

# NEWSLETTER SEPTEMBER

## In this newsletter:

- 🐾 [Clicking Eland](#)
- 🐾 [Zoonoses](#)

Dear clients,

We hope you are looking forward to reading our next newsletter! In this edition we explain the clicking sounds of eland bulls, and provide you a video link where you can nicely see an eland bull walking while hearing the clicks. The second article is a bit longer, about zoonoses. Zoonoses are becoming a bigger health concern, so in this article we explain what they are, how they can be transmitted, and what you can do to prevent becoming infected with a zoonosis. We place some extra emphasis on rabies, an important zoonosis in Namibia. Kind regards, the Wildlife Vets Namibia team.

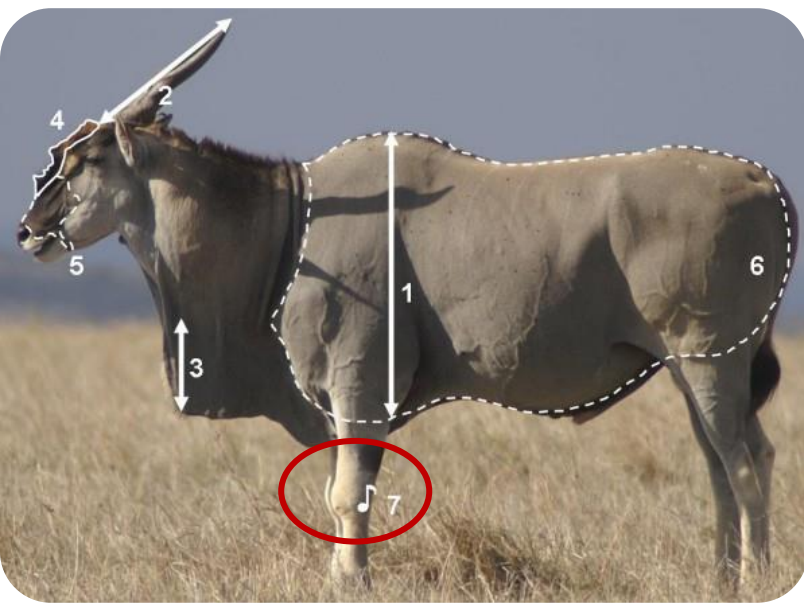
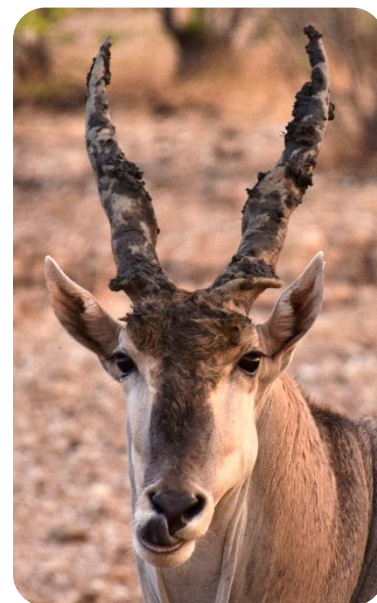
## CLICKING ELAND

When you observe eland bulls that are walking, you probably have heard a clicking sound. We wrote a few years ago about this topic ([Newsletter Feb 2019](#)), but recently we saw a big eland bull walking, making the perfect clicking sounds! So, we thought let's write again about this interesting feature!

The eland antelope is our biggest antelope, bulls can weigh over 900kg! The word 'eland' comes from the Dutch word for moose. Eland belong to the group of spiral-horned antelopes. This funny click you hear when eland bulls walk, has intrigued people for a long time. Some said the clicking sound comes from the two halves of the hooves opening and snapping together, others suggested it has something to do with the knee joint, or it could be arthritis or cartilage damage.

Today, the most commonly accepted answer to these clicking sounds is actually a tendon which slides over the bones of the front carpal joint – as it slides over the bone it vibrates like a string. In humans clicking knees would not really be a sign of strength... but in eland males it is a way to show off how big they are. The clicks are a message to other males, as the clicks may give an indication of the size of a bull in question. The bigger a bull, the lower the frequency of the clicks, and the deeper the clicking sound.

