

Veterinary requirements of primate release: A new approach for the IUCN/SSC guidelines

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THEORY

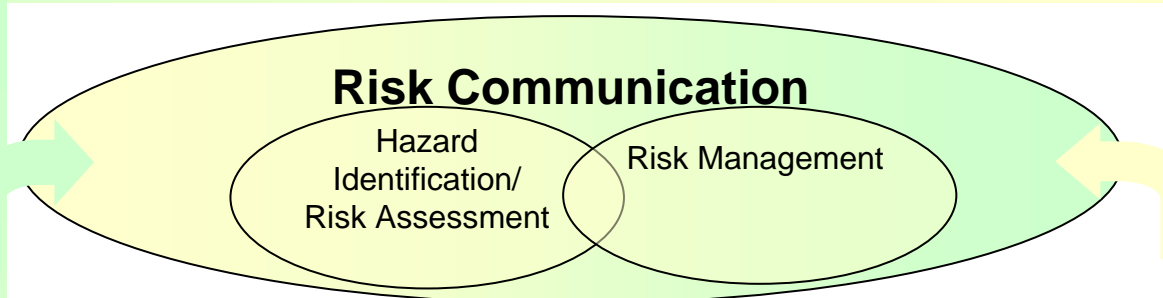
Reintroduction processes carry a risk of introducing diseases to native wildlife populations living in release areas. This risk is significant for great apes who share many common diseases with human beings. Exposure to pathogens during captivity, makes understanding and managing this risk critical. In addition, released animals can be affected by an endemic disease for which they are not prepared. Underlying principles of this risk analysis approach are:

- no situation is without risk
- socio-ecological variables make health assessment an adaptive process
- introduced and recipient populations need to be assessed
- all stakeholders should be involved in identifying mitigation strategies

PASA is in a unique position to collect data on pathogens affecting primate populations in captivity and in the wild through a network of scientific partners

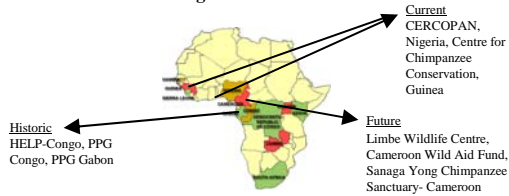


PROCESS



TO

The Pan African Sanctuary Alliance (PASA) Reintroduction Programme Status:



The PASA Veterinary Programme has been organised to assist this reintroduction plan and includes:

- Annual workshops to refine protocols, help manage veterinary issues, communicate with field partners (highlighted below). Held in: 2003 Uganda; 2004 Republic of Congo; 2005 Cameroon; 2006 Sierra Leone; 2007 Cameroon.
- Crisis Fund for emergency veterinary service.
- Training Programs (2007 examples: Lawrence Mugisha (Ngamba Island, Uganda) – Virology training at the Robert Koch Institute in Berlin; John Kiyang (Limbe Wildlife Centre, Cameroon) – Diagnostic and pathology training at Liverpool University and Chester Zoo.
- Veterinary Healthcare Manual Publication (First edition 2004, second edition pending 2009)
- Birth Control (Temporary contraception provision for management of animals within sanctuaries)
- PASA Veterinary List-serve (PASAanimalhealth@yahoogroups.com)

Hazard Identification and Risk Assessment

Use a logical framework to determine the following:

- Adverse health events and means of introduction and spread (hazard identification) . Acknowledge the possibility of emerging or unidentified pathogens.
- Likelihood of such events occurring. (risk assessment).

Data sources will include, but not be limited to:

- Epidemiological findings in local wild and human populations
- Pathological (post mortem) data
- Literature review

Example: traffic light system – red for diseases of major concern, green for diseases of less concern. This is not a recipe list of diseases, but is situation specific, based on available data.

Risk Management – Data collection and disease protocols

Risk Management – manage adverse outcomes
Example: Part of a diagnostic sample protocol table for one of PASA's sanctuaries. These tables were completed for all PASA members and collate sample collection data for each of the diseases of concern – stating how and when to collect samples, how to store them, who can analyse the samples, and how to interpret results. These protocols can be reviewed and modified for specific investigations, plus allow integration with local and regional partner investigations.

Limbe Wildlife Centre

Disease	Sample	When	How	Where	Who	How to store	How to analyse	How to interpret
Cholera	Stool	At any time	Rectal	Stool	Local	Refrigerated	Microscopy	...
...

Risk Management – Disease investigations

Risk Management – manage consequences of adverse outcomes
Example: Parasitology findings in chimpanzees at a PASA sanctuary. Part of a disease survey to help formulate a specific diseases of concern list.
Dientamoeba fragilis, a potential pathogen associated with irritable bowel syndrome in humans, previously unidentified in chimpanzees, was discovered in one member of a group not destined for release. The implications of this finding are being investigated further.

Disease	Number of individuals (n)	Number of individuals with disease (n)	Percentage of individuals with disease (%)
Dientamoeba fragilis	10	1	10%
...

PRACTICE

