

Barriers to notification of disease events in Asia and the Pacific

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for Animal
Health

Organisation
mondiale
de la santé
animale

Organización
Mundial
de Sanidad
Animal

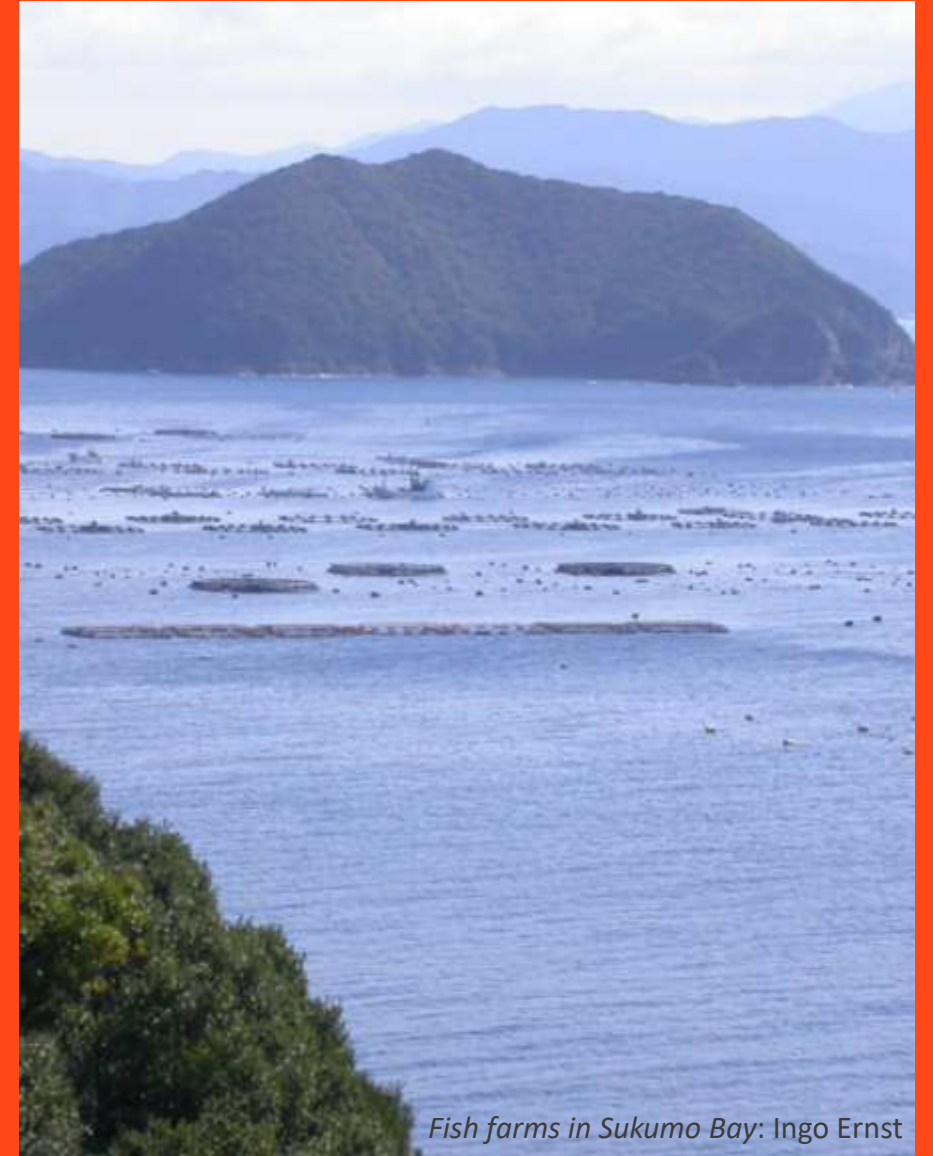


Presentation overview

1. Introduction
2. Methods
3. Results
4. Barriers to notification
5. Conclusions and recommendations



1. Introduction



Fish farms in Sukumo Bay: Ingo Ernst



Project objectives

1. Identify and analyse key barriers to disease notification for both terrestrial and aquatic animals, and
2. Develop strategies and recommendations to overcome the identified barriers.