When an eland grows, this tendon gets longer and wider, and the clicks deepen in sound. This way a bull can communicate to other males about his fighting conditions; it is a way of showing dominance from a distance, without having to fight. The clicks are a very honest signal, an eland cannot fake it.



Check [this video](#), showing an eland bull walking and clicking away! Pay attention to the front legs, and when you hear the click. Put your sound on loud!

Picture of an eland bull showing which other traits, besides the knee clicks (7), help to determine who is the dominant male: the bodies' depth (1), horn length (2), the size of the dew flap (3), size of the hair tuft on their heads (4), the darkness of the face mask (5) and the greyness of the eland's body (6) © [Jakob Bro-Jørgensen and Torben Dabelsteen \(2008\)](#)

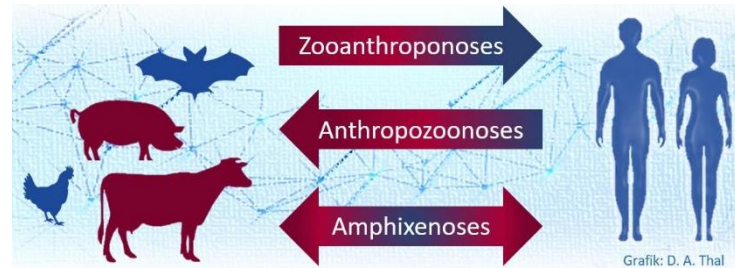
# ZOONOSES

28 September it was World Rabies Day, an important day to raise awareness about this deadly disease. Last year, eight people in Namibia died of rabies. Rabies is a zoonosis (plural is zoonoses, Greek: 'zoon' = animals, 'noson' = disease), but there are many more diseases in Namibia that are zoonoses.

A zoonosis is a disease that is transmitted from animal to man, or vice versa. The diseases can range from minor short-term illness to major life-threatening illness. There are more than 200 different kinds of zoonoses, caused by bacteria, viruses, parasites, fungi etc.

A distinction is made between the different routes:

- 🐾 Zooanthroponosis; Disease transmission from humans to animals
  - Example: Diphtheria, giardia, tuberculosis. It seems that SARS-CoV-2, the causative agent of COVID-19, can also be transmitted from man to animal.
- 🐾 Anthroozoonosis; Disease transmission from animals to humans
  - Example: Rabies, anthrax, brucellosis, Rift Valley fever, Echinococcus granulosus
- 🐾 Amphixenoses; Zoonotic disease that can be transmitted in either direction
  - Example: Staphylococcal or streptococcal infection



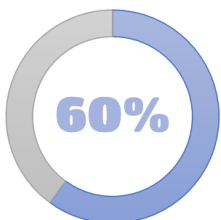
Classification of zoonoses by the main direction of infection © [D.A. Thal](#)

Zoonoses are classified into:

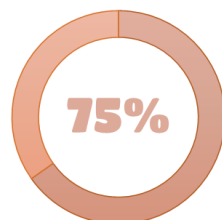
- 🐾 Bacterial (e.g., anthrax, salmonellosis, tuberculosis, Lyme disease, brucellosis, plague)
- 🐾 Viral (e.g., rabies, AIDS, Ebola, avian influenza)
- 🐾 Parasitic (e.g., cysticercosis, trichinosis, toxoplasmosis)
- 🐾 Mycotic (e.g., ringworm, sporotrichosis)
- 🐾 Unconventional (prion disease e.g., mad cow disease)

But... let's not get too technical! Why is it important to know about zoonoses? Man has always been plagued by epidemics caused primarily by infectious diseases that originated from animals, especially wildlife. We have coexisted with domestic and wild animals for millennia, BUT several anthropogenic factors have intensified the animal-human interface in recent decades (the risk of disease spillover):

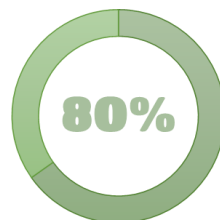
- 🐾 Human population growth.
- 🐾 Efforts to alleviate the associated poverty (intensified farming and unsustainable exploitation of natural resources).
- 🐾 Traditions, e.g., wildlife-meat consumption or traditional medicine drive trade of wild animals, which can contribute to infectious disease emergence.
- 🐾 Increasingly globalized planet – disease outbreaks can spread very quickly.



