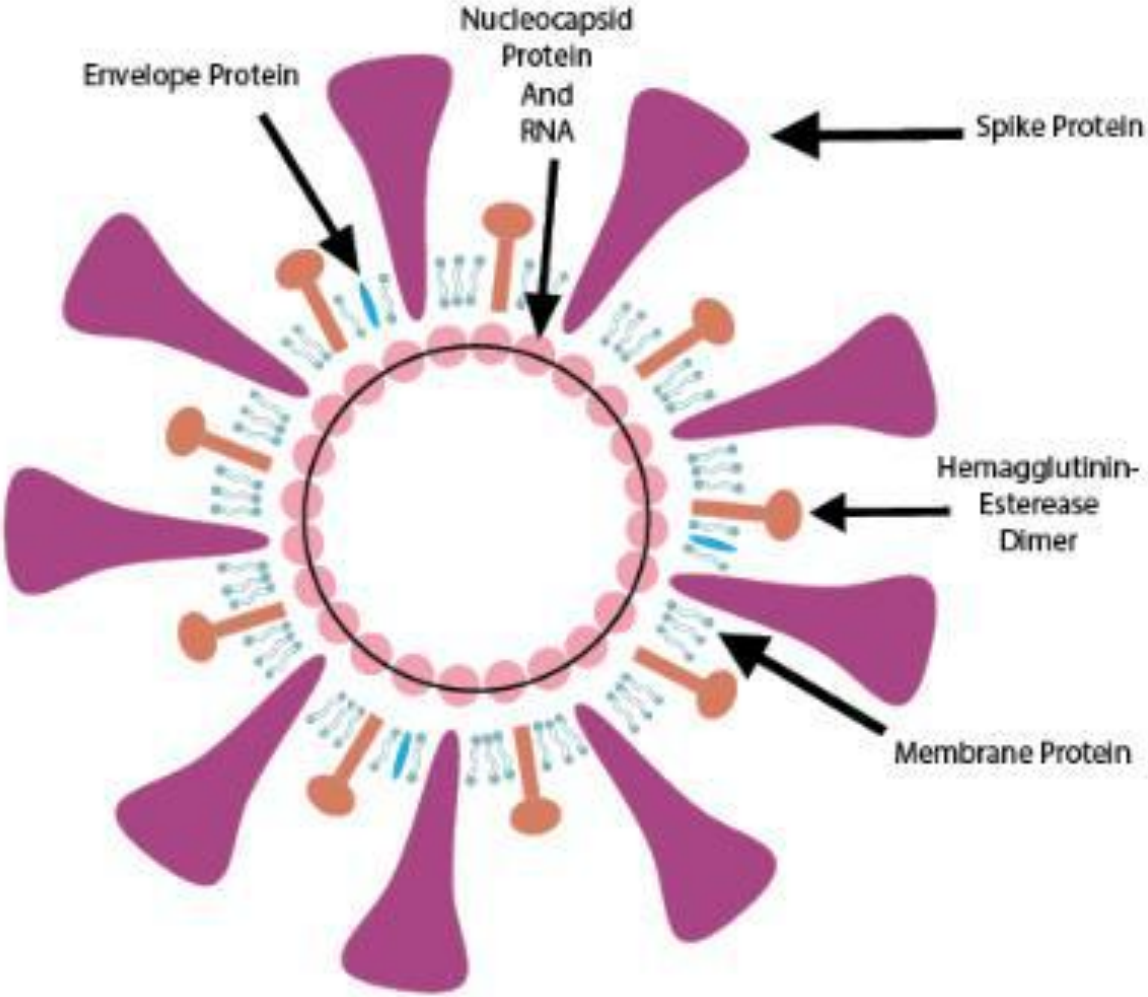
OzoAcademy
HOSPITALITY TRAINING SCHOOL

COVID 19: INFECTION CONTROL & PREVENTION

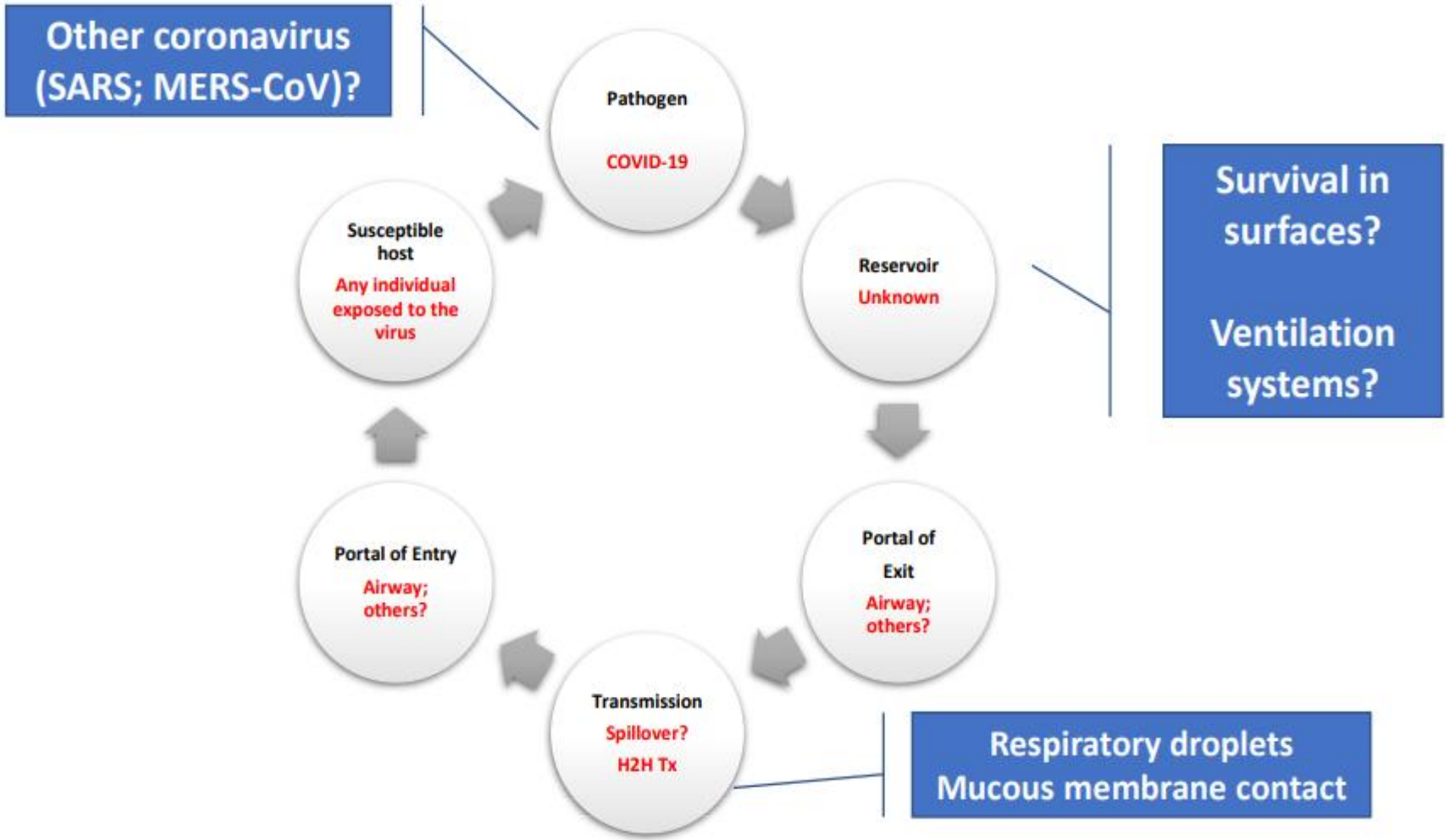
CORONAVIRUS: COVID 19

Epidemiology

- Large, enveloped, positive strand RNA virus
- December 2019 cluster of patients with novel coronavirus identified in Wuhan, China reported to WHO believed to be sourced from Huanan Seafood Wholesale Market
- 4 clinical manifestations:
- 81% Mild
- 14% Severe
- 5% Critical
- 1% Asymptomatic


Envelope Protein
Nucleocapsid Protein And RNA
Spike Protein
Hemagglutinin-Esterease Dimer
Membrane Protein

