IUCN BSG
Guidelines for Field Hygiene

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IUCN Bat Specialist Group

Guidelines

What is Field Hygiene?

What is Field Hygiene?

Set of best practices using standard, simple measures to minimize the risk that research activities result in pathogen pollution, the human-facilitated moving or transferring of pathogens between species and sites

Pathogen Pollution

Introduction of new or non-endemic pathogens to a _____

Pathogen Pollution

Introduction of new or non-endemic pathogens to a _____

Place

Ecosystem

Species

Population

We all perform some level of Field Hygiene already!

Separating spaces

Hand washing

Keeping equipment clean

Wearing gloves

CALL FOR MEMBERS: WORKING GROUP ON HUMAN-BAT TRANSMISSION OF SARS-COV-2: RISKS AND RECOMMENDATIONS

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Mon, Apr 20, 2020, 8:42 PM

to me

From: ***Dr Tigga KINGSTON***
To: ***IUCN SSC Bat Specialist Group 2017-2020***

Dear BSG Members
Following the
recommendation for the suspension of field research, we are assembling a Working Group to evaluate the magnitude of risk and make more detailed recommendations for bat researchers as well as non-research stakeholders at the human-bat interface (e.g. rehab facilities, zoos). The Working Group should draw on its own expertise, reach out beyond the BSG for expert opinion, consider the outcomes of infectivity, pathology and transmission trials as they become available, and interface with on-going efforts, most notably the risk assessment of the USGS and other working groups (EUROBATS). The Working Group will develop recommendations in light of the global constituency of the BSG and attendant variability in resources for risk mitigation (e.g. PPE).
BSG members with expertise in bat-borne viruses are needed, but representation of all aspects of bat research and geographical coverage is desired. We are aiming for a core Group about 10-15 members.

Please email Tigga (tigga.kingston@ttu.edu) if you can serve.
Thank you everyone

IUCN SSC Bat Specialist Group (BSG) Recommended Strategy for Researchers to Reduce the Risk of Transmission of SARS-CoV-2 from Humans to Bats

MAP: Minimize, Assess, Protect

Living Document Version 1.0 Released 19th June 2020

Authors: Germán Botto Nuñez, Andrew Cunningham, Eric Moise Bakwo Fils, Winfred Frick, Md Nurul Islam, Tracey Jolliffe, Rebekah Kading, Andrzej Kepel, Tigga Kingston, Stefania Leopardi, Rodrigo Medellín, Ian Mendenhall, Stuart Parsons, Paul Racey, Danilo Russo, Julie Teresa Shapiro, Amanda Vicente-Santos, Luis Víquez-R, Thong Vu Dinh

Version 1.0 (2020)

Preventing human-to-bat transmission of SARS-CoV-2

Exposure Risks

Contact exposure
Bats coming into contact with contaminated hands or equipment

Aerosol exposure
Infectious droplets from handlers holding bats in close proximity

Environmental exposure
Sharing enclosed, poorly-ventilated spaces with bats, where virus may persist in the air or on surfaces

MAP your plan to prevent transmission to bats!

Mitigation Strategies

Minimize
Delay, prioritize, or avoid handling bats when possible, i.e. implement acoustic surveys

Assess
Postpone handling bats if there is a probability that you have been exposed to SARS-CoV-2 or if you have symptoms

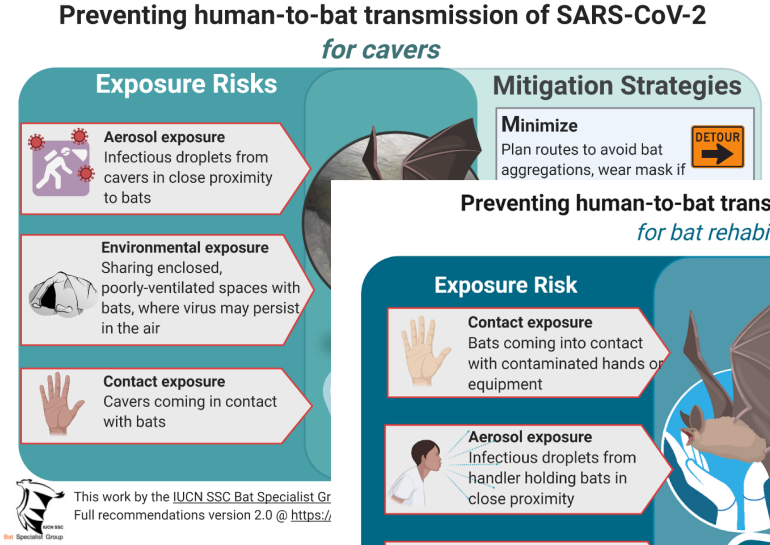
Protect
Adopt practices that reduce exposure, i.e. face covering, gloves, disinfection procedures