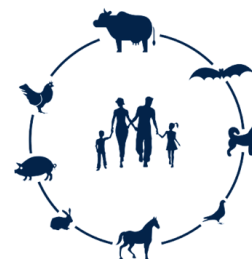
60% of existing human infectious diseases are zoonotic



75% of emerging diseases of humans have an animal origin



80% of agents with potential bioterrorist use are zoonotic pathogens

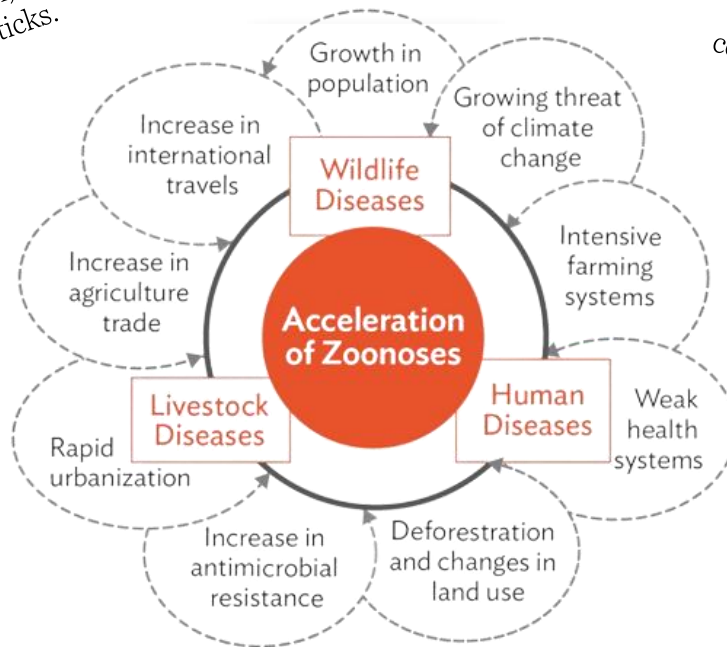
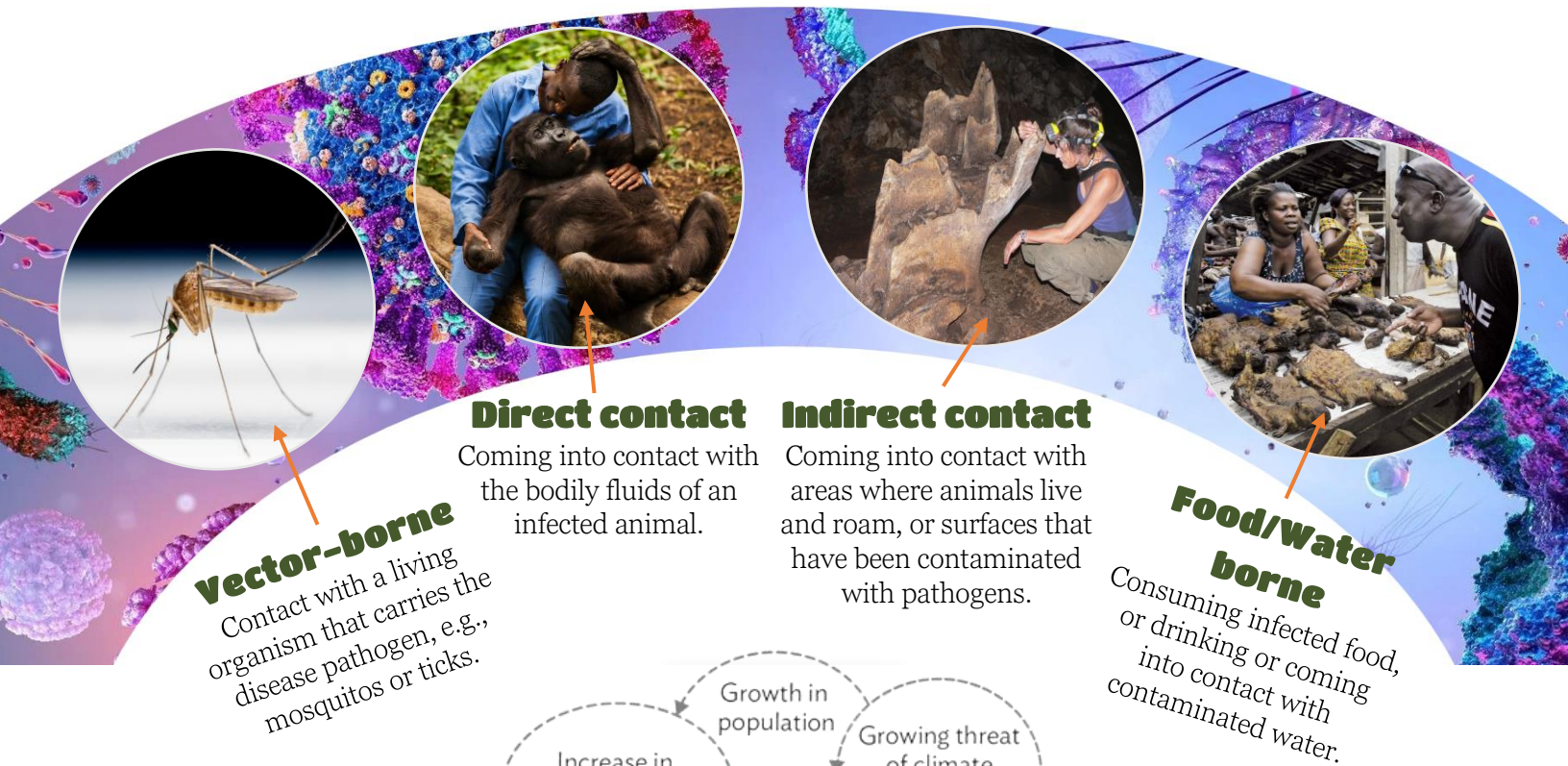


