



# Breaking the Chain of Infection

Germs spread from person to person through a series of events called chain of infection. There are six links that make up the chain. To prevent germs from infecting more people, we must break the chain of infection at any of the six links.

### **Break the Chain:**

- Immunizations
- Treatment of underlying disease
- Health and wellness

# **Susceptible Host**

Carrier of an infection or someone at risk of infection

## Portal of Entry

Way the germs enter a new host (e.g., mouth, nose, eyes, open wounds)

## **Break the Chain:**

- Hand hygiene
- Wear PPE
- Personal hygiene
- First aid

## Break the Chain:

- Diagnosis and treatment
- Antimicrobial stewardship

## **Infectious Agent**

**1.** Germs that cause disease (e.g., bacteria, virus, fungi)

# **Mode of Transmission**

Ways germs can be passed on (e.g., contact, ingestion, inhalation)

### **Break the Chain:**

- Hand hygiene
- Wear PPE
- Food safety
- Cleaning, disinfection, sterilization
- Isolation
- Air filtration

## **Break the Chain:**

- Antibiotics
- Cleaning, disinfection, sterilization
- Other infection prevention policies
- Pest control

## Reservoir

Places where germs live
(e.g., humans, animals, insects, water, soil, surfaces)

#### **Portal of Exit**

Ways germs leave the reservoir (e.g., feces, vomit, coughs, aerosols, oozing wounds)

## **Break the Chain:**

- Hand hygiene
- First aid
- ▶ Wear PPE
- Control of aerosols, droplets splatter
- Respiratory etiquette
- Proper waste disposal

 $Source: APIC\ Break\ the\ Chain\ of\ Infection\ Infographic\ http://infectionprevention and you.org/protect-your-patients/break-the-chain-of-infection/linear-lin$ 

Germs	Reservoir	Portal of Exit	Mode of Transmission	Portal of Entry	Susceptible Host
SARS-CoV-2 (virus that causes COVID-19)			Profession and the second		İ
	Human	<b>Mouth</b> Coughing, Sneezing, Talking, Singing	<b>Respiratory droplets</b> flying into the air and landing on surfaces	<ul> <li>Mouth, nose, eyes</li> <li>Breathing in respiratory droplets</li> <li>Touching contaminated surface and touching face</li> </ul>	Anyone, but elderlies, healthcare and essential workers, and people with underlying health conditions are at higher risk
Break the Chain	<ul><li>Stay home when sick</li><li>Sick leave policy</li></ul>	<ul><li>Wear mask</li><li>Cough into elbow or tissue</li></ul>	<ul><li>Proper ventilation</li><li>Clean and disinfect surfaces properly</li></ul>	<ul><li>Physical distance</li><li>Wear mask</li><li>Hand hygiene</li></ul>	► Get vaccinated
Methicillin-resistant Staphylococcus aureus (MRSA)	Human	Open wounds	Wounds and cuts coming in	Open wounds and cuts	Anyone, but athletes,
		and cuts	contact with another person's skin or surface	Contact with an infected person's oozing wounds or contaminated surface	students, military personnel in barracks, patients receiving inpatient medical care are at higher risk
Break the Chain		<ul> <li>Clean and cover open wounds until healed</li> <li>Do not pick at or pop the sore</li> <li>Don't share personal items (e.g., towels, clothing, razors)</li> </ul>	<ul> <li>Good hand/body hygiene</li> <li>Clean and disinfect surfaces properly</li> <li>Laundering fabric coming in contact with an infected person</li> </ul>	<ul> <li>Cover and clean open wounds until healed</li> <li>Don't share personal items</li> <li>If infected, get treatment early</li> </ul>	
Norovirus			<del>                                      </del>		<b>D</b> i
	Human contaminated water	Vomiting, diarrhea	Tiny vomit or fecal particles of infected person landing on food, water or surfaces.  Direct contact with an infected person.	Mouth Tiny vomit or fecal particles of an infected person entering your mouth	Anyone
Break the Chain	<ul> <li>Stay home when sick</li> <li>Sick leave policy</li> <li>Strict hand hygiene and food handling policy</li> <li>Proper water treatment</li> </ul>	<ul> <li>Good hand hygiene</li> <li>Clean and disinfect contaminants immediately and properly</li> </ul>	<ul> <li>Clean and disinfect surfaces properly</li> <li>Wash fruits and vegetables thoroughly</li> </ul>	<ul> <li>Good hand hygiene</li> <li>Avoid contact with an infected person</li> <li>Avoid sharing food or eating utensils</li> </ul>	CLOROXPRO