Why is this project needed?

- Notification of disease events is a fundamental obligation of WOAH Members since 1924. Reflected in Chapter 1.1. of Aquatic and Terrestrial Codes.
- The purpose (transparency of global animal disease situation) is a shared benefit among Members.

BUT...

- In practice, obligations are not met consistently
- Notification practice does not align with its purpose and importance.

Article 5

The Governments shall forward to the Office:

1. By telegram, notification¹ of the first cases of rinderpest or foot and mouth disease observed in a country or an area hitherto free from the infection.
2. At regular intervals, bulletins prepared according to a model adopted by the Committee, giving information on the presence and distribution of the following diseases:



Scope

1. Immediate notifications for listed diseases (in accordance with article 1.1.3 of the Aquatic Code and Terrestrial Code)
2. Immediate notification for emerging diseases (in accordance with article 1.1.4 of the Aquatic Code and Terrestrial Code).

Out of scope:

- Semestral reporting
- Annual reports



2. Methods





Methodology

1. **Online survey** to explore the key elements of the notification process.
2. **Focus group workshops** to share preliminary survey results, validate findings, and explore root causes.



Methodology – survey design

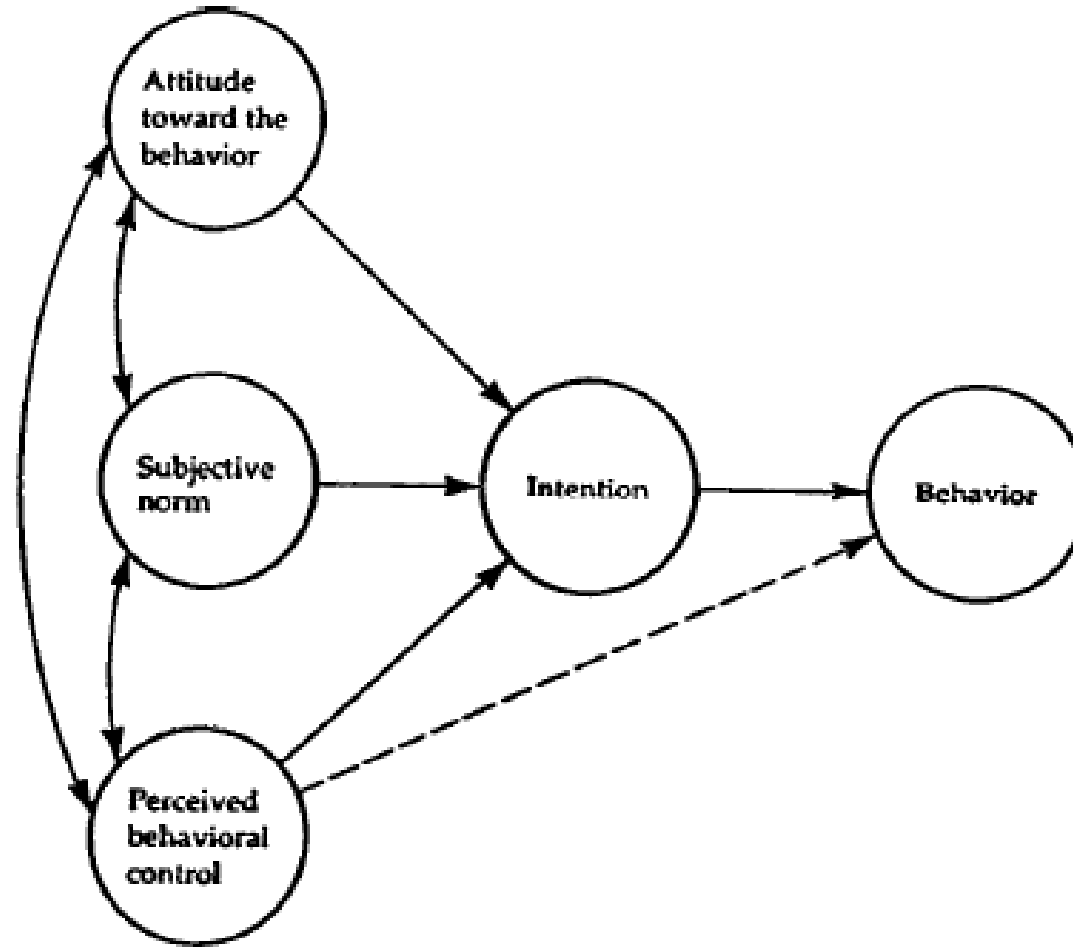
- Survey to measure factors influencing notification
- Behavioural approaches incorporated:
 - Theory of Planned Behaviour
 - Integrative Model of Organisational Trust
- Best practice survey design used
- Each measure was the average of at least 3 questions.



Theory of Planned Behaviour

- Widely used framework to understand human actions in different contexts (e.g. education, health, biosecurity)
- Aims to explain how behaviour is influenced by:
 - **attitudes** toward a behaviour (i.e. whether the person has a favourable or unfavourable evaluation of the behaviour)
 - **subjective norms** (i.e. perceived social pressure to perform or not perform the behaviour),
 - **perceived behavioural control** (i.e. perceived ease or difficulty of performing the behaviour, reflecting past experience and anticipated impediments).

Theory of Planned Behaviour

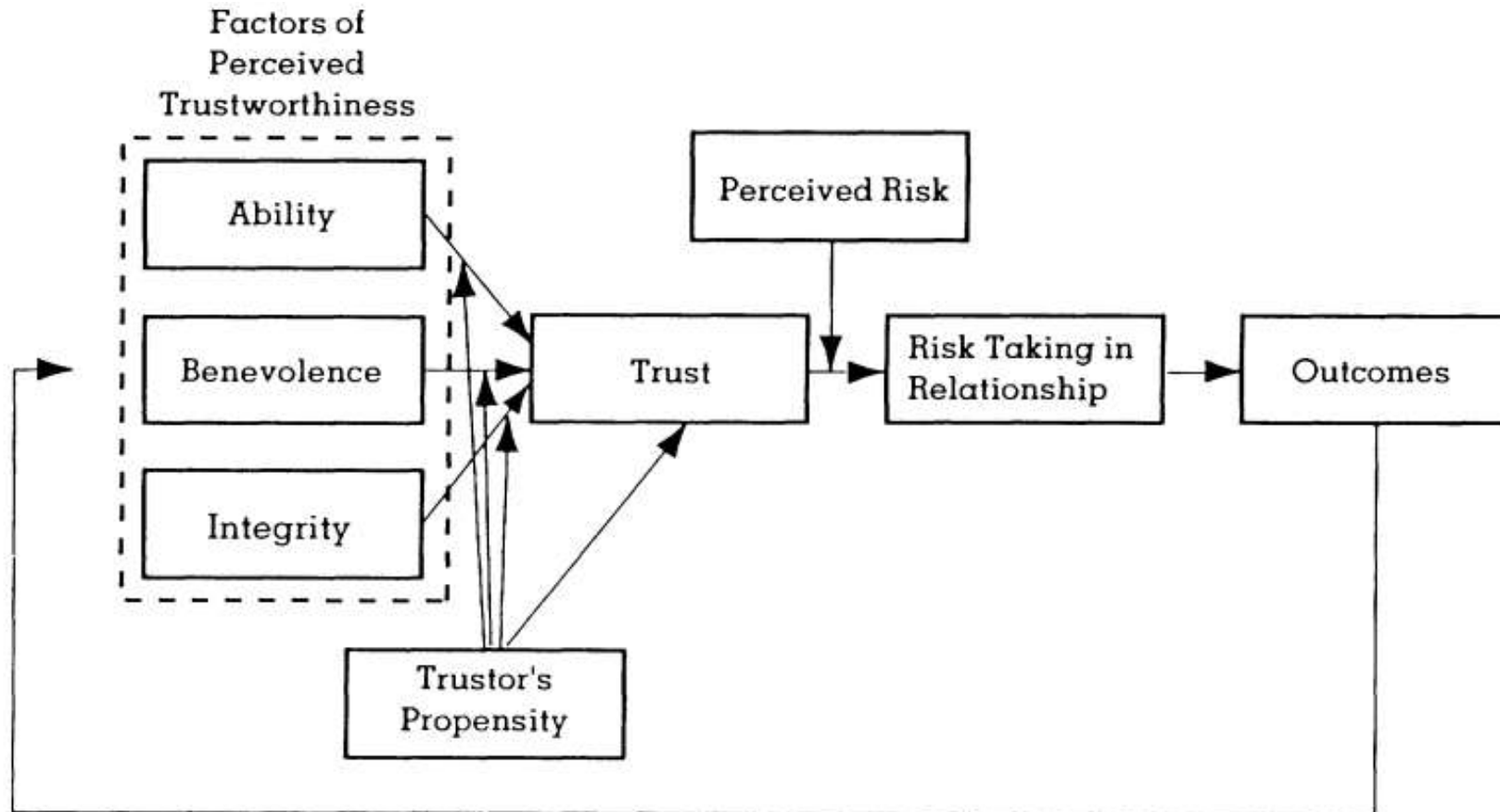


Integrative model of organisational trust

- Theoretical framework for examining trust in organisations and applied to different disciplines (e.g., marketing, agribusiness, psychology, economics)
- Has been applied to producer reporting previously
- Risk and interdependence between parties is necessary
- For WOAHS notification, the risk/interdependence is the possible application of trade measures following a WOAHS notification.
- Trustworthiness, trust, and perceived risk are key measures.



Integrative model of organizational trust





Survey measures

1. **importance** of animal production and animal health
2. **organisational knowledge** with respect to notification
3. **organisational capability** with respect to notification

Theory of Planned Behaviour

4. **attitudes** to notification of animal disease events
5. **subjective norms** on notifying animal disease events
6. **perceived behavioural control** on notifying animal disease events

Survey measures - 2

Integrative Model of Organisational Trust

7. **perceived risk** and **perceived benefit** of notifying WOAHA
8. **trustworthiness** of trading partners, comprised of integrity, benevolence and ability
9. **trust** in trading partners

Outcome variables

10. Past notification behaviour
11. Intention to make an immediate notification

Focus group discussions

- Three focus group meetings
- Explored barriers to notification and root causes
- Identified actions to address barriers.



