASSESSMENT

Risk Pathways Assessment: Methods

- Questions divided into risk from live pigs, pork/pig products, fomites and other (gaps in preparedness)
- Originally designed to generate a score but we did not use the scores- all “low”
- Descriptive analysis of the binary responses (yes/no) without weighting

Risk Pathways Assessment: Tool

| Risk pathways | Main question | No | Questions | Weight | Criteria | Answer | Risk level | Official | Unofficial | Risk level unofficial |
|---------------|---|----|--|--------|---------------------------|--------|------------|----------|------------|-----------------------|
| live pigs | What is the risk (likelihood) of (at least 1) pig in your country to become infected with ASFV as a result of importation of live pigs from infected countries? | 1 | Does your country officially import live pigs from currently infected countries ? | 1 | Yes = 1 No = 0 | | Low | | | Low |
| | | 2 | Is there a value chain of live pigs study available? <i>(this question will not be considered for risk profiling)</i> | | Yes No | | | | | |
| | | 3 | How many pigs have been officially imported during the past year from the infected countries? <i>(this question will not be considered for risk profiling)</i> | | Value | | | | | |
| | | 4 | Is the health status of the imported farm pigs known and acceptable? | 1 | Yes = 0 No = 1 | | | | | |
| | | 5 | Which are the quarantine measures are applied in your country for imported pigs? - A. No quarantine - B. Quarantine < 7 days - C. Quarantine > 7 days or ASF laboratory testing | 1 | A = 1 B = 0.5 C = 0 | | | | | |
| | | 6 | Are there veterinary inspectors who have been trained on ASF at border inspection points? | 0.5 | Yes = 0 No = 1 | | | | | |
| | | 7 | Do the border inspection points have the capacity and infrastructure to test live pigs for ASF? | 0.75 | Y = 0 N = 1 | | | | | |
| | | 8 | Is it a common practice that pig farms importing pigs from infected countries implement preventive measures such as - Quarantine > 7 days before introducing new animals - Checking farm or animal health status before introducing new animals - High biosecurity - Purchase from trusted sources | 1 | Y = 0 N = 1 | | | | | |
| | | 9 | Does your country unofficially import live pigs from currently infected countries ? What is it? | 1 | Yes = 1 No = 0 | | | | | |

- 29 surveys of 40 (72.5%) returned - good response rate

Risk Pathways Results: Live Pigs

- **Importation of Live Pigs:**
 - No country in Americas officially imports live pigs from ASF infected countries.
 - In all countries the health status of the imported farms/pigs known and acceptable.
 - In 62% of countries, veterinary inspectors who have been trained on ASF are at border inspection points.
 - 21% of countries have the capacity and infrastructure at border inspection points to test live pigs for ASF.

Risk Pathways Results: Pig products

- **Importation of Pig Products:**
 - 90% of countries have measures in place at border to prevent or discourage people from bringing infected pork products.
 - However, in 28% of countries, its common for people coming back from currently infected countries to bring pork products in their luggage.
 - 10% of countries unofficially import pork/pig products for business purposes from countries currently infected with ASF.
 - 55% of countries have swill feeding a common practice.
 - 62% reported having scavenging pigs and 52% have landfills which are not protected from wild pigs.

Risk Pathways Results: Contaminated fomites

- **Exposure to contaminated fomites:**
 - In 97% of countries it is not common for citizens to work in pig associated jobs in infected countries.
 - **59%** of countries do not have facilities and required/enforced procedures for cleaning and disinfection of vehicles transporting pig and pork products at the border inspection points.
 - In **59%** of countries, trucks used for transport of imported pigs / pig products are also used to transport items to pig farms such as feed, pigs, equipment.

Risk Pathways Results: Other factors

- 64% of countries said a majority of veterinarians have ASF knowledge.
- 68% reported there are laboratories in their countries which can diagnose ASF.
- Yet only 50% of countries have a surveillance program in domestic pigs and 25% have in wild pigs.
- 36% of countries have an official ASF prevention and control program and 46% have a compensation policy that would include ASF.

Risk Pathways: Conclusions

- Live animals import
 - Comparatively lower risk since no countries importing live animals from ASF infected countries.
- Importation of pig products
 - Comparatively higher risk due to unofficial importation and visitors bringing pig products from ASF infected countries.
- Contaminated fomites
 - Could play very critical role in transmission of ASF in between neighboring countries in Americas in case ASF is introduced.
- Other factors
 - Although there is some knowledge of ASF there is lots of room for improvement in preparedness.

