

For the Health of It

Clark County Health Department

January 1, 2024

NOTABLE NEWS

REMINDERS: PERMITS

Pool and Tattoo/body piercing Permits have expired as of December 31, 2023. Pool renewal applications are now due! Applications can be found on our website at <https://clarkhealth.net>.

Food establishment permits expire on January 31st. Reminders were mailed to facilities in November to the addresses we have on file. Applications can be found on our website at <https://clarkhealth.net>.

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ISSUE 1

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FOOD ESTABLISHMENTS

IC 16-42-5.2, amended in 2020 by House Enrolled Act 1210, states that a Certified Food Protection Manager (CFPM) is not needed when the food establishment's food handling activities do not include the cooking of raw food of animal origin or are limited to one (1) or more of the following:

- (1) Heating or serving precooked foods.
- (2) Preparing or serving a continental breakfast such as rolls, coffee, juice, milk, and cold cereal.
- (3) Preparing or serving beverages or ice.
- (4) Preparing or serving packaged or unpackaged low hazard foods, including elephant ears, funnel cakes, cotton candy, confectioneries, baked goods, popcorn, chips and grinding coffee beans.
- (5) Providing prepackaged food in its original package

All other establishments are required to have at least 1 CFPM. Failure to obtain a CFPM with 3 months of notification, or 3 months from the last CFPM employee leaving the job, will result in an office hearing.

OUTREACH



Disease Intervention Specialist
Appreciation Day, Indianapolis



Utica Christmas Parade



THE NATIONAL HIGHWAY TRAFFIC SAFETY
ADMINISTRATION ESTIMATES

**3 OUT OF 4 CAR SEATS
ARE INSTALLED
INCORRECTLY**

The Clark County Health Department is now a permanent fitting station offering appointment-based, educational car seat fittings and installations.



Don't risk it. Call (812)282-7521 and
request an appointment today.



**NEW
PROGRAM**



Public Health
Prevent. Promote. Protect.

Clark County Health Department



COMMUNITY PARAMEDICINE MOBILE HEALTH

OUR GOAL

To assist patients, and to provide resources and treatment in order to minimize hospitalizations and urgent care visits.
We can help you manage chronic conditions from the comfort of your home.

✓ Chronic Conditions & Screenings

- Diabetes
- Cardiac Issues
- Pulmonary Issues
- Behavioral patients

✓ Fall Risk Assessments

✓ Substance Use Disorder & Harm Reduction

✓ Pre and Postnatal Care

✓ Safe Sleep

✓ Vaccinations

✓ Medication Review and Follow-up Appointments

✓ Minor Wound Care

✓ Liaison between patients and healthcare providers

FOR MORE INFO

 812-282-7521 Ext: 232

 www.clarkhealth.net



AWARENESS DAYS

Sepsis is a complication caused by the body's overwhelming and life-threatening response to an infection, which can lead to tissue damage, organ failure, and death.

Any type of infection that is anywhere in your body can cause sepsis. It is often associated with infections of the lungs (e.g., pneumonia), urinary tract (e.g., kidney), skin, and gut. An infection occurs when germs enter a person's body and multiply, causing illness and organ and tissue damage.

-CDC.gov

FEB 11TH IS
SEPSIS
SURVIVOR
WEEK

Sepsis

Symptoms of sepsis include:



Fast heart rate.



Low blood pressure.



Fever or hypothermia.



Shaking or chills.



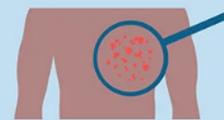
Warm or clammy/sweaty skin.



Confusion or disorientation.



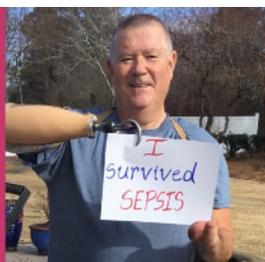
Shortness of breath.



Sepsis rash.



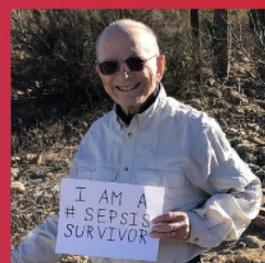
Extreme pain or discomfort.



In the United States,

MORE THAN 1.4 MILLION PEOPLE SURVIVE SEPSIS EVERY YEAR.

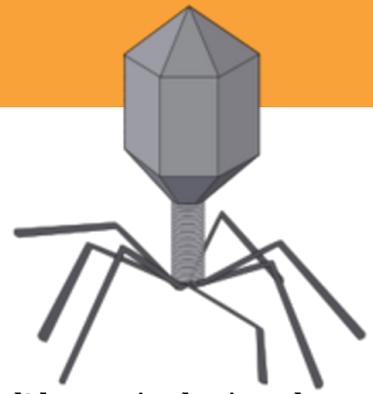
You are not alone.