Source: AI

3. Results

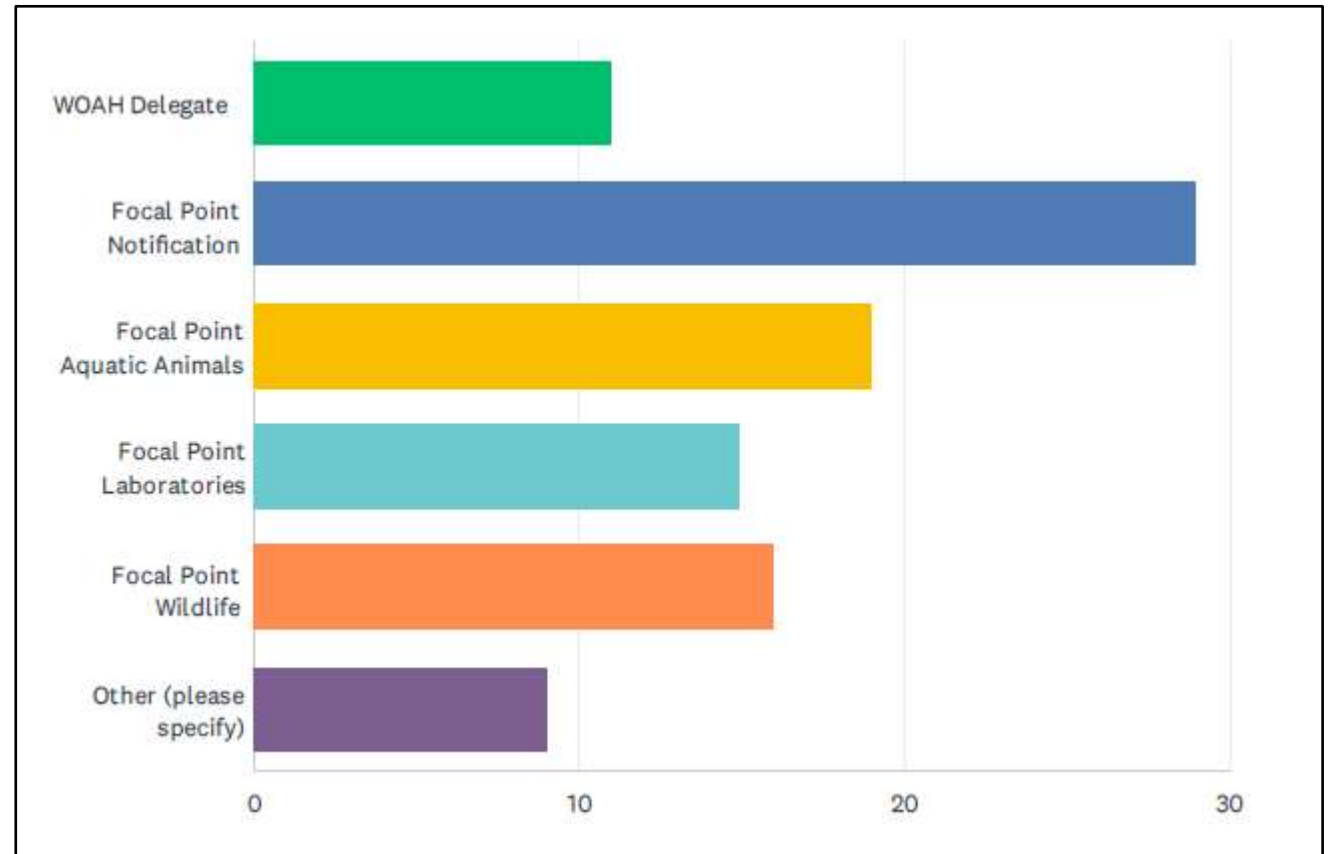


Scallops: Ingo Ernst



Survey responses

- 91 responses were received
- Response rate ~ 67%
- 82 valid responses





Analysis

- Reliability of measures examined – Cronbach's alpha
- Exploratory factor analysis – determine if measures represent single factor
- Descriptive statistics examined to explore nature of results
- Correlation matrix to explore relationships among variables
- Logistic and linear regressions to explore factors that influence “intention to notify”

Importance of animal production and health

- “*Importance*” of terrestrial & aquatic production, export trade, animal health and wildlife health
- “*Importance-terrestrial*” highest (mean = 4.25) (scale 1 to 5)
- “*Importance-aquatic*” high but variable (mean = 3.97)

Analysis

- Logistic regression (intention to notify high/low) – not significant
 - *“Importance” did not have a meaningful influence on intention to notify*



Organisational capability and knowledge

- Organisational knowledge (e.g. notification requirements)
- Organisational capability (e.g. reporting, investigation & diagnosis)

Analysis

- Evaluate the combined and individual contributions of knowledge and capability ($p < 0.001$, explaining 37.3% of variance)
- One unit increase in:
 - Knowledge = 0.33 increase in intention to notify
 - Capability = 0.48 increase in intention to notify

➤ *“Organisational knowledge” and “organisational capability”
predict intention to notify*



Theory of Planned Behaviour

- “*Attitudes*” – favourable (or unfavourable) evaluation of notification
 - Very positive attitudes to notification (mean = 4.49)
- “*Subjective norms*” – perceived social pressure to perform (or not perform) notification
 - Generally positive (mean = 4.20)
- “*Perceived behavioural control*” – perceived ease (or difficulty) of performing notification
 - Generally high (mean = 4.06), but some low