5 new human diseases appear every year, 3 are of animal origin



The close relationship we have with animals could potentially be a major public health problem. Some diseases such as HIV started as a zoonosis, but later mutate into human-only strains. Some of the zoonoses, such as Ebola cause recurrent outbreaks. Others, such as COVID-19, can (as we have clearly seen...), have the potential to cause global pandemics. In Africa there have been several major zoonotic outbreaks such as rabies, anthrax, Ebola, monkey pox, yellow fever, Rift Valley fever, Lassa fever etc.

Zoonoses can spread in a number of ways, the most-well known are via vectors (e.g., an infected mosquito bites you and you get malaria) and via direct contact with an animal (e.g., you get ringworm from touching an infected kitten). Other ways are via in-direct contact, for example via faeces, urine, saliva or via infected objects. Another way is by consuming infected meat or contaminated water; you might remember the outbreak of anthrax in people after consuming hippo carcasses that died of anthrax in 2019.



After the Covid-19 pandemic it is clear that diseases can have a major impact on the world. There is greater contact between humans and animals now due to the fact we travel more and further, the global trade and urbanization. At the same time the growing global population causes a rising demand in food, causing more habitat destruction, and people getting closer to (formerly untouched) habitats and wildlife. Of course, we don't mean to worry you, but it is important to think about zoonoses, and understand that you might be at risk of certain diseases in certain situations.

Namibia has a thriving wildlife industry; game breeding, trophy/leisure hunting, ecotourism, game capture etc. Another industry is the meat industry, and the game meat industry has seen a huge increase in the production and export of game meat to Europe and South-Africa. It is thus of utmost importance that food security and safety issues are properly approached by all parties involved. In Namibia, the following major zoonotic diseases are also notifiable diseases: rabies, Rift Valley fever, anthrax, brucellosis, chlamydiosis (psittacosis), Johne's disease and bovine tuberculosis.

The 'One Health Approach' is an increasingly popular approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. The concept revolves around the fact that humans, animals and the world we live in are inseparably linked.