ASF PREPAREDNESS CHECKLIST

Emergency Preparedness Checklist: Tool

Emergency Preparedness Checklist for African swine fever

For each statement, indicate the status: Yes (green), In progress/Ongoing (yellow), No (red), Unknown (white)

List the gaps, the necessary actions to undertake, the responsible office(s) to follow up the action and provide a deadline for completion.

| Does your country have the following preparedness measures in place to manage the disease? | Status | Gaps | Actions | Responsible office |
|--|--------|------|---------|--------------------|
| Requirement for veterinarians, paraprofessionals, farmers, and others to report suspected cases in place. | | | | |
| Protocol and framework support (such as a reporting hotline/website) for reporting suspected cases from the field to the CVO in place. | | | | |
| Local animal health officers stationed throughout the country to respond to suspected cases or to outbreaks. | | | | |
| Framework and mechanism for rumor tracking in place. | | | | |
| National surveillance and laboratory framework to collect and package samples for analysis in place. | | | | |
| National incident management system and framework in place to respond (To include rapid response teams, incident command, and incident coordination through an animal health emergency operations center). | | | | |

31 surveys of 40 (77.5%) returned - good response rate

Emergency Preparedness Checklist: Methods

- List of 42 questions related to preparedness
- Grouped into 4 main topics : i) legal authority, ii) human resources, iii) infrastructure, iv) preparedness (response plan, training, exercises)
- Each area applied equal weights (25% each) to give a score out of 100

Questions covered.....

Legal Authority

- Legal obligation to report suspected case, issue/enforce a quarantine, stop movement, biosecurity orders, stamping out, border control and communicate with other countries.

Infrastructure

- Availability and access to national funds, national Incident command system, national surveillance and laboratory framework, equipment supplies and vehicles to support investigation, laboratory testing and response.

Human Resources

- Field and central animal health staff across the country, laboratory personnel, framework and persons for rumor tracking.

Preparedness

- Response plans: National and sub-national plan including SOPs for prompt field investigation, sample collection, surveillance and response.
- Training: for activities of all human resources identified above.
- Exercises: Discussion-based and operational, reviews to update plans from lessons learned.

Countries ranked by Total Score in Americas: Preparedness survey

| TOP | MIDDLE | LOWER THIRD |
|-------|--------|-------------|
| 1 NA | 11 CA | 21 CAC |
| 2 SA | 12 CAC | 22 CAC |
| 3 NA | 13 SA | 23 SA |
| 4 NA | 14 SA | 24 CAC |
| 5 CAC | 15 SA | 25 CA |
| 6 CA | 16 CA | 26 CA |
| 7 SA | 17 CAC | 27 CAC |
| 8 CA | 18 SA | 28 CAC |
| 9 SA | 19 CAC | 29 CA |
| 10 SA | 20 SA | 30 CAC |
| | | 31 CAC |

Countries ranked by Total Score in Sub-Regions : Preparedness survey

| NORTH AMERICA | SOUTH AMERICA | CARIBBEAN |
|-----------------|---------------|-----------|
| 1 NA | 11 SA | 21 CAC |
| 2 NA | 12 SA | 22 CAC |
| 3 NA | 13 SA | 23 CAC |
| CENTRAL AMERICA | 14 SA | 24 CAC |
| 4 CA | 15 SA | 25 CAC |
| 5 CA | 16 SA | 26 CAC |
| 6 CA | 17 SA | 27 CAC |
| 7 CA | 18 SA | 28 CAC |
| 8 CA | 19 SA | 29 CAC |
| 9 CA | 20 SA | 30 CAC |
| 10 CA | | 31 CAC |

Areas to prioritize

- For each topic, a percentage of positive responses was calculated and categorized as
 - Green (more than 80%),
 - Yellow (less than 81% & more than 60%)
 - Pink (less than 61%)
- Can be used for a SWOT analysis: strengths, weaknesses, opportunities and threats

SWOT analysis in Sub-Regions :

North & Central America

| Categories Name | Legal Authority | Human Resources | Infrastructure | Response plan | Training | Exercises |
|-----------------|-----------------|-----------------|----------------|---------------|----------|-----------|
| Maximum score | 25 | 25 | 25 | 12.5 | 6.25 | 6.25 |
| North America | | | | | | |
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| Central America | | | | | | |
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SWOT analysis in Sub-Regions :

South America

| Categories Name | Legal Authority | Human Resources | Infrastructure | Response plan | Training | Exercises |
|-----------------|-----------------|-----------------|----------------|---------------|----------|-----------|
| Maximum score | 25 | 25 | 25 | 12.5 | 6.25 | 6.25 |
| South America | | | | | | |
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Discussion points

- What areas are the highest priority?
- What can be done through the ASF Standing Group of Experts under GF-TADs?
- What existing initiatives could be modified to meet these needs?

THANK YOU! GRACIAS!