Theory of Planned Behaviour - 2

Analysis

- Evaluated combined and individual contributions of “*perceived behavioural control*”, “*subjective norms*” and “*attitudes*”
- Significant ($p < 0.001$) effect of “*perceived behavioural control*” on “*intention to notify*”
- One unit increase in “*perceived behavioural control*” = 0.43 increase in “*intention to notify*”
 - “*Perceived behavioural control*” predicts “*intention to notify*”
 - *Strongly positive attitudes toward notification*



Integrated Model of Organisational Trust

- “*Trustworthiness*” – comprised of perceptions of trading partner’s “ability”, “benevolence”, and “integrity”
 - (mean = 3.63)
- “*Trust*” – of trading partners
 - (mean = 3.64)
- “*Perceived risk*” – of making a notification
 - (mean = 2.87) - variable
- “*Perceived benefit*” – of making a notification
 - Generally high (mean = 4.09)

Integrated Model of Organisational Trust

Analysis

- Evaluated combined and individual contributions of “*trust*”, “*perceived benefit*” and “*perceived risk*”
 - No significant effect on “*intention to notify*”
- Trustworthiness did predict “*trust*”, particularly “*integrity*” and “*benevolence*”
 - “*Trust*” in trading partners did not predict “*intention to notify*”
 - High perceived benefit of notification
 - Low (but variable) perceived risk of notification

Risks and benefits of notification

Single greatest risk

1. Reduced access to international markets (50%)
2. No risk (16%)

Single greatest benefit

1. Maintaining international reputation for transparency and compliance with WOAHA standards (46%)
2. Limiting the international spread of animal diseases (33%)

Conclusions of the analysis

1. Three factors influence notification (all capability based):

- Organisational knowledge
- Organisational capability
- Perceived behavioural control



2. Factors that don't influence notification:

- Importance (of animal production and animal health)
- Trust in trading partners



3. Views on notification are positive

- Strongly positive attitudes toward notification
- High perceived benefit of notification



Reality check!

Are these findings reliable, sound, meaningful?

- ✓ Established theories were used (e.g. TPB, IMOT)
- ✓ Statistical analysis indicated reliability of measures
- ✓ The right people participated (and a large sample)
- ✓ Anonymous participation
- ✓ Focus group workshops validated and explored issues
- ✓ Internal consistency of results.

4. Barriers to notification





Exploring barriers to notification

Three key areas identified (all capability based):

1. Diagnostic and laboratory confirmation delays
2. Decision making and administrative delays
3. Surveillance and reporting system issues

1. Laboratory confirmation not available or slow

Causes	Actions or strategies to address barriers
• Diagnostic capability for some diseases is not available (e.g. exotic or emerging diseases) • Delays if Reference Laboratory confirmation is required • Delays if multiple laboratories need to confirm result • Delays if further investigation or resampling are required • Delays due to sample transport time from remote areas to laboratories • Lack of resources, economic crisis	1. Provision of positive control material to support adoption of methods for exotic disease 2. Regional laboratory proficiency testing programs for national reference laboratories 3. Regional workshops for national reference laboratories to improve diagnosis of listed diseases of regional significance 4. Facilitate access to Reference Laboratories for confirmation

2. Decision making and administrative delays

Causes	Actions or strategies to address barriers
• High level approvals may slow notification (e.g. by senior officials or ministers) • Inter-agency approvals and communication (e.g. for aquatic and wildlife diseases) may slow notification • Collecting, collating and approval of detailed information may be slow • Need to simultaneously prepare media releases and holding statements • Slow decision making on whether an event meets the definition of a confirmed case or emerging disease	5. Template to collate immediate notification information and seek approvals 6. Establish agreed workflow and division of responsibilities between different agencies 7. Training for focal points and delegates on notification and WAHIS tailored to their knowledge and experience 8. Ensure WAHIS is developed to prioritise meeting user needs 9. Guidance on best practice for managing risks associated with notifications 10. WOA engage with CAs and ministers to promote awareness of notification obligations

3. Surveillance and reporting system issues

Causes	Actions or strategies to address barriers
• Producer reluctance to report delays or prevents event recognition • Poor communication systems delay or prevent event recognition • Lack of awareness of WOAHA notification obligations can delay or prevent advice reaching decision makers • Lack of trained human resources delays field investigation.	11. Provision of web-based surveillance/reporting platforms that can be adopted by Members 12. PVS pathway utilised to evaluate and develop surveillance systems and improve notification 13. Training to support surveillance systems and notification, including simulation training



4. Conclusions and recommendations



There are a lot of positives!

