CAMP HEALTH AND SAFETY 2023 ANNUAL TRAINING





Welcome & Introductions

Elaine Russell, MPH

Transylvania County Health Director





Disease Transmission

Tara Rybka, MPH

Community Health Coordinator



Disease Transmission

- How do diseases spread?
 - Foodborne or waterborne
 - Fecal-oral transmission
 - Airborne or droplet (fomites)
 - Close or direct contact
 - Bloodborne
 - Vector-borne

- How can we prevent them?
 - Handwashing!!!
 - Vaccination
 - Proper cleaning
 - Water filtration/treatment
 - Food storage and preparation
 - Covering coughs and sneezes
 - Bed spacing
 - Not sharing items
 - Personal protective equipment
 - Bite prevention



Investigation of Outbreaks and Clusters

- Recognizing similar illnesses among persons with a common exposure
 - Must be investigated to determine if cases are actually an outbreak
 - Speed and accuracy are crucial to investigation
- How do we find out?
 - Complaint to the local health department
 - Identification through surveillance (laboratory results, healthcare provider reporting)



Investigation of Outbreaks and Clusters

TPH goals:

- Stop outbreak and limit exposures
- Prevent illness through control measures
 - Vaccination
- Prevent future outbreaks
 - Unknown routes of transmission
 - Emerging pathogens
- Protect privacy of individuals and families (and the camp)

Camp goals:

- Protect camp reputation
- Limit exposures
- Prevent illness
- Keep parents informed
- Get back to normal operations



Basic Communicable Disease Tips

Prior to Camp Arrival

- Communication and screening with parents and incoming staff
- Assess vaccination status; make recommendations accordingly

Upon Arrival to Camp

- Consider screening for fevers, rashes, GI distress
- Inquire about travel history in past 30 days

Tracking Tips

- More than 1 camper with similar symptoms:
 - Record detailed food and activity history with list of contacts
 - Contact local health department
- Retain flight number information for campers and staff





Immunization Records

Kathy Kelley, BSN, RN

Communicable Disease Nurse



Immunization Records

- Having a quick access to vaccine records decreases need to contact parents or guardians when an injury or exposure occurs.
- Knowing date of last tetanus vaccine may eliminate a visit to the ED or health department.
- Knowing status of other vaccines (e.g., measles, chicken pox) will determine next steps after a possible exposure.



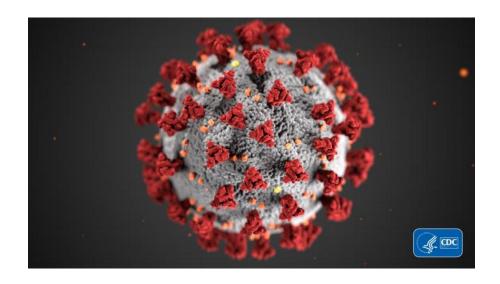
Recommended Vaccines

The following immunizations are strongly recommended:

- Measles, mumps, & rubella diseases (MMR vaccine) because these vaccine preventable diseases are highly communicable
- Tetanus Toxoid because the camp environment increases the risk of exposure to C. tetani bacteria; Tdap vaccine is the preferred immunization
- Hepatitis B
- Hepatitis A
- Meningococcal meningitis (MCV4 or MPSV4)







COVID-19 in Camps

Kathy Kelley, BSN, RN

Communicable Disease Nurse



COVID Guidance for Camps

Exposed to COVID-19:

(within 6 feet for 15 minutes, starting 2 days prior to when symptoms began)

- Wear a mask around others until 10 full days have passed
- Watch for symptoms
- Test 5 full days after exposure or immediately if symptoms begin
- Avoid high-risk people and areas for 10 full days

Tested positive for COVID-19:

- **Isolate** at home and away from others for 5 full days from start of symptoms (or positive test date if no symptoms)
 - Can leave isolation when 5 full days have passed AND fever free with no feverreducing medications for 24 hours and other symptoms are improving
- Wear a mask around others for 10 full days since beginning of symptoms
 - Masks can be removed before day 10 with 2 negative antigen tests conducted 48 hours apart (after the 5-day isolation has ended)
- Avoid high-risk people and areas for 10 full days



COVID-19 Prevention – All Community Levels

In addition to basic health and hygiene practices, like handwashing, CDC recommends some prevention actions:

- Staying up to date with COVID-19 vaccines
- Improving ventilation
- Getting tested for COVID-19 if needed
- Following recommendations for what to do if you have been exposed
- Staying home if you have suspected or confirmed COVID-19
- Seeking treatment if you have COVID-19 and are at high risk of getting very sick
- Avoiding contact with people who have suspected or confirmed COVID-19





Foodborne Disease

Brian Johnson

Environmental Health Program Specialist

Food Lodging and Institutions



Common Foodborne Illnesses

The Big Six (FDA Food Code 2017)

- Salmonella Typhi
- Non-typhoidal Salmonella
- Shigella
- STEC (Shiga toxin-producing E. coli)
- Hepatitis A
- Norovirus

Symptoms

- Diarrhea
- Nausea
- Vomiting
- Abdominal pain
- Also, headache, fever, chills, backache, bloody diarrhea, jaundice



Requirements for Sick Employees

Exclude from work for:

- SYMPTOMS of vomiting, diarrhea, jaundice, sore throat with fever
- DIAGNOSIS of norovirus with symptoms
- DIAGNOSIS of Hepatitis A, with or without symptoms

Restrict duties for:

- DIAGNOSIS of norovirus with no symptoms or after symptoms resolve
- EXPOSURE to norovirus or Hepatitis A without symptoms or diagnosis
- EVIDENCE of infected wound or pustular boil



Preventing Foodborne Illness



Keep Food Safe

- Know your food sources
 - Approved, reputable suppliers
- Control time and temperature
- Clean and sanitize
- Practice good personal hygiene
- Prevent cross-contamination





Camp Inspections

Brian Johnson

Environmental Health Program Specialist

Food Lodging and Institutions



N.C. Department of Health and Human Services Score: ____ Health Department Division of Public Health Environmental Health Section **Facility ID** Date of Insp/Chg Inspection of Resident Camp Old Facility ID **Status Code:** ☐ Community ☐ On-Site ☐ Community Water Supply: Non-Public Water Supply Wastewater System: Transient Non-Community Non-Transient Non-Community Systems Name Change * Seasonal Permit Issued * Verification of Closure ☐ Inspection Water sample taken today? ☐ YES ☐ NO \square YES \square NO Visit Status Change Name of Resident Camp: _____ Manager: City: Location Address: State: Billing Address: City: State: # Employees Season Closes # Bovs # Girls # Present Attendance # Maximum Attendance Season Opens Deduction Full/Half SITE: (.3608 - .3612) Comments (Circle One) 1. Site factors for camp facilities and activities and actual or potential health 1.0 0.5 hazards 2. Water supply, hot and cold water heating facilities in food preparation, utensil and hand washing, and areas required for cleaning 3.0 1.5 3. Cross connections 3.0 1.5 4. Wastewater disposal 4.0 2.0 5. Solid waste storage and cleaning facilities 2.0 1.0 6. Swimming Pools 1.0 0.5 CAMP BUILDINGS/AREAS: (.3613 - .3617) 7. Camp floors, walls ceilings; construction, cleanliness and repair 1.0 0.5 8. Lighting and ventilation: adequate and in good repair 9. Sleeping quarters, lodging, arrangement, cleanliness and repair 1.0 0.5 2.0 1.0 10. Vermin exclusion 2.0 1.0 11. Storage, handling of clean and dirty linen and clothing 1.0 0.5 12. Lavatories, bathing & toilet facilities: approved, accessible, adequate, clean, good repair 2.0 1.0 13. Laundry facilities clean, good repair, properly handled 1.0 0.5 14. Drinking water facilities: approved and clean 2.0 1.0 15. Pesticides and potentially hazardous materials: storage and handling 2.0 1.0 16. Premises clean; drained; free of vermin harborage; approved pesticides only 1.0 0.5

2.0 1.0

17. Animal stables: properly located and approved manure storage and removal

Common Inspection Demerits from 2022

• #9- Sleeping Quarters; Minimum of 30 inches between beds and at least 6 ft between the heads of sleepers.

#10-Vermin Exclusion; Screening, tight fitting and self closing doors.

 ##12-Lavatories and Bathing; Hot water is required for handwashing and bathing. There is no minimum temperature. Soap and hand drying device (towels or hand dryer) shall be provided.



FOOD SERVICE: (.36183638)			
18. Food service facilities & dining halls: adequate size and construction	1.0	0.5	
19. Caterer approved	2.0	1.0	N
20. Field Sanitation: written procedures available and approved	3.0	1.5	
21. Employees: clothing, hair restraints, tobacco use	1.0	0.5	
22. Employees: proper handwashing	4.0	2.0	
23. Employees: excluded for disease	3.0	1.0	-
24. Food Protection: Supplies: source, wholesome, safe for consumption, handling,	5.0	1.0	
service and transportation	4.0	2.0	
25. Food Protection: During service and storage	3.0	1.5	
26. Food Protection: Dry food storage	1.0	0.5	
27. Food Protection: Milk and Milk products	2.0	1.0	-
28. Food Protection: Ice: source, storage and handling	2.0	1.0	
29. Food Protection: Shellfish: source, preparation, storage; advisory posted	2.0	1.0	
30. Refrigeration: adequate, foods at required temperatures; proper thawing	2.0	1.0	
31. Use of anti-bacterial soap, gloves, sanitized surfaces, washing of produce	3.0	1.5	
32. Foods meet time and temperature requirements during storage, preparation,	5.0	1.5	
cooking, display, service, and transportation	4.0	2.0	
33. Thermometer available for checking food temperatures	2.0	1.0	2
34. No re-service of foods	2.0	1.0	
35. Equipment and Utensils: approved construction, good repair, clean	3.0	1.5	9
36. Equipment and Utensils: washed, rinsed, and sanitized, cloths clean	4.0	2.0	
37. Approved dishwashing facilities, test kits, methods, preparation sinks when	4.0	2.0	-
required	3.0	1.5	
38. Adequate hot water facilities for food service needs	3.0	1.5	
39. Storage and handling of utensils and equipment	2.0	1.0	
40. Storage spaces clean, arrangement, stored above floor	1.0	0.5	
41. Food Service Facilities: lighting meets minimum levels, shielded	1.0	0.5	
42. Food Service Facilities: ventilation clean, good repair	1.0	0.5	
43. Food Service Facilities: lavatories: location, approved facilities, clean, repair	3.0	1.5	
44. Food Service Facilities: toilet facilities: location, construction, signs, storage,	5.0	1.5	
fly exclusion, clean, repair	1.0	0.5	
45. Food Service Facilities: Floors: proper construction, good repair, clean	1.0	0.5	
46. Food Service Facilities: Walls, Ceilings: proper construction, good repair, clean		0.5	
47 Premises Miscellaneous: approved use of specialty hitchens no domestic use	1.0	0.5	
47. Premises, Miscellaneous: approved use of specialty kitchens, no domestic use 48. Premises, Miscellaneous: toxic materials, food service laundry, mop & broom	1.0	0.5	Comment Sheet Attached Yes No
storage	1.0	0.5	- TW
49. Food Service Facilities: no live animals, effective pest control	2.0	1.0	

Common Inspection Demerits from 2022

 #21- Hair Restraints; All food handlers required to wear an approved hair restraint.

• #25-Food Protection Storage; All foods must be stored off the floor at least 12 inches.

• #26-Food Protection Dry Food Storage; All dry foods shall be stored in approved containers.

#30-Refrigeration; Foods must be kept at 45F or below.



Common Inspection Demerits from 2022

 #32-Time and Temperature Requirements; Hot held foods must be kept at 135F or above. Off-site potentially hazardous foods, once cooked shall be used or discarded within 2 hours.

• #35- Equipment and Utensils; Clean and in good repair.



Legislative Changes

- Periodic review of all rules to ensure necessary and current
- Initially within 5 years, then every 10 years
- 60 days for public comments
 - Agency must address all public comments (defined as "a written comment objecting to all or any part of the rule")
 - May also submit comments supporting the action
- All rules classified:
 - Necessary w/substantive public interest (may be readopted)
 - Necessary without substantive public interest (will stay in the Code)
 - Unnecessary (removed from Code)
- May exempt from review if adopted/amended within previous 10 years
- Resident camp rules adopted October 1, 2007



Resident Camp Rules vs. NC Food Code Cooking Temperatures

Food	Temp
Poultry, stuffed meats, stuffings containing meat or poultry	165°F
Reheat of PH Foods	165°F
Ground meat products	155°F
Other PH Foods	145°F
Roast beef	130°F
Beef steak or as ordered	130°F
Cold hold	45°F

Food	Temp	Time
Poultry; stuffing containing fish, meat or poultry; stuffed foods; wild game animals; All reheated foods; PHF reheated in a microwave; raw animal foods cooked in a microwave	165°F 165°F 165°F	<1 sec 15 sec Stand 2 min
Steaks; ground meats; injected meats; eggs prepared for hot holding	155°F 158°F 145°F	17 sec <1 sec 3 min
Whole-muscle, intact cuts of beef (outsides brown color); pork; fish; eggs prepared for immediate service	145°F	15 sec
Fruits & vegetables cooked for hot holding; reheat of commercially packaged food for hot holding	135°F	15 sec
Roasts (beef or pork)	130°F 145°F	112 min 4 min

Resident Camp Rules vs. NC Food Code Sanitizing

Sanitizer	Strength	Time
Hot water	170°F	1 min
Chlorine	50 ppm	2 min
lodine	12.5 ppm	2 min
QAC	200 ppm	2 min

Chemical	Strength	Time
Hot water		30 sec
Chlorine	50-100	10 sec
Iodine	12.5-25.0	30 sec
QAC	200	30 sec
EPA registered	Per label	Per label



Helpful Websites

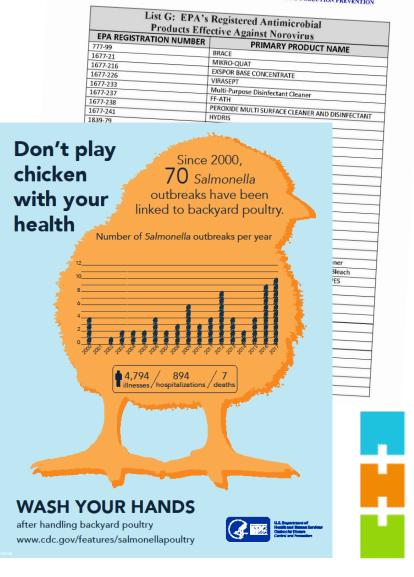
Selected EPA-registered
Disinfectants: disinfectants
effective against specific
bacteria and viruses
Healthy Pets, Healthy
People: staying healthy
with animal contact
(posters)

https://www.epa.gov/
pesticide-registration/
selected-epa-registereddisinfectants
https://www.cdc.gov/
healthypets/publications/



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION



Helpful Websites

NC Resident Camp Rules	http://ehs.ncpublichealth.com/docs/rules/294306 -16-3600.pdf
NC Food Code	FDA Food Code 2017.pdf (ncdhhs.gov)
NC Food Establishment Rules	http://ehs.ncpublichealth.com/docs/rules/294306 -26-2600.pdf
FDA Food Code 2017 Annex 3	Supplement to the 2017 Food Code (fda.gov)





Rabies

Kathy Kelley, BSN, RN

Communicable Disease Nurse



Rabies

- A fatal viral infection of brain and nervous system
- Transmitted through saliva of infected mammal during final stages of disease
- Physical symptoms may be aggression, confusion, lethargy, or excessive salivation

High-Risk Species:

- Raccoons
- Skunks
- Foxes
- Bats
- Coyotes
- Groundhogs
- Wolves
- Beavers

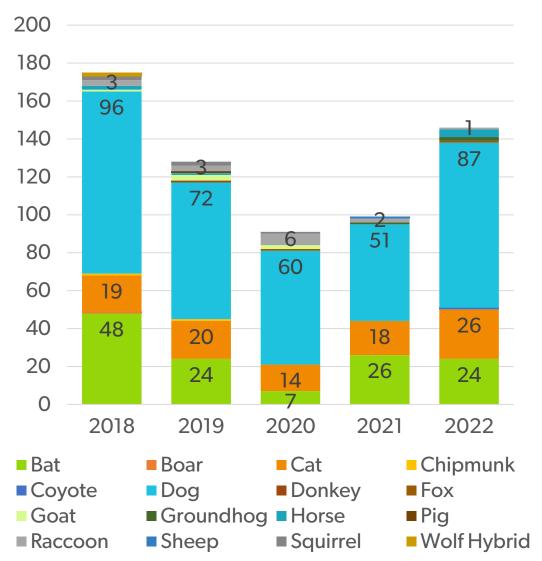


Rabies Investigations

In 2022:

