## **Conservation and Public Health: Nature Based Solutions**

African Animal Welfare Conference, 10<sup>th</sup> September 2020



Dr. Gladys Kalema-Zikusoka

Founder and CEO, Conservation Through Public Health

Ashoka Fellow, National Geographic Explorer, 2020 Aldo Leopold Award Recipient



## Threats to Gorillas: Habitat Loss and Poaching Disease and Human/Wildlife Conflict



## Conservation Through Public Health (CTPH) founded in 2003

- **Mission:** Promote biodiversity conservation by enabling people to coexist with wildlife through improving animal health, community health and livelihoods in and around protected areas and wildlife rich habitats in Africa
- Vision: People, wildlife and livestock living in balance, health and harmony with local communities acting as stewards of their environments

- Wildlife Conservation
- wildlife health
- habitat conservation
- Community Health
- Village Health and Conservation Teams
- Community Animal Health Workers
- Alternative Livelihoods
- Gorilla Conservation Coffee (a social enterprise of CTPH)
- Group livestock income generating projects

## Mitigating the impact of COVID-19

- A novel coronavirus, originating from Bats
- Contagious as the common flu affecting the upper and lower respiratory tract
- SARS, civet cat intermediate host
- MERS, dromedary camel intermediate host
- SARS-COV2, is intermediate host a pangolin?
- Wuhan wet market: stressed live wild animals in tiny cages under crowded conditions
- Perfect conditions for the RNA virus to jump from one stressed host to another through droplets and fecal contamination
- 80% of infected people are asymptomatic
- Over 26 million cases and 800,000 deaths



## Are non human great apes susceptible to COVID-19 and other respiratory diseases?



- Human Common Flu viruses have affected Great Apes
- Human Metapneumovirus Infection in Mountain Gorillas, Rwanda, 2011
- Lethal Respiratory Disease Associated with Human Rhinovirus C in Wild Chimpanzees, Uganda, 2013
- Human coronavirus OC43 outbreak in wild chimpanzees, Côte d'Ivoire, 2016
- COVID-19 from asymptomatic zoo keepers to tigers and lions at Bronx Zoo, cats, dogs, farmed mink
- Humans, great apes and other old-world primates have similar ACE2 protein receptors making them highly susceptible to SARS-COV2 that causes COVID-19.

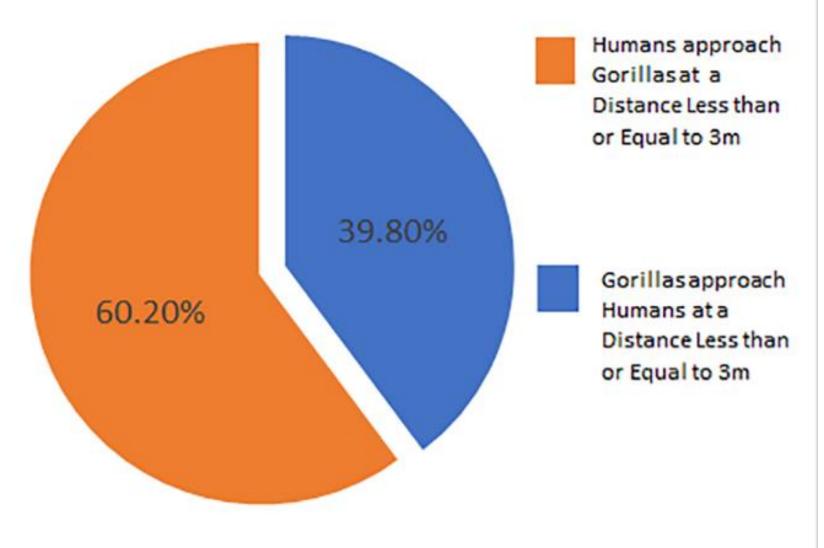
## Gorilla Tourism: Premier activity in East Africa





© Allison Hanes June 2011.

Observations of Egregious 7 m Rule Violations: Tourist - Gorilla Spacing < 3 m (n = 275)



Annalisa Weber et al. 2019

## How to Prevent the Spread of COVID-19 and other Respiratory Diseases from Humans to Gorillas Ranger Training Workshops

## March 2020







International Gorilla Conservation Programme



MAX-PLANCK-GESELLSCHAFT

### Upgraded Great Ape viewing regulations in Uganda IUCN Guidelines; Gorilla Pathology Specialist Group No sick tourists, Taking Temperatures, Wearing Masks, Hand washing/Disinfection



Great Ape viewing regulations: Wearing of Masks Enforcing the Seven Meter distance, Tourists now demanding that the gorillas and chimpanzees are protected from COVID-19 in humans

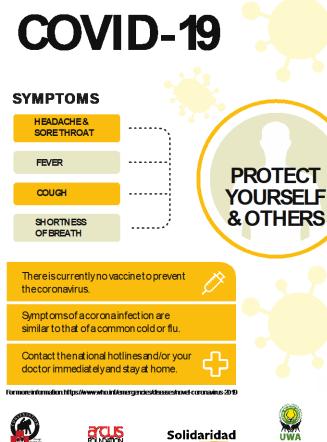




## Training of Human and Gorilla Conflict Resolution Teams (HUGOs) in COVID-19 mitigation



Preventing the spread of COVID-19 among local communities and from people to gorillas at Bwindi through training 270 Village Health and Conservation Teams



#### PREVENTION





AVOID CLOSE CONTACT Keep asafe distance (2 meters or 6 feet) between yourself and other people. Especially with people who are unwell





CLEAN AND DISINFECT Clean and disinfect frequently touched surfacesdaily. Coronavirus also spreads when aperson touches asurface or object that has the virus on it then touches their ever nose, or mout h.

#### **PREVENT DISEASE** TRANSMISSION BETWEEN PEOPLE AND GORILLAS



animals. Stayat least ten meters (30 feet) away from gorillas. Turn away to cough or sneeze in your elbow. Call Uganda Wildlife Authorit yand HUGOs who will wear masks to safely chase dorillas from your dardens.

Joseph Arinait we - 0782 957 970 | Barbara Mugisha - 0782 589 745

- COVID-19, TB, respiratory diseases, scabies, HIV, diarrheal diseases
- Good hygiene and sanitation
- Voluntary Family planning
- Nutrition
- Sustainable agriculture
- Report homes visited by gorillas
- Awareness on zoonotic diseases
- Gorilla and forest conservation
- Ecotourism





## Training Village Health and Conservation Teams (VHCTs) in COVID-19 mitigation





## Ride For a Woman: Diversify/Switch Livelihoods



## In the absence of Tourism How do we ensure that the Wildlife is protected?

Coffee from farmers sharing a habitat with gorillas at Bwindi Impenetrable National



Marketed to conscious consumers with a donation of sales sustaining community health, gorilla health and conservation





#### SAVING GORILLAS ONE SIP AT A TIME

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# SETBACK: Endangered mountain gorilla, Rafiki, killed by a poacher in COVID-19 crisis







## Mitigating COVID-19 and Preventing the Next Pandemic

- Advocating for Responsible Tourism
- Africa CSO Biodiversity Alliance

Policy Brief to Governments, Donors and Tour Companies

- 25 countries with 28 Great Ape sites
- 10 countries with great ape tourism
- Looking beyond tourism to sustain conservation
- Social media campaign about zoonosis and reverse zoonosis and links to COVID-19

**UNEP Report:** "<u>Preventing the next</u> pandemic - Zoonotic diseases and how to break the chain of transmission"

- Preventing zoonotic disease through One Health approaches
- Respecting Nature and Wildlife
- **Reducing Deforestation** and Habitat encroachment
- Improving animal welfare and husbandry
- Sustainable management of landscapes and seascapes to enhance co-existence of agriculture and wildlife
- Ban/Regulate wildlife trade?

### Thank You Very Much



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