- ✓ Strongly positive attitudes to notification
- ✓ High perceived benefits of notification
- ✓ Three factors identified that predict intention to notify
 - organisational knowledge
 - organisational capability
 - perceived behavioural control
- ✓ Each of these factors is modifiable, providing opportunities for improvement.

Strengths based approaches

- This study has revealed many strengths regarding notification of disease events
- Strengths-based approaches focus on identifying and maximizing strengths rather than addressing weaknesses
- Focus on what works well and enhance it, encourage growth and development
- Moving from a “deficit-dialogue” (about barriers, gaps, deficiencies) to strengths-based communication (about opportunities and progress)
- Suggested as an approach to supporting Member improvements in notification.



Draft recommendations

- Preliminary, pending further discussion and consideration
- Comments welcome to contribute to finalisation
- 5 draft recommendations which encompass the 13 suggested actions *[please note that the final seven recommendations can be found in the full report of the consultancy survey]*

Recommendation 1.

Develop an action plan to support Members to enhance diagnostic capability of national reference laboratories in the Asia-Pacific region

Rationale:

- diagnostic capability is a key barrier to notification
- four actions were identified to improve laboratory capability
- relevant programs are already underway in the region – need to determine coverage and gaps
- action plan should be complementary to existing programs, outcome focussed, provide measurable improvements in notification.

Recommendation 2.

Evaluate whether the WOAHPVS Pathway sufficiently emphasises notification capabilities to provide adequate guidance to Members for improving notification

Rationale:

- Member capability is a key determining factor that predicts notification intention
- WOAHP's primary means for evaluating and supporting development of Members' capabilities is the PVS Pathway
- Important to examine whether the PVS pathway is adequately supporting development of capabilities relevant to notification.

Recommendation 3.

Develop a plan for routine training of WOAHA Delegates and relevant WOAHA Focal Points in areas relevant to notification that is tailored to their experience and capabilities

Rationale:

- Knowledge is a factor that predicts notification intention
- Delegates and Focal Points have a key role in notification, and should be supported to have the knowledge and skills to undertake their role
- Many considerations including cost, time requirements for participants and trainers, addressing needs appropriately, achieving notification outcomes...
- Optimal approach needs to be planned and evaluated to determine impact.

Recommendation 4.

Develop fit-for-purpose guidance materials, exemplars and resources to support notification

Rationale:

- Study participants shared approaches that they use to assist them to successfully meet their notification responsibilities
- A set of resources (e.g. guidance materials and exemplars) that draws on these approaches, could be developed and shared
- The resources could also be used to raise awareness with senior officials and Ministers on notification obligations.

Recommendation 5.

Design and implement an approach for ongoing recognition of Members with strong notification performance

Rationale:

- Recognition of countries with strong notification performance will create extrinsic incentives for conscientious notification
- May provide an aspirational goal for Members for recognition in a similar way that disease status recognition does
- A set of resources (e.g. guidance materials and exemplars) that draws on these approaches, could be developed and shared
- An approach for recognising positive notification performance could cultivate a positive, strengths-based approach to notification.

Conclusions

- Three factors determined that predict notification intention (all capability based)
- Three areas of capability identified as barriers to notification (diagnostics, surveillance, administrative issues)
- 13 actions identified to address the barriers
- 5 draft recommendations proposed to advance the actions
- Established a sound methodology to explore barriers to notification
- Application to other regions could be considered – possible that different factors could be involved.

Thank you

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