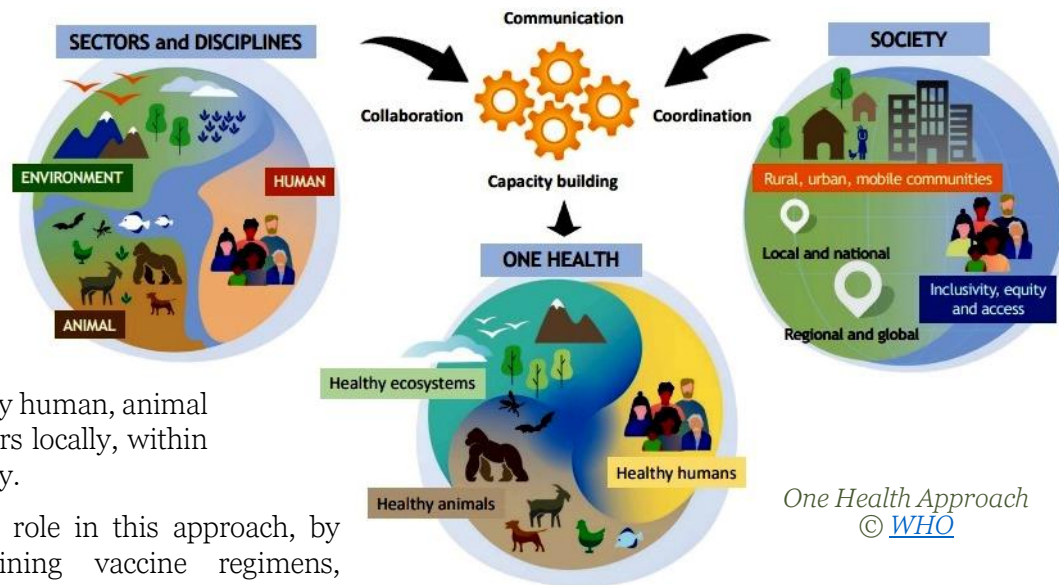
Zoonosis should be prioritized by human, animal and environmental health sectors locally, within a country but also internationally.

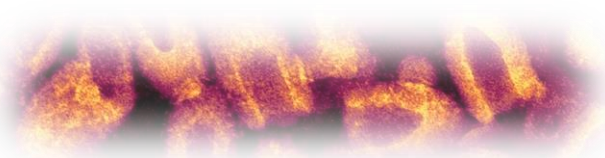
We as vets play an important role in this approach, by diagnosing diseases, maintaining vaccine regimens, implementing parasite control programs advising pet owners and farmers. But, we need owners and farmers to play their part in preventing diseases, and thus zoonoses!

What can you do to prevent zoonoses? Some tips for on a personal level:

- 🐾 Be aware of possible zoonotic diseases at the destinations where you go;
- 🐾 Wash hands after contact with an animal;
- 🐾 Use gloves when handling sick animals;
- 🐾 Don't approach sick animals, or animals displaying strange behaviour;
- 🐾 Use insect repellent or other methods to keep mosquitos, flies, fleas and ticks away;
- 🐾 Practice good sanitation;
- 🐾 Practice safe food handling;
- 🐾 Don't drink unclean/untreated water, first boil or filter this water;
- 🐾 Vaccinate animals and yourself;
- 🐾 Deworm and treat pets for ticks on a regular basis;
- 🐾 Keep areas where animals are kept clean.

If you think you might have a zoonosis, make sure you contact a medical professional ASAP.





We started this article off with the rabies example, as it was World Rabies Day, and because rabies is such an important zoonosis to prevent. In endemic areas, like Namibia, it is recommended to vaccinate all your pets annually – the vaccine is inexpensive.

Inform your children, workers and neighbours about this disease. People should stay away from wild animals and unknown dogs, cats, etc. especially if these display abnormal behaviour. Such animals should, if possible, be examined by a veterinarian or be destroyed (do not shoot them in the head), and the head should be submitted to the Central Veterinary Laboratory in Windhoek for a rabies test. The head should be kept cool (not frozen!) on ice packs, wrapped in plastic to avoid virus contamination and should be clearly marked as “hazardous – possible rabies. [Here](#) you can download a fillable label to send along with your sample.