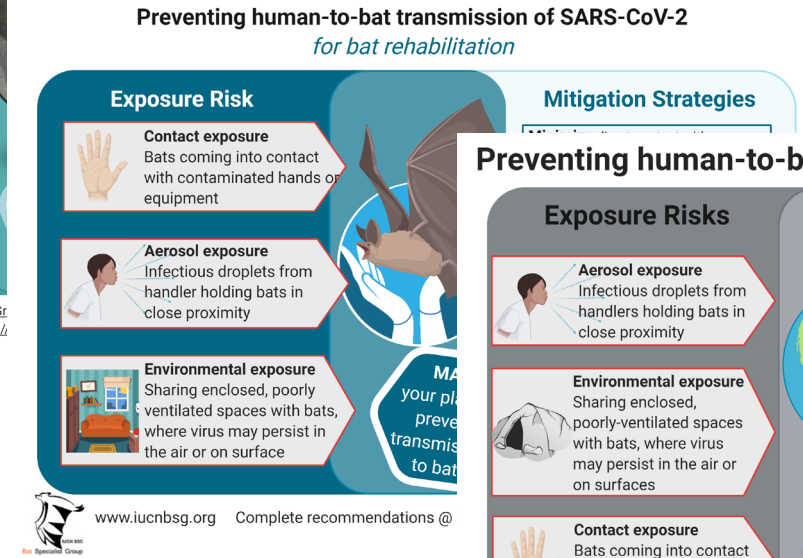
IUCN SSC Bat Specialist Group

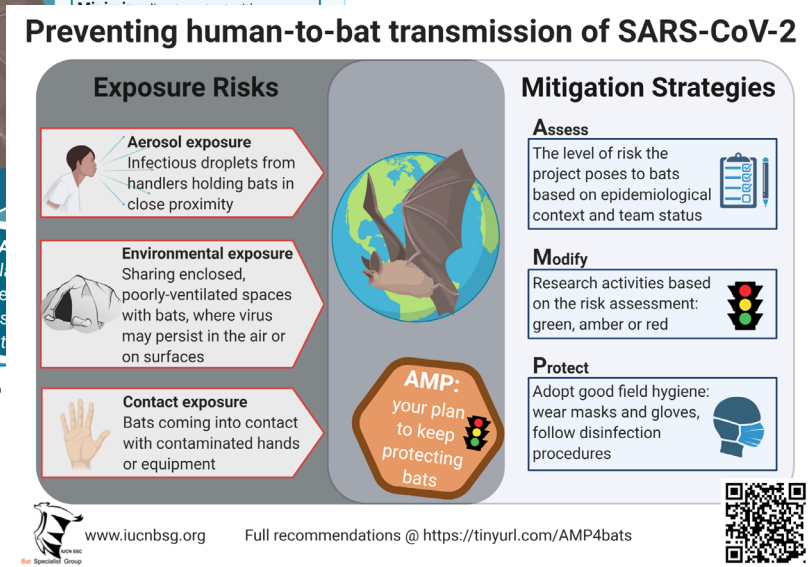
www.iucnbsg.org

Full recommendations @ https://tinyurl.com/mapforbats

Version 2.0 (2022)





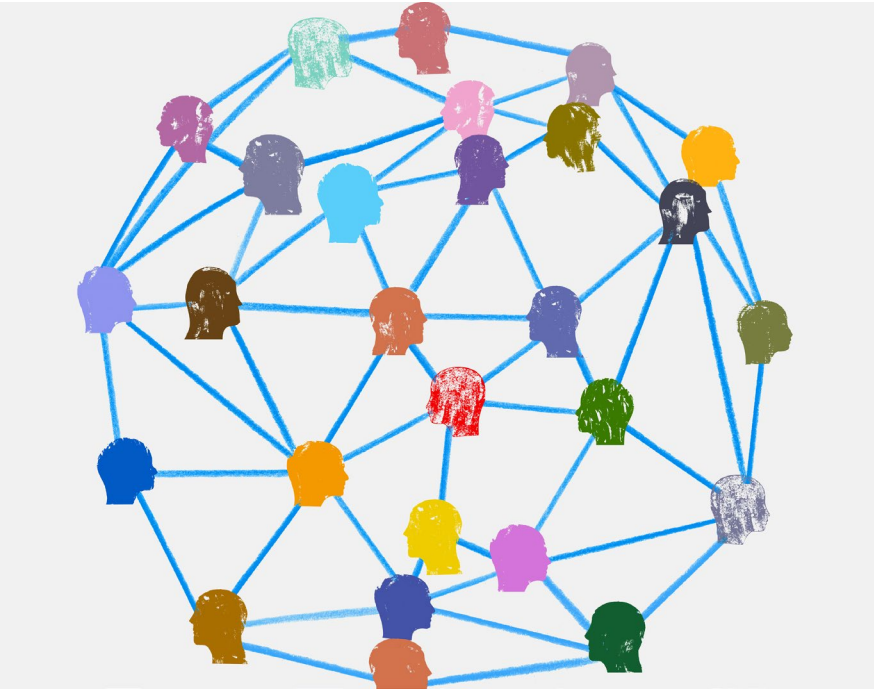


Recomendations that are weighted accordingly to the exposure risk


Rebekah Kading

Diego Peralta

What should we be doing outside the pandemic context?

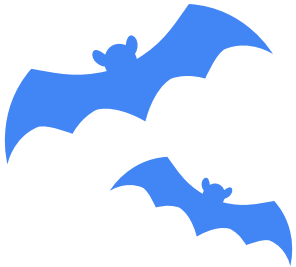


Once the emergency is “over” and research has shown that the transmission risk is low

Lots of conversations around how can we improve or practices

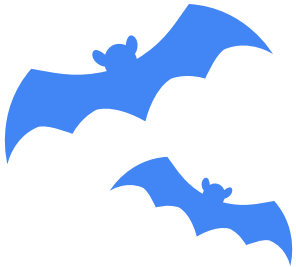
Initial work on guidelines for field hygiene

Why do we need to adopt field hygiene?



Protect bats AND people

Why do we need to adopt field hygiene?



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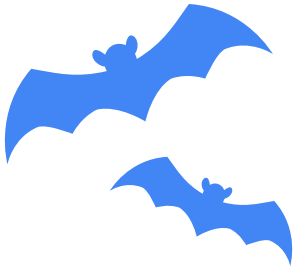

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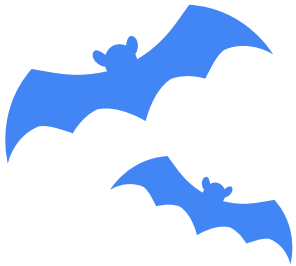

Protect bats AND people

Bats → People

People → Bats

Bats → Bats (mediated by people)

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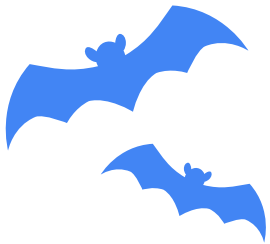

Protect bats AND people

Need to self-regulate

Bats → People

People → Bats

Bats → Bats (mediated by people)

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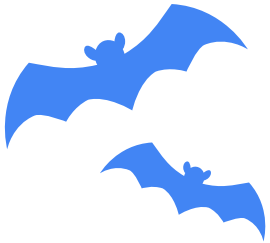

Protect bats AND people

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Need to self-regulate

Politics in the US and elsewhere

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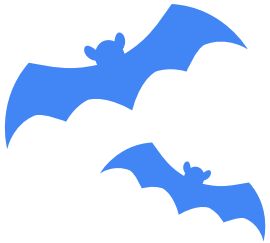

Protect bats AND people

Bats → People

People → Bats

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Need to self-regulate

Politics in the US and elsewhere

A chance to do things in a better way

Personal Protective Equipment (PPE)

(a) **Dedicated clothing** - a layer of removable clothing worn over street clothes, such as a long-sleeve, button-down shirt worn with long pants or uniform coveralls, must be removed during breaks (eating, drinking, etc.) and after fieldwork each day

(b) **Face mask** – surgical mask, KN95, N95 respirator

(c) **Eye protection** - safety glasses or goggles

(d) **Handling gloves** - leather and/or nitrile gloves

(e) **Rubber boots**

(a) Dedicated field clothing

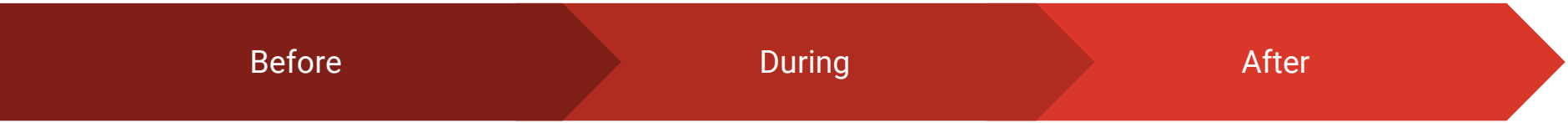
(b) Face mask

(c) Safety glasses or goggles

(d) Handling gloves and/or nitrile gloves

(e) Rubber boots

Process:



Process:

Before | During | After

Step 0: Permits & vaccinations.

Step 1: Evaluate risks based on: (1) geographic region; (2) bat species; (3) research activities

Step 2: Select appropriate Personal Protective Equipment (PPE).

Step 3: Prepare PPE and Field Safety Plan

Step 4: Train all personnel in PPE use and the Field Safety and Hygiene Plan.

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Step 0: Check team health and readiness before each night.

Step 1: Establish separated working spaces for living (if camping/eating) and working with bats.

Step 2: Prepare the processing station(s).

Step 3: Bat collection.

Step 4: Bat processing.

Step 5: Bat release.

Step 6: Lab space cleaning and breakdown.

Process:

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After

Disinfect all equipment and clothes

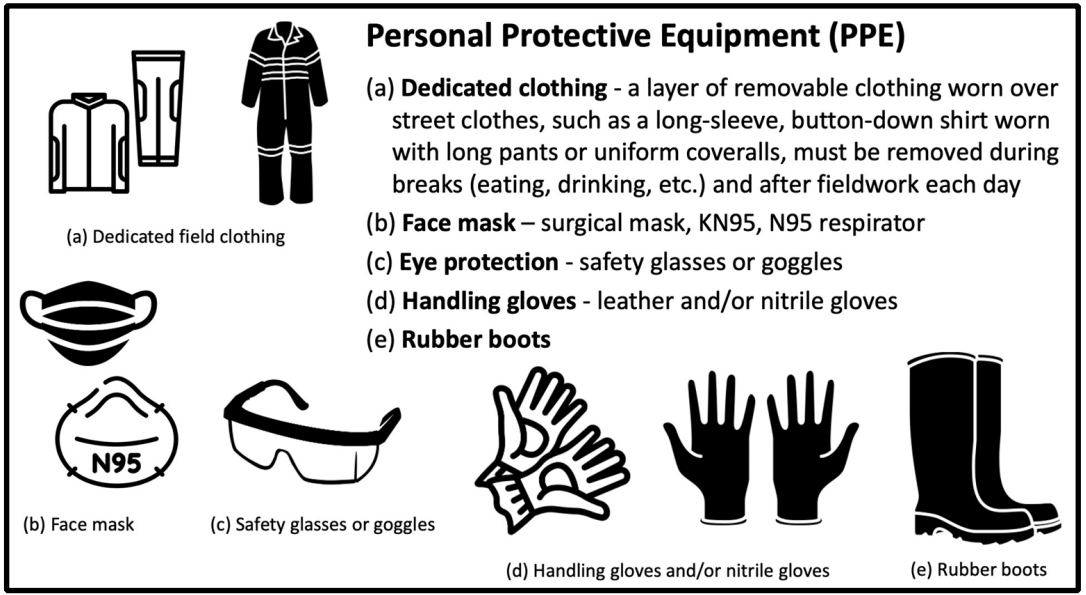
Properly dispose of biohazard waste and sharps.

Stay in contact with all team members and monitor team health.

PPE: Basic

For ALL capture / close proximity:

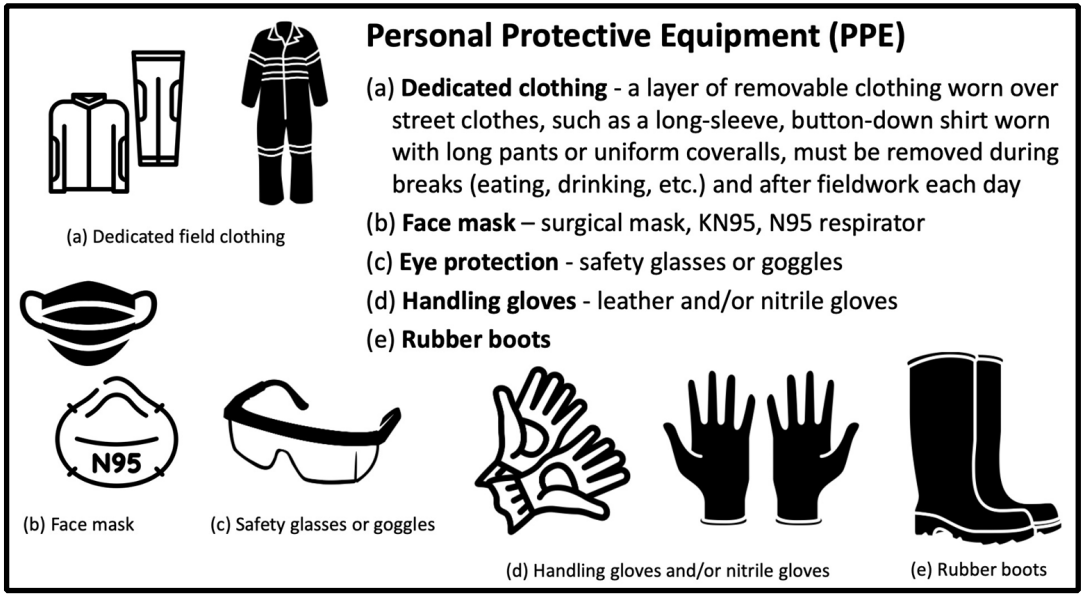
- Gloves
- Masks
- Dedicated field clothes
- Footwear
- Optional: Eyewear



PPE: **Basic+**

For higher risk activities:

- Gloves
- **Fitted Masks / Respirators**
- **Disposable / disinfectable clothing**
- Footwear
- **Eyewear**

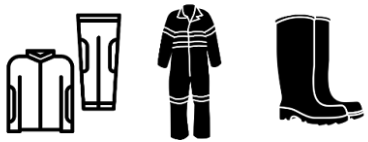


STEPS FOR PUTTING ON PPE

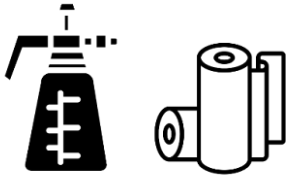
1. 
   Dedicated field clothing
2. 
   Rubber boots
3. 

   Face mask
4. 
   Safety glasses or goggles
5. 
   Handling gloves and/or nitrile gloves

STEPS FOR REMOVING PPE

1. 
   Spray with EtOH – store reusable gloves in tote; dispose of nitrile gloves in biohazard bag
2. 
   Remove, spray with EtOH, and wipe with paper towels
3. 
   Spray thoroughly with EtOH, including the bottom of boots – store in tote
4. 

   Dispose in biohazard bag


Hand pump sprayer filled with >70% ethyl alcohol (EtOH) & paper towels


Biohazard bag


Storage tote

Thank you!