

Global Health Cast 38

May 23, 2023



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 @Vaccinologist



Prof. Dr. Joe Schmitt

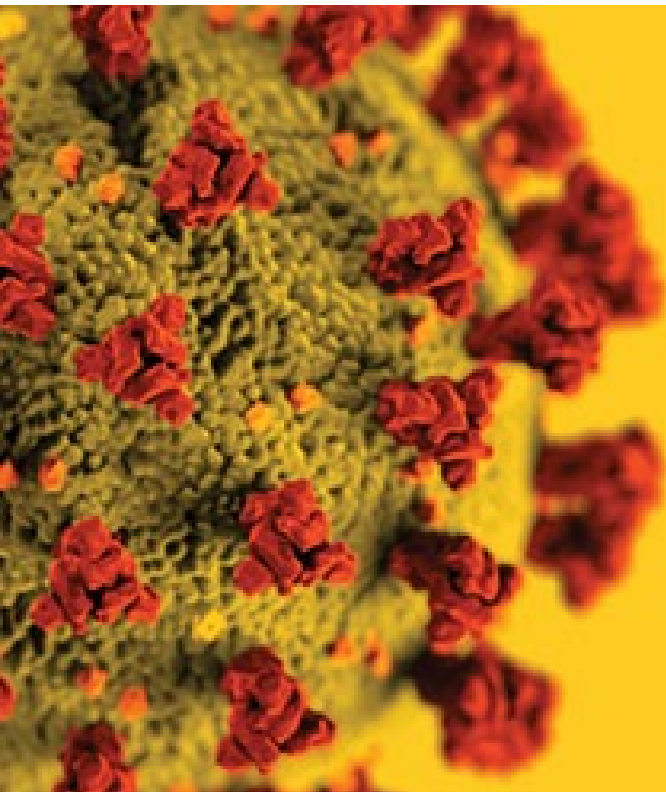
 @Prof_Schmitt

Every Week

12.00 noon - CET

What we talk about today

- **What to expect with the end of PHE for COVID**
- **SARS-CoV-2 at the Huanan Seafood Market**
- **VACCELERATE network**
- **RSV–bronchiolitis and risk of recurrent wheezing (RW) and asthma**
- **“Most Infectious Diseases” – Ebola and Marburg Virus**

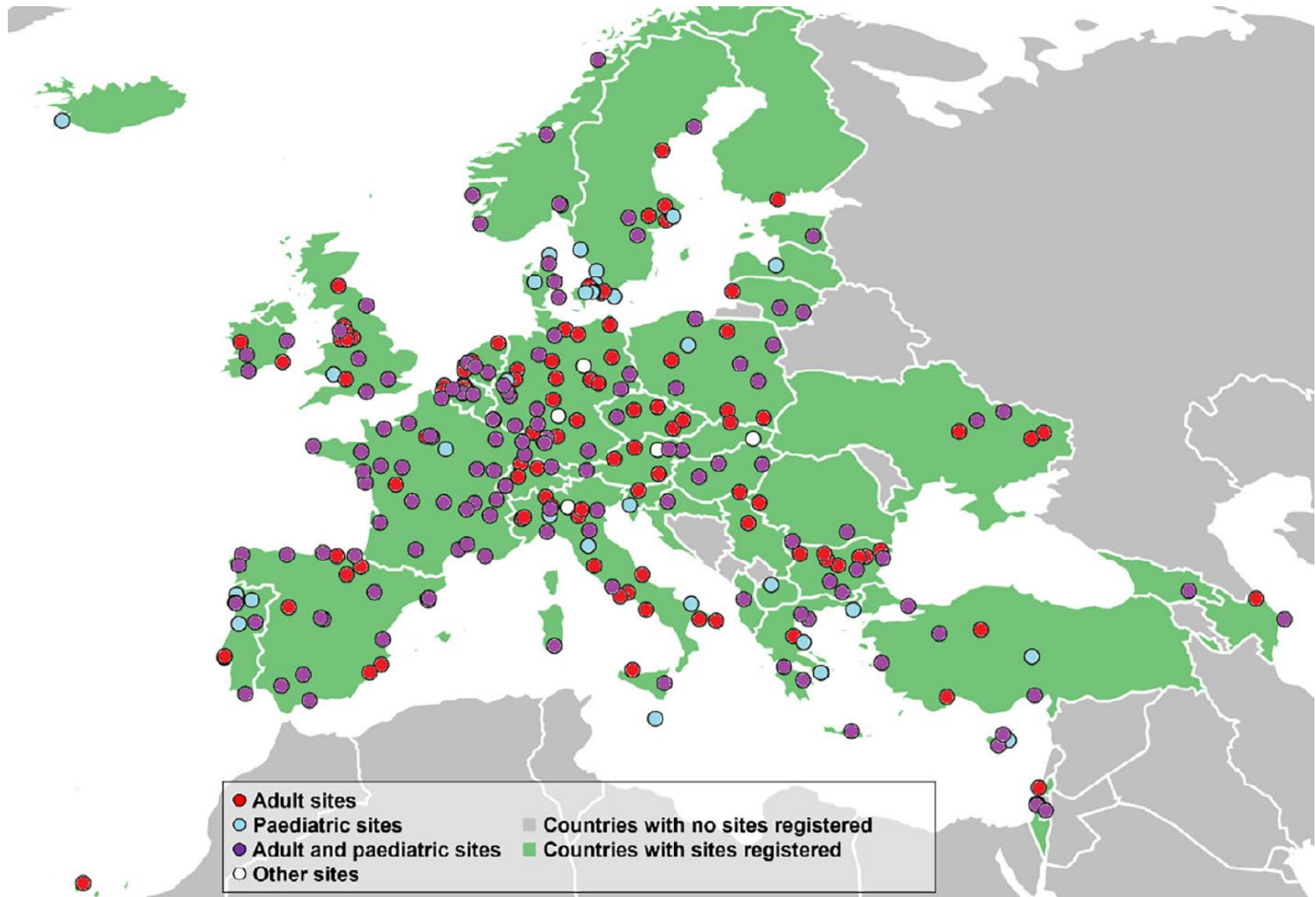


WHAT CAN **YOU**
EXPECT WHEN COVID
PHE ENDS?

Surveillance of SARS-CoV-2 at the Huanan Seafood Market



Current Site Vaccelerate Site Network Mapping - Overall registered sites



VACCELERATE Site Network utilisation since set up.

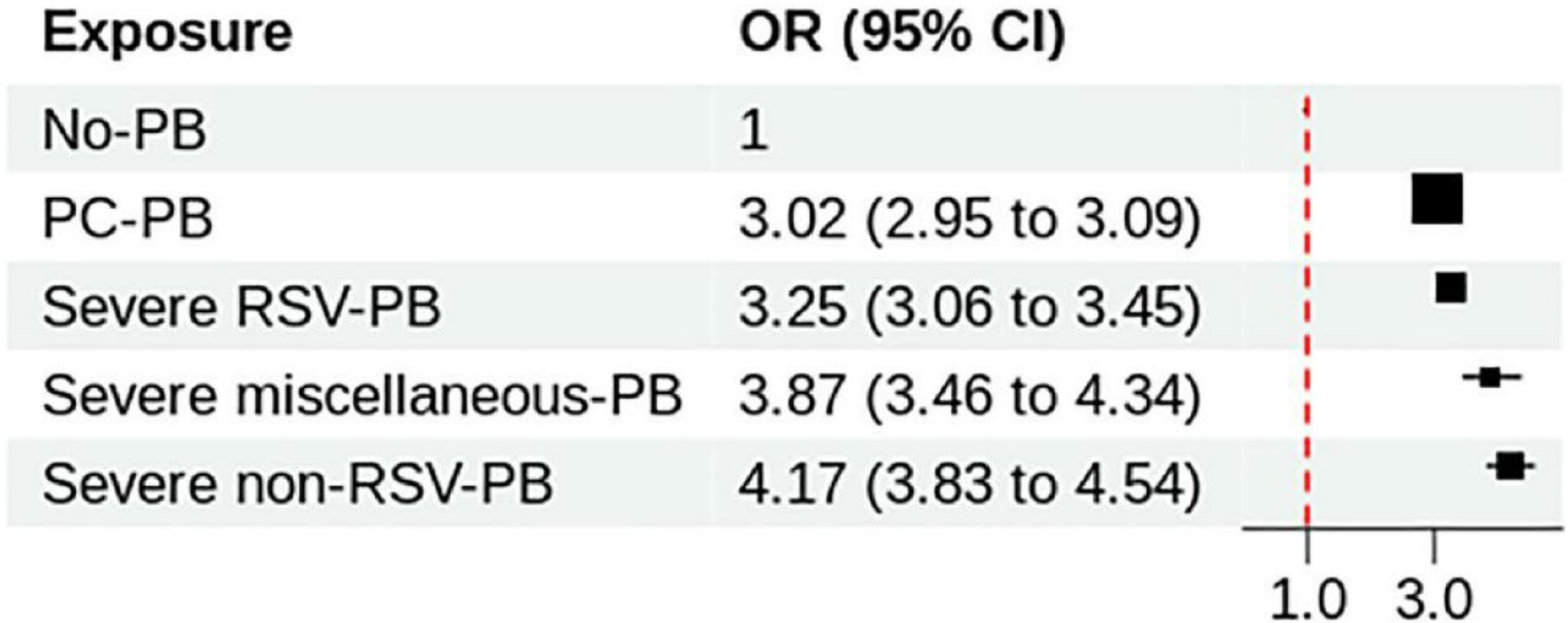
Utilisation date	Pathogen	User	Purpose
October 2020	SARS-CoV-2	Industry trial	Vaccine trial
October 2020	SARS-CoV-2	Industry trial	Vaccine trial
February 2021	SARS-CoV-2	Industry trial	Vaccine trial
February 2021	SARS-CoV-2	Industry trial	Vaccine trial
February 2021	<i>Orthomyxoviridae</i>	Industry trial	Vaccine trial
March 2021	SARS-CoV-2	Industry trial	Vaccine trial
March 2021	SARS-CoV-2	Industry trial	Vaccine trial
July 2021	SARS-CoV-2	Industry trial	Vaccine trial
July 2021	SARS-CoV-2	Industry trial	Vaccine trial
August 2021	SARS-CoV-2	Academic trial	Vaccine trial
August 2021	SARS-CoV-2	Academic trial	Vaccine trial
August 2021	SARS-CoV-2	Academic trial	Vaccine trial
September 2021	Fungi	Academic epidemiological study	IFI diagnostic and treatment capacity mapping [18]
March 2022	<i>Streptococcus pneumoniae</i>	Industry trial	Vaccine trial
April 2022	<i>Streptococcus pneumoniae</i>	Industry trial	Vaccine trial
May 2022	<i>Orthomyxoviridae</i>	Industry trial	Vaccine trial
May 2022	Monkeypox virus	Academic epidemiological study	Monkeypox diagnostic and treatment capacity mapping [17]
June 2022	Monkeypox virus	Academic epidemiological study	Status of monkeypox-related clinical trials in Germany
June 2022	Monkeypox virus	Academic epidemiological study	Status of monkeypox-related clinical trials in Europe
July 2022	Monkeypox virus	Academic epidemiological study	Monkeypox epidemiology in children and adult women at outbreak onset [16]
August 2022	NA	Academic epidemiological study	Status of Study Nurse courses in Europe
February 2023	Monkeypox virus	Industry trial	Feasibility to participate in observational monkeypox paediatric studies
February 2023	Any	Academic epidemiological study	Priority list of pathogens of interest
February 2023	SARS-CoV-2	Academic epidemiological study	Long-COVID treatment and follow up capacity mapping
March 2023	NA	Other	Invitation to study nurse course

IFI, invasive fungal infection; NA, not applicable; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

RSV – association with RW/asthma

- ▶ Association between severe RSV–bronchiolitis and subsequent increased risk of recurrent wheezing (RW) and asthma.
- ▶ Causal relationship remains unproven.
 - ▶ Retrospective population-based cohort study (339 814 children),
 - ▶ **Bronchiolitis during the first 2 years of life (regardless of etiology and severity) was associated with at least a 3-fold increased risk of RW/asthma at 2–4 years and an increased prevalence of asthma at ≥ 5 years of age.**
 - ▶ risk similar in children with mild bronchiolitis as in those with hospitalized RSV-bronchiolitis and was higher in children with hospitalized non-RSV-bronchiolitis. The rate of RW/asthma was higher when bronchiolitis occurred after the first 6 months of life.
 - ▶ However, 60% of hospitalized bronchiolitis cases setting were due to RSV
- ▶ Results support the hypothesis of a shared predisposition to bronchiolitis (irrespective of etiology) and RW/asthma.

Association between previous bronchiolitis during the first 2 years of life and subsequent risk of asthma or RW, children aged 2–4 years, stratified by type of bronchiolitis



PB: registered bronchiolitis in primary care or hospital
 PC: first bronchiolitis consultation at primary care

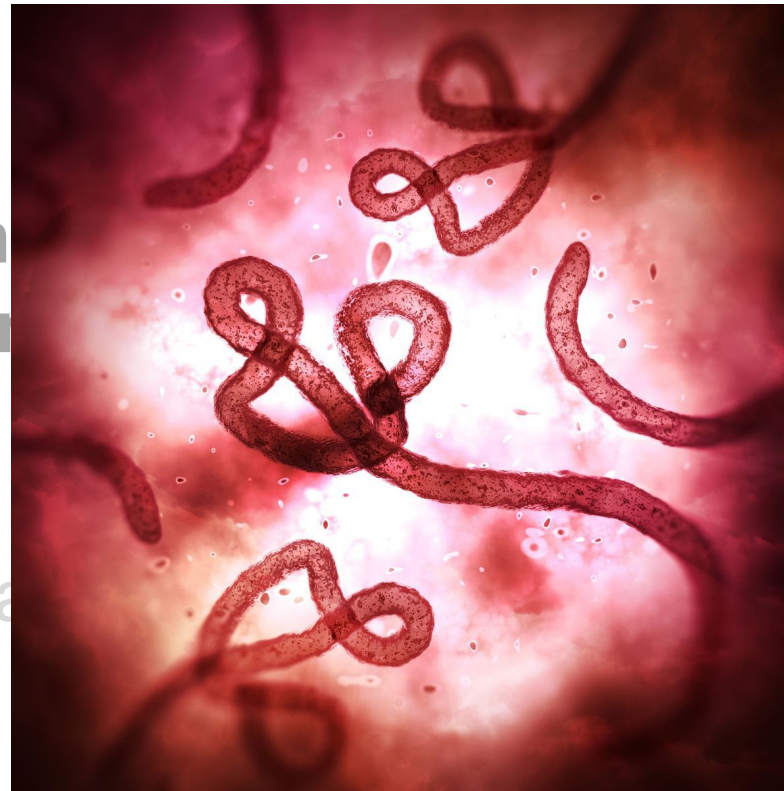
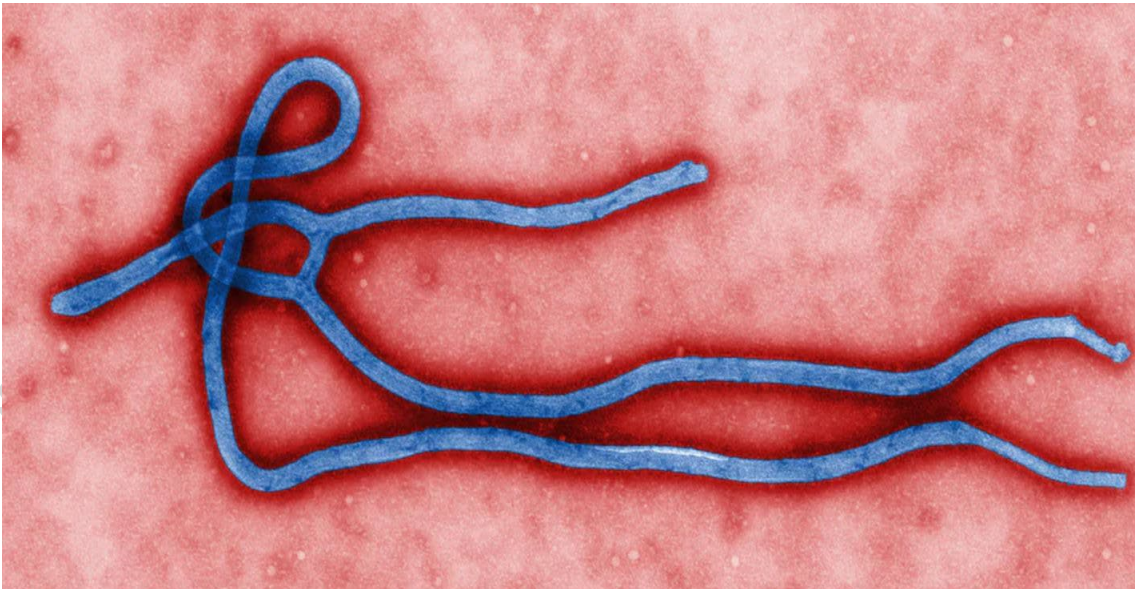
The most infectious diseases the WHO has identified to date:

- ✓ Nipah virus **Check out GHC 33**
- ✓ Crimean-Congo hemorrhagic fever **Check out GHC 34**
- ✓ Lassa fever **Check out GHC 35**
- ✓ Rift Valley fever **Check out GHC 36**
- ✓ Zika **Check out GHC 37**
- Ebola and Marburg
- Middle East respiratory syndrome (MERS)
- Severe acute respiratory syndrome (SARS)

Disease X (any unknown pathogen that could cause a future outbreak)

The most infectious diseases the WHO has identified to date:

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- ✓ Zika Check out [GHC 37](#)
- **Ebola and Marburg**



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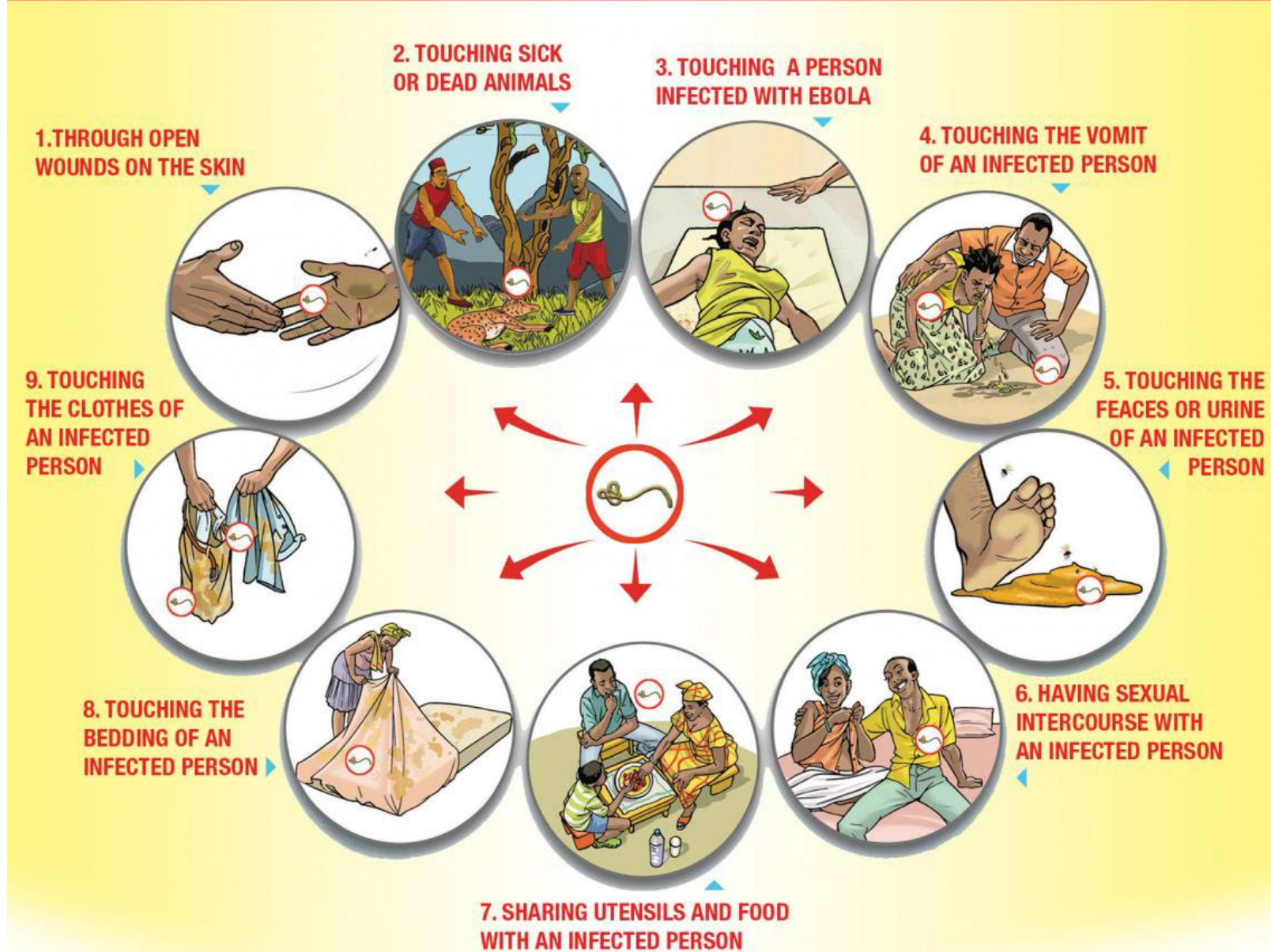
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(outbreak)

HOW DOES EBOLA SPREAD?



HOW DOES ONE GET EBOLA?

BY COMING INTO DIRECT CONTACT WITH:

1



Body fluids of a person who is sick with or has died from Ebola (blood, vomit, urine, feces, sweat, semen, saliva, etc)

2



Objects contaminated with the virus (needles, medical equipment)

3



Infected fruit bats or primates

4



Possibly from contact with semen from a man who has recovered from Ebola (by having oral, vaginal or anal sex)

HOW DOES EBOLA SPREAD FROM PERSON TO PERSON?

A person infected with Ebola is **only contagious** when they begin to have one or more symptoms of the disease



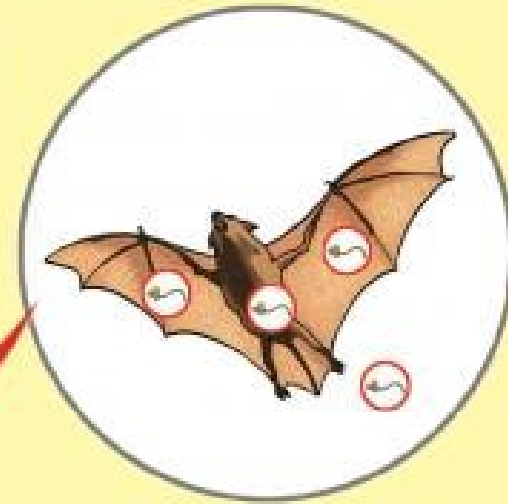
3 WEEKS

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

After **21 days**, if an exposed person does not develop symptoms, they will **NOT** become sick with Ebola

HOW IS EBOLA TRANSMITTED FROM ANIMALS TO HUMANS?

- 1 The Ebola virus is transmitted to humans through **infected bush-meat**, such as bats and monkeys



- 2 The Ebola virus is easily transmitted from animals to humans during hunting, slaughtering and preparing of the meat

During an Ebola outbreak, avoid bush-meat, as it can infect you with Ebola

6 WAYS TO PREVENT EBOLA

EBOLA IS A DANGEROUS VIRUS BUT CAN BE AVOIDED EASILY!



1

AVOID **PHYSICAL CONTACT** WITH PEOPLE SHOWING SYMPTOMS OF THE **EBOLA VIRUS**



2

WASH YOUR HANDS **REGULARLY** WITH CLEAN **WATER** AND **SOAP**



3

KEEP **AWAY** FROM (FRUIT)BATS, MONKEYS, **DEAD ANIMALS** AND BUSH MEAT



4

ANIMAL **PRODUCTS** SHOULD BE THOROUGHLY **COOKED** BEFORE **CONSUMPTION**



5

INFORM **HEALTH AUTHORITIES** IMMEDIATELY IN CASE OF **CONTACT** WITH EXPECTED OR CONFIRMED **EBOLA CASES**



6

ONLY **TRAVEL** TO AREAS WHERE THERE IS AN **EBOLA** OUTBREAK IN CASE OF **URGENT NEED**

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