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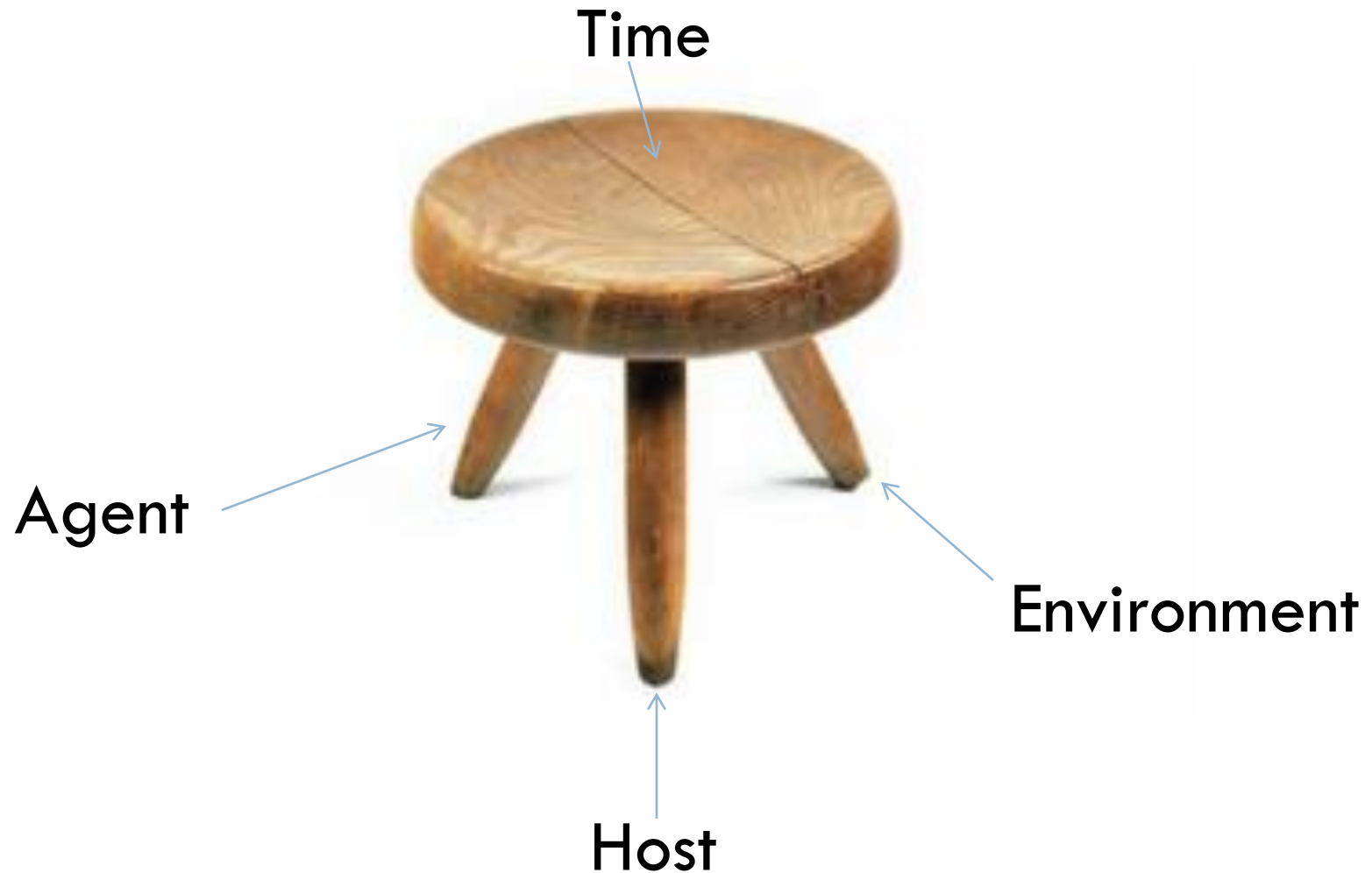
NO LEG TO STAND ON

Outbreak prevention in the childcare setting

Objectives

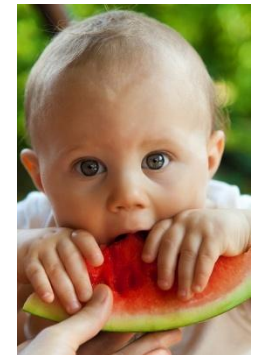
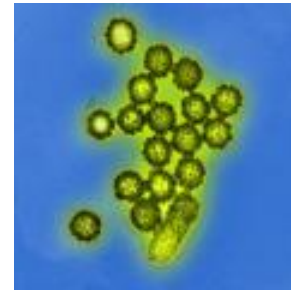
- How diseases spread
- Current diseases of concern
- How to respond to outbreaks

How Diseases Spread: Constructing the 3-legged Stool



Example - Influenza

- Time
 - ▣ Now through February
- Agent
 - ▣ H1N1, H3N2
- Host
 - ▣ People
- Environment
 - ▣ Air, close quarters, crowds



The Equation for Disease

TIME

AGENT

HOST

ENVIRONMENT

1

+

1

+

1

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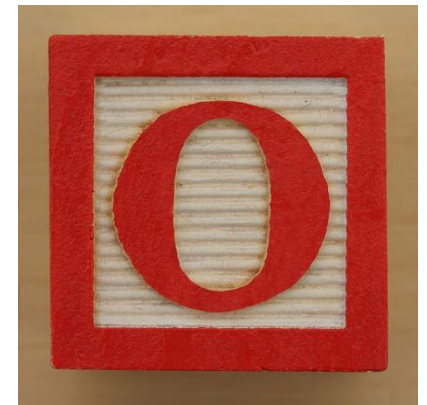
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DISEASE

Reverse Equation

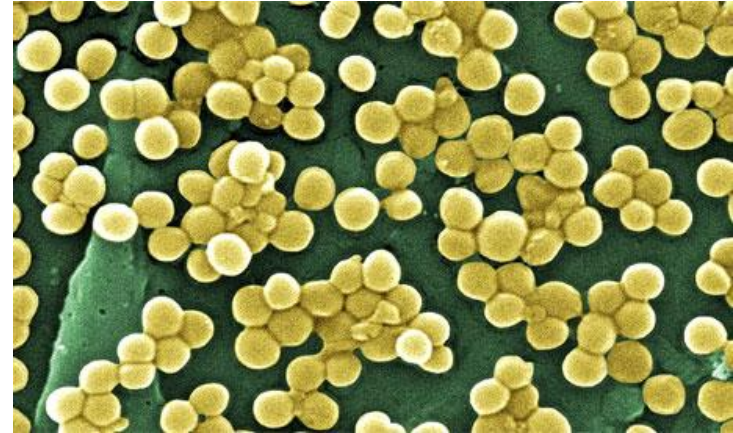


Current diseases of concern

- MRSA
- D-68 Enterovirus
- Plague
- Ebola
- West Nile Virus
- Head lice

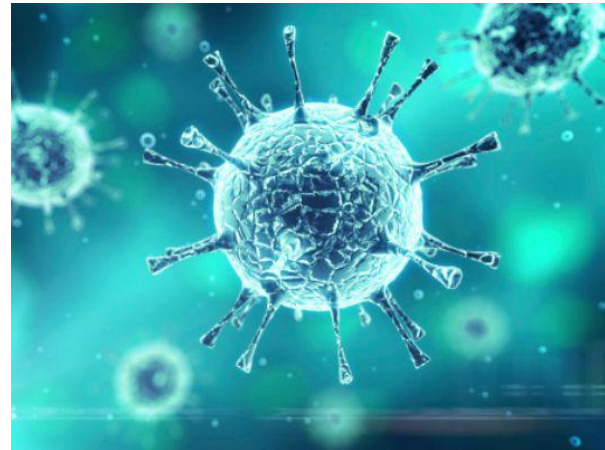
Headlines - MRSA

- Agent
 - ▣ Methicillin-Resistant Staphylococcus Aureus
- Host
 - ▣ People
- Environment
 - ▣ Certain activities or places that involve crowding, skin-to-skin contact, and shared equipment or supplies.
- Time
 - ▣ 1 - 10 day incubation period



Headlines – Enterovirus D-68

- Agent
 - ▣ Enterovirus D68
- Host
 - ▣ People
- Environment
 - ▣ Air and surfaces - Coughs, sneezes, or touches a surface that is then touched by others
- Time
 - ▣ 3-6 days and symptoms last 5 - 10 days



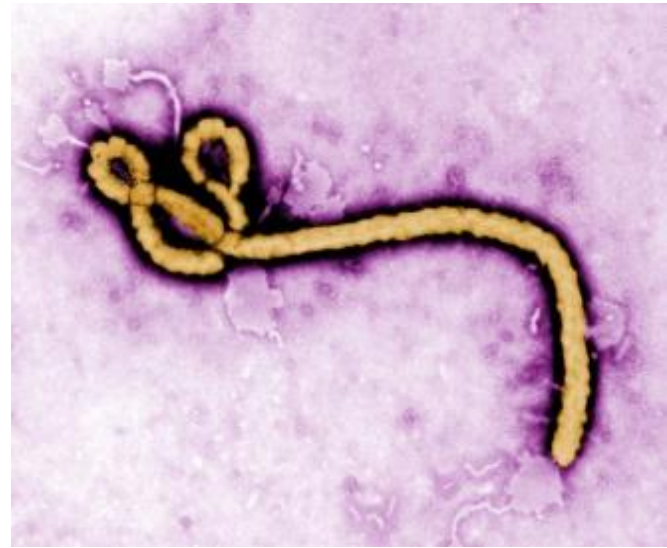
Headlines - Plague

- Agent
 - ▣ *Yersinia pestis*
- Host
 - ▣ People, fleas, rodents
- Environment
 - ▣ Plague circulates among wild rodents and their fleas in rural and semirural areas in the western United States
- Time
 - ▣ Transmission to humans occurs through the bite of infected fleas, direct contact with infected body fluids or tissues, or inhalation of respiratory droplets from ill persons or animals, including ill domesticated cats and dogs



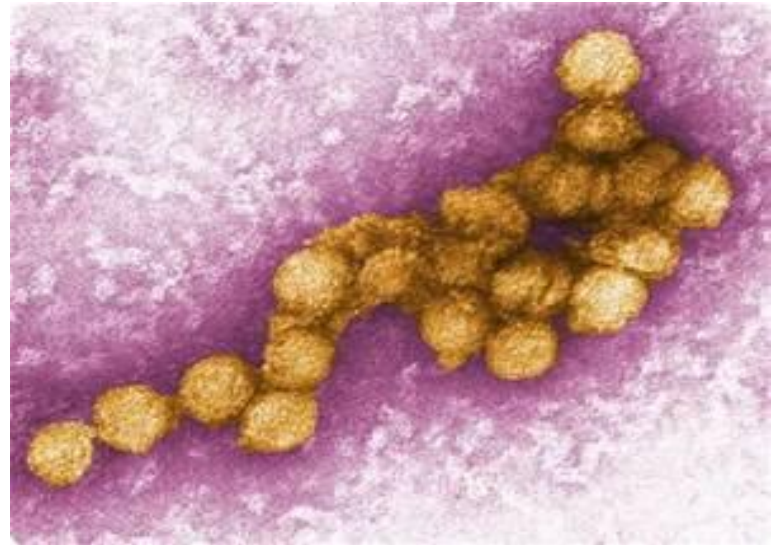
Headlines - Ebola

- Agent
 - ▣ Filoviridae Ebolavirus
- Host
 - ▣ Bats, humans
- Environment
 - ▣ Eastern Africa, Texas
- Time
 - ▣ 2 - 21 days; more commonly 4 - 10 days



Headlines – West Nile Virus

- Agent
 - ▣ Flavivirus
- Host
 - ▣ Mosquitos, humans
- Environment
 - ▣ Moist areas, standing water, places and situations where people might be uncovered
- Time
 - ▣ Incubation period is 14 days/ seasonal aspects



Headline – Head Lice



- At least 25 states host lice populations that don't respond to common over-the-counter treatments
- Prescription medications are available
- Lice do not carry diseases

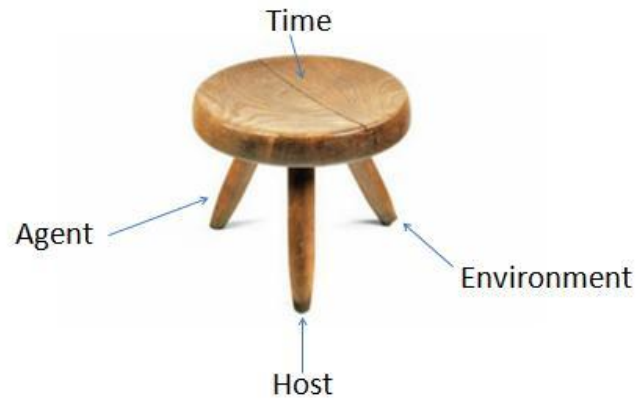
From a recent study from Southern Illinois University

Prevention – Breaking the Stool

- Pick a disease
- Discuss the Agent, Host, Environment
- What can you do to remove each of these legs?

Conclusions

How Diseases Spread: Constructing the 3-legged Stool



Reverse Equation

A visual equation using numbers on colored tiles. On the left is a red circular tile with the number '4'. To its right is a blue minus sign. Next is a red square tile with the number '1'. To its right is a blue equals sign. On the far right is a red square tile with the number '0' inside a white square frame.

Questions?



Thank You!



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