### What to do if you or your pet gets exposed?

If your animal(s) were in contact with an animal with suspected rabies, consult your veterinarian immediately. At the very least a rabies vaccination (even if your pet is current on its vaccinations) is indicated. If a bite was inflicted by a dog or cat not showing symptoms suggestive of rabies and if the animal (both yours and the one inflicting the bite wounds) received regular rabies vaccinations, infection is highly unlikely.

The virus is very sensitive to soapy detergents. People who were exposed to an animal suspected of suffering from rabies should immediately and thoroughly wash the skin and/or bite wounds with soap and water. This simple measure will drastically reduce the risk of contracting the disease. After this, call your doctor!! Preventative treatment is safe and effective IF STARTED EARLY, however, no animal or person has ever survived the disease once symptoms of rabies set in. The treatment of a person bitten by a rabid animal is very expensive and is thus usually reserved for patients with confirmed rabies exposure.

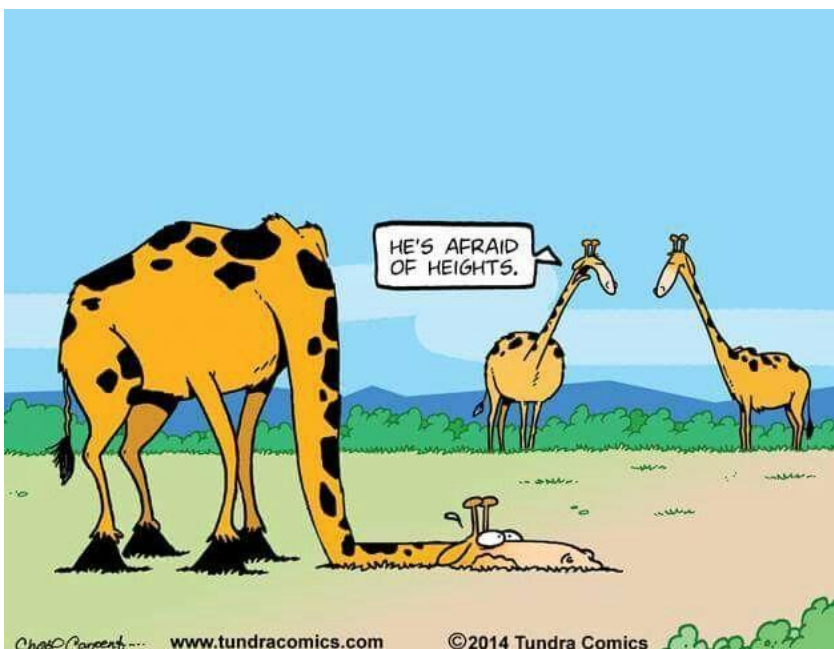
**People at high risk of exposure, e.g., farmers and their workers, people working with animals, veterinarians, etc. should seriously consider rabies vaccinations for themselves!**

You can find the following articles about rabies on our website:

- ✓ Rabies in Kudu and Eland #1: Implications to the game industry
- ✓ Rabies in Kudu and Eland #2: Herd immunity in rabies and COVID-19
- ✓ Rabies in Kudu and Eland #3: How vaccination leads to immunity

Other articles on zoonotic diseases we have listed on our website are 'Anthrax in Wildlife' and (meat) Measles. Click on the link below to read and download these articles:

① <https://wildlifevetsnamibia.com/documentation/articles>



DR ULF TUBBESING

P.O. BOX 50533, BACHBRECHT,  
WINDHOEK

+264 (0) 81 128 3050

[ULFT@AFRICAONLINE.COM.NA](mailto:ULFT@AFRICAONLINE.COM.NA)

MARISKA BIJSTERBOSCH

+264 (0) 81 382 8473

+31 (0)6 4369 3095 (WHATSAPP)

[MARISKA@WILDLIFEVETSNAMIBIA.COM](mailto:MARISKA@WILDLIFEVETSNAMIBIA.COM)

[WWW.WILDLIFEVETSNAMIBIA.COM](http://WWW.WILDLIFEVETSNAMIBIA.COM)

FACEBOOK: [WILDLIFE VETS NAMIBIA](#)

INSTAGRAM: [WILDLIFE VETS NAMIBIA](#)

YOUTUBE: [WILDLIFE VETS NAMIBIA](#)