



Zoonotic Disease Education in Palau

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Purpose

To develop a multi-faced campaign to raise awareness of and to decrease the incidence of zoonoses and vector-borne illnesses in The Republic of Palau.

Background on Palau

- Developing island country in Micronesia
- Population 21,093
- Insufficient hand hygiene and sanitation in some areas
- Recent outbreaks of leptospirosis, scrub typhus, dengue fever, and diarrhea
- Many feral animals but little awareness of their connection to zoonotic illness
- Efforts exist to control feral dog populations
- Poor animal disease prevention patterns among pet owners
- Multiple community efforts to improve hand hygiene practices but few are educational



Koror State Animal Shelter

Identified Diseases

Leptospirosis	Scrub Typhus	<i>Campylobacter jejuni</i>
<i>Chlamydia psittaci</i>	Dermatophytosis	Giardia
Hookworms	Pasteurella	<i>Listeria Monocytogenes</i>
<i>Toxoplasma gondii</i>	<i>Strongyloides stercoralis</i>	<i>Dirofilaria immitis</i>
Canine Scabies	Tapeworms	<i>Toxocara canis</i>
<i>Toxocara cati</i>	Non-typhoid Salmonellosis	

Methods

- Conversations were held with local health professionals to determine needs surrounding zoonoses and vector-borne disease prevention and control.
- A survey of local health professionals was conducted to determine which zoonotic and vector-borne diseases were present in local patient populations.
- A presentation was given to youth camp participants on personal hygiene and infectious disease with an emphasis on zoonoses prevention at the human and animal level, diseases of international concern, and hand washing.
- Two separate presentations were given to the Koror State Animal Shelter staff and Koror State Sanitation workers on zoonoses, disease prevention in animals, exposure risks for humans, and personal protective measures.
- Summaries of locally identified zoonotic and vector-borne diseases including human symptoms, animal symptoms, and local risk factors were developed and distributed to the veterinarian, his staff, hospital, and medical clinic employees.
- An infection control plan was developed for the Koror State Animal Shelter at the request of the shelter staff and in collaboration with the animal shelter, hospital epidemiologist, and the Infection Prevention and Control Committee.
- Reporting procedures were developed in collaboration with the local epidemiologist to improve communication between the animal shelter and the hospital in the areas of animal disease surveillance, disease reporting, and exposure incidence reporting.
- A practice session on proper glove, mask, gown, and hand hygiene technique was conducted at the Koror State Animal Shelter.
- An employee at the Koror State Animal Shelter requested and was given all presentation materials and resources to continue the education programs in the community and shelter.

Results

- 17 zoonotic and vector-borne diseases were identified to be of major concern in Palau.
- Approximately 100 children were present for six different presentations covering zoonotic and vector-borne disease prevention and hand hygiene.
- 7 Koror State Animal Shelter and 8 Koror State Sanitation staff were instructed on zoonoses and vector-borne disease, the occupational risks that they are exposed to, disease prevention at the human and animal level, and personal protective measures.
- Adherence to the de-worming medication regimen for the state sanitation workers and animal shelter staff immediately improved following the presentation.
- Increases in hand washing, use of protective equipment, and sanitation measures have been reported at the animals shelter following the presentation.
- Staff showed an increased interest in improving the infection control practices of the animal shelter.
- All animal shelter staff signed the cover of the infection control plan to state that they have read the document and agree to follow the regulations.

Summary

Zoonoses and vector-borne diseases are under-appreciated issues in Palau. There is still progress to be made in terms of sanitation, prevention of zoonotic disease at the animal level, and hand hygiene. However, this project appeared successful in explaining why such behaviors are important and encouraged at least temporary improvements in prevention and awareness of zoonoses and vector-borne illnesses.



Presentations on Zoonoses, Hygiene, and Sanitation

References

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