Natural History of COVID-19



Symptoms

Fever

Cough

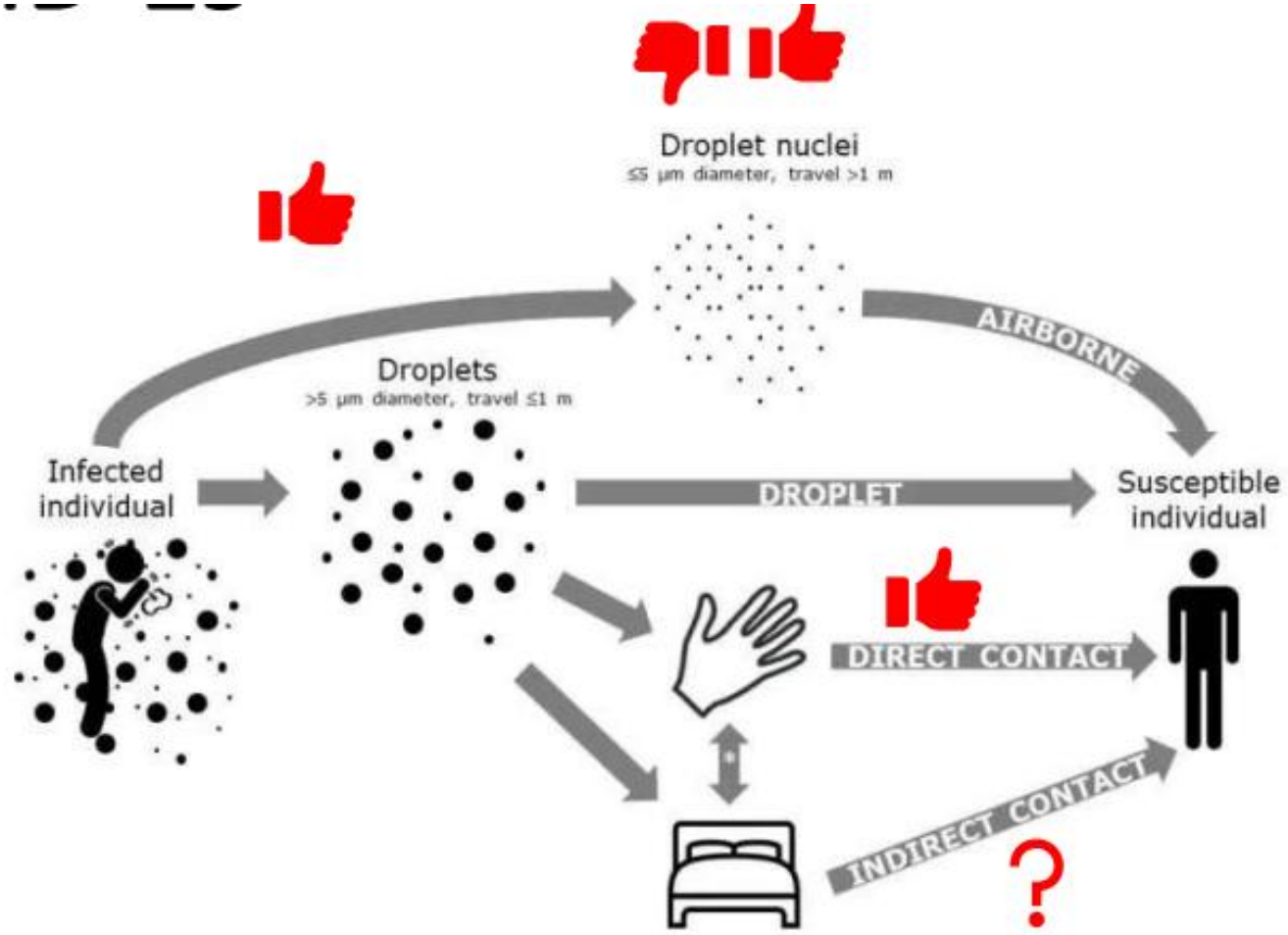
Shortness of breath

Muscle aches

Sore throat

Unexplained loss of taste or smell

Transmission of COVID-19



* Transmission routes involving a combination of hand & surface = indirect contact.

Transmission

- Incubation period: median 5 days (ranges from 2-14 days)
- Median age of 47
- 60% male vs 40% female
- Transmission: Droplet, Contact, +/-Airborne
- Studies have found high viral load in nasopharyngeal samples of asymptomatic patients suggesting infectious before symptoms show

What is contact

- WHO defines a contact as a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case

Contact

- Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
- Direct physical contact with a probable or confirmed case;
- Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment;

Contact in Hospitality

- Guest companions or persons providing care who had close contact with the suspected case;
- The staff member designated to look after the ill persons, and other staff members who may have been in close contact with the ill persons or the facilities they use (e.g. bathroom) or their usual articles (e.g. used linen and clothes).

Screening

- **Screen all individuals at first contact with in designated area**
- Measure temperature and ask every person about:
- Symptoms consistent with COVID-19 infection (fever, cough, dyspnea)
- Close contact with a patient known or presumed to have COVID infection

Screening

- Travel to any area with reported local transmission of COVID disease
- Any positively screened person should be given a mask and kept 2 metres (6 feet) away from other persons
- All personnel should wear Personal Protective Equipment (PPE) when evaluating a positively screened person

Standard Precautions

- “(…) A set of practices that are applied to the care individuals, regardless of the state of infection (suspicion or confirmation), in any place where services are provided. (…)”

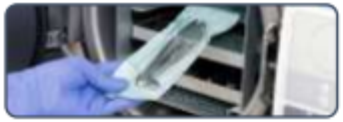
Standard Precautions

Hand hygiene (water and soap or alcohol-based solutions)

Use of personal protective equipment (PPE) according to risk

Respiratory hygiene (or cough etiquette)

Safe injection practices



Sterilization / disinfection of medical devices

Environmental cleaning

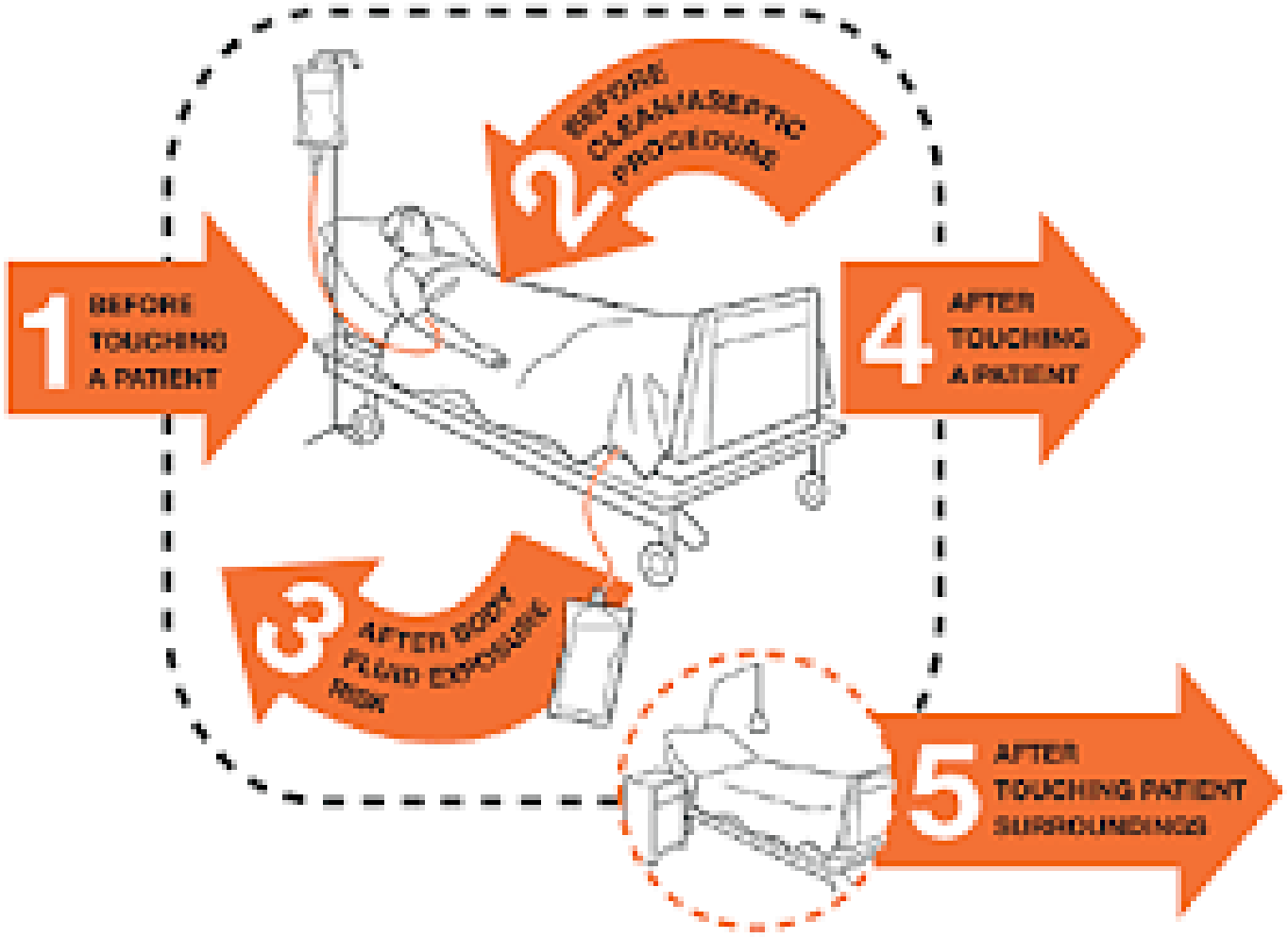
Transmission Based Precautions

Contact precaution

Droplet precaution

Airborne precaution

Infection Prevention



Hand Hygiene

- 5 Moments for Hand Hygiene
- Clean hands with alcohol-based hand rub *if not visibly soiled for minimum of 20 seconds*
- Wash hands with soap and water *if visibly soiled for minimum of 40 seconds*

Respiratory

- Cover mouth with bent elbow or tissue for any cough or sneeze
- Wear mask while at work and in contact with people

Personal Protective Equipment

- All personnel should put on PPE gear when coming into contact with potential COVID-19 infection.
- PPE gear entails:
- Facemask
- Face shield or goggles
- Gloves (clean, non-sterile gloves)

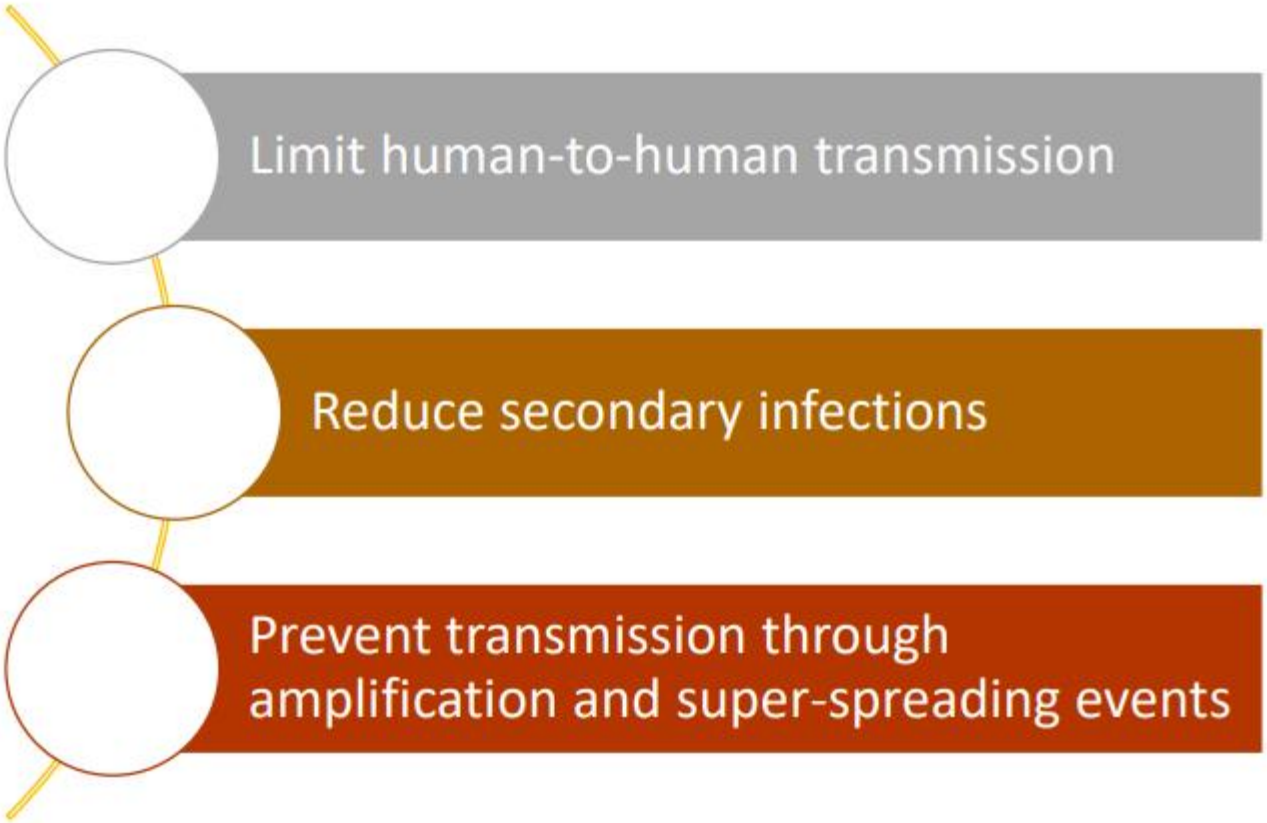
Masks

Masks, and eye protection, such as eyewear and goggles, are also important pieces of PPE and are used to protect the eyes, nose or mouth mucosa of the worker from any risk of contact with a person's respiratory secretions or splashes of blood, body fluids, secretions or excretions.

Gloves

- Gloves are an essential item of PPE and are used to prevent the worker from being exposed to direct contact with the blood or body fluid of an infected person.
- Gloves DO NOT replace hand hygiene.

Summary


Limit human-to-human transmission
Reduce secondary infections
Prevent transmission through amplification and super-spreading events