Learn more at SepsisSurvivorWeek.org.

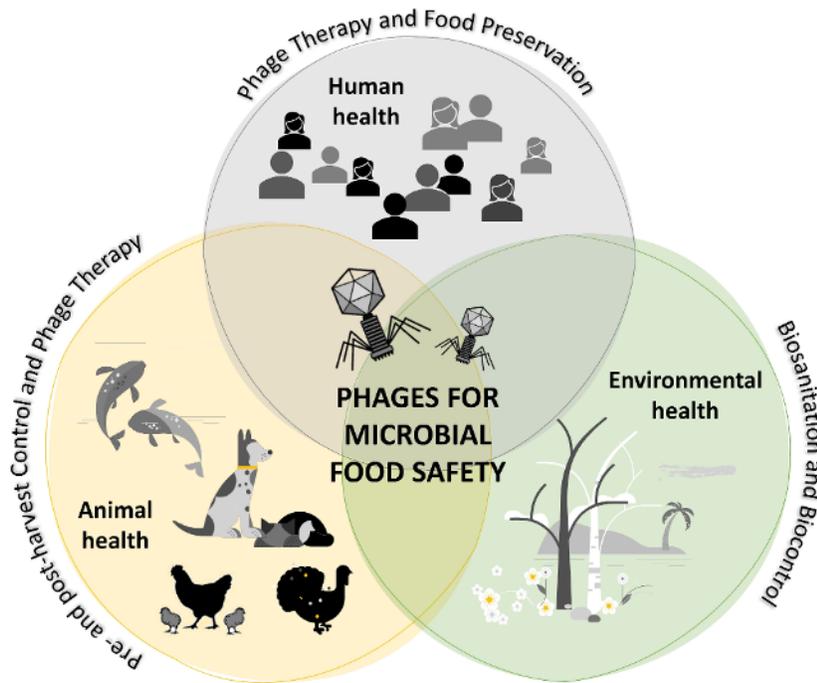


ONE HEALTH: Bacteriophages



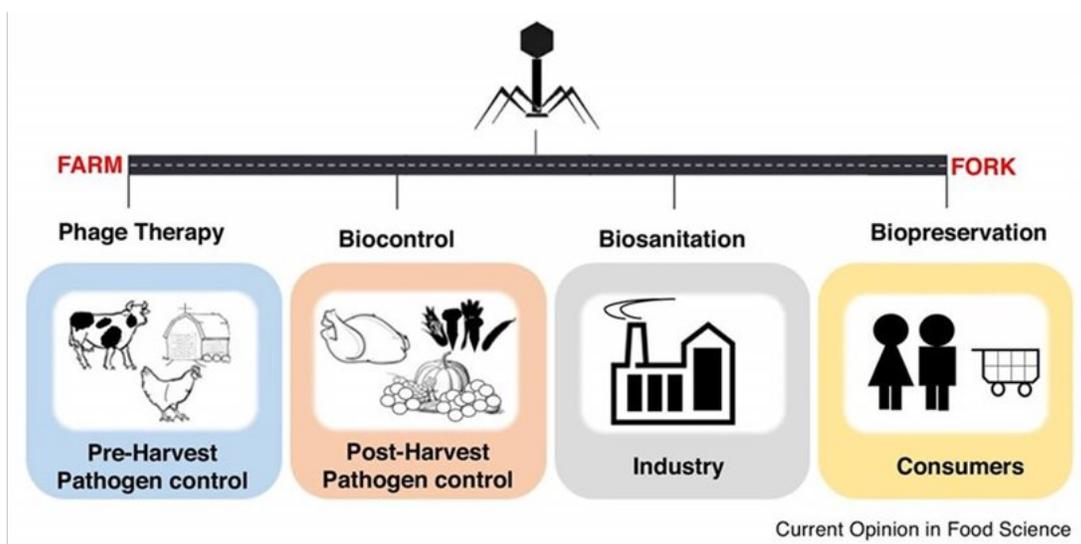
Bacteriophages:

- Viruses that infect and replicate only in bacterial cells
- Nucleic acid (genetic material) surrounded by a protein
- Bacteria cells are destroyed in the phage replication process
- Many require specific hosts/bacteria, limiting the damage to 'good' bacteria during therapeutic use.
- There are more than 10^{31} bacteriophages on the planet= 10,000,000,000,000,000,000,000,000,000.



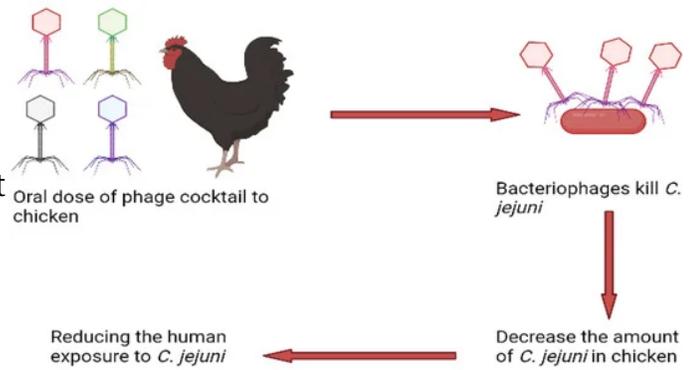
Bacteriophages use in One Health:

- Bacteria present problems in human health; plant, animal, and aquaculture health; environmental health; and the food industry
- Growing antibiotic resistance creating new problems requiring new solutions
- Growing economic burden of illness and food waste
- Can we use bacteriophages to target these problem causing bacteria?

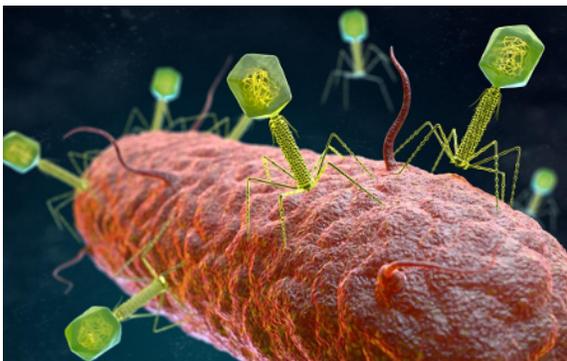
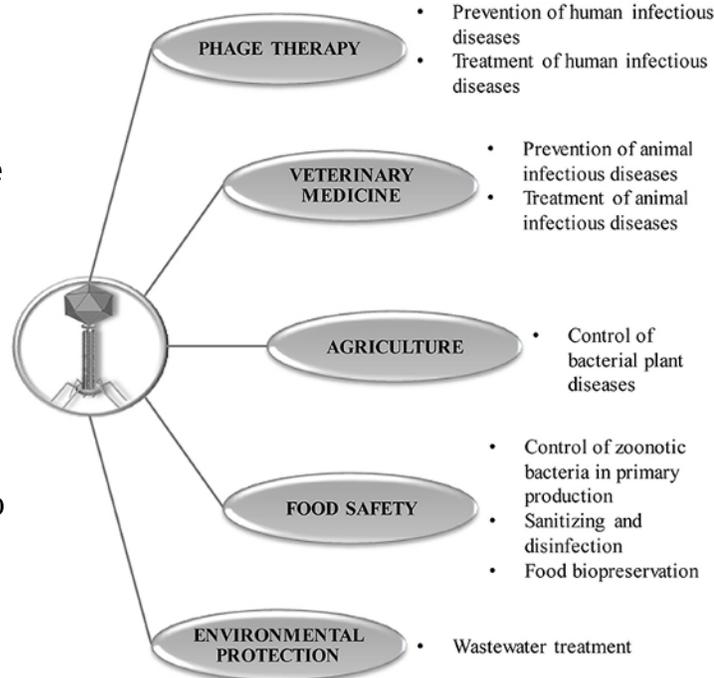


Examples of Bacteriophage use in One Health:

- Animals- Both illness and contamination of a food source
 - Campylobacter jejuni* and *Salmonella* in chickens. Studies have shown reductions of up to 5 log in the cecal counts of *Campylobacter* colonized chickens. Different publications have demonstrated the efficacy of phages in reducing *Salmonella* concentration in chickens (Lavilla et al. 2023).
 - Aquaculture: phage use may have other advantages: Being host specific allows them to kill the target pathogenic *Vibrio* species, while leaving beneficial *Vibrio* species in fish microbiota alone.



- Animals- Post Harvest
 - A phage 'cocktail' mix has shown a significant reduction in *Listeria monocytogenes* in smoked salmon.
 - It has been demonstrated that phage could significantly reduce the numbers of *Listeria* on hot dogs (Guenther, S. et al., 2009).
 - Needs more research. It's possible that phage use can help protect the food supply by killing spoilage organisms. Ongoing studies include adding phages to food products and as disinfectants during production.
- Other potential uses
 - As a vaccine coat to increase stability.
 - As a cloning vector in genetic recombination technique.
 - Phage therapy can be applied, in principle, to treat any bacterial infection for which a specific phage is present. Examples of infections that are already treated with phage therapy include urinary tract infections, meningitis, gastrointestinal infections, staphylococcal skin diseases and more.



<https://www.mdpi.com/2076-2615/12/23/3378>

<https://asm.org/articles/2023/june/phages-and-food-combatting-bacteria-from-farm-to-f>

European Food Safety Authority (EFSA). (2009). The use and mode of action of bacteriophages in food production-Endorsed for public consultation 22 January 2009-Public consultation 30 January-6 March 2009. *EFSA Journal*, 7(5), 1076.

Guenther, S., Huwyler, D., Richard, S. and Loessner, M.J., 2009. Virulent bacteriophage for efficient biocontrol of *Listeria monocytogenes* in ready-to-eat foods. *Appl. Environ. Microbiol.* 75 (1), 93-100

MENTAL HEALTH: BRAINGAMES

WORDSEARCH

D U H
 H N Q N D W S Y H
 Q S U A W G O I P U Y Z V
 H D Y P S Y D B R I P J G N V C U
 S R H X U K J M A M Y T T I Y Q C Y C
 R J X E R S G K F C R O S A E X G O M K M
 H J D I O Y N Z H T L A E H N N W E G S D
 H R T V B P T P W Q E I S K E E I F V W Y V D
 E B O O K L H E Q L R R K B D X S M P D X P M
 L A R K P A J O B W A I C I C A Z H A A P X K Y N
 L O W T E L W S A L M O N E L L A O Y N T U A E J
 N V T U Y T B X C E O P D N T Q R P O F I N W E U
 Z H D J F R W I Y T K Z H P D L A Z S V Y W T O R S P
 J U J Q H O Q C W E C F A G F N D S N U N J I I C B F
 M W V P F T J A B R K U G R R Y A C E M N Z P I Z L F
 H M F K K B D W I Y V E Q V F L D N Z J E C U Y E
 W G J S W J A M A L S Q A M K K A L Y H J F X S C
 G E M X O D K A E R B T U O W E O D P H Q U O E R
 D T B T V B C B D H P T K B V U J X C K G V B
 T K I G W S Q J F B A F P D V U Q B B M U R N
 C X E C X I F A F W T G K J Q L F K S O A
 Y W S S W S S R T L L P B R E F H W H P G
 E C E T I S A R A P Q I B X L G Z X A
 N Y V I E M E S E V C Z V E N I M
 E O H G H E H E T X R U L
 S Z R I O Q A K E
 I E S

- BACTERIA
- NOROVIRUS
- SALMONELLA
- SANITIZE
- CONTAMINATION
- OUTBREAK
- PARASITE
- BACTERIOPHAGE
- HYGIENE
- HEALTH



BRAINTEASERS

- 1) You throw away my outside, you cook my inside. Then you eat my outside and you throw away my inside. What am I?
- 2) What kind of apple has a short temper?
- 3) What can provide food before it is alive, while it is alive and after it's dead?
- 4) A rooster is on the roof of a barn facing east. The wind is blowing to the west at 10 miles per hour. The rooster lays an egg. Which direction does the egg roll?

4) Roosters don't lay eggs

3) Chicken

2) Crabapple

1) Corn

Answer:



Natural Killers: Opportunities and Challenges for the Use of Bacteriophages in Microbial Food Safety from the One Health Perspective

Abstract: Ingestion of food or water contaminated with pathogenic bacteria may cause serious diseases. The One Health approach may help to ensure food safety by anticipating, preventing, detecting, and controlling diseases that spread between animals, humans, and the environment. This concept pays special attention to the increasing spread and dissemination of antibiotic-resistant bacteria, which are considered one of the most important environment-related human and animal health hazards. In this context, the development of innovative, versatile, and effective alternatives to control bacterial infections in order to assure comprehensive food microbial safety is becoming an urgent issue. Bacteriophages (phages), viruses of bacteria, have gained significance in the last years due to the request for new effective antimicrobials for the treatment of bacterial diseases, along with many other applications, including biotechnology and food safety. This manuscript reviews the application of phages in order to prevent food- and water-borne diseases from a One Health perspective. Regarding the necessary decrease in the use of antibiotics, results taken from the literature indicate that phages are also promising tools to help to address this issue. To assist future phage-based real applications, the pending issues and main challenges to be addressed shortly by future studies are also taken into account.

<https://www.mdpi.com/2304-8158/12/3/552>

Lavilla, Maria, et al. "Natural Killers: Opportunities and Challenges for the Use of Bacteriophages in Microbial Food Safety from the One Health Perspective." *Foods* 12.3 (2023): 552.

Administration/Vital Records/Environmental

1201 Wall Street Jeffersonville IN 47130

Phone 812-282-7521

Public Health Nurse

1201 Wall Street Jeffersonville IN 47130

Phone 812-283-2459

HIV/STD Program Office - Phone 812-288-2706

Office Hours

Monday 8:30am - 4:30pm

Tuesday 8:30am - 4:30pm

Wednesday 8:30am - 4:30pm

Thursday 8:30am - 4:30pm

Friday 8:30am - 4:30pm

Saturday - CLOSED

Sunday - CLOSED

Public Health
Prevent. Promote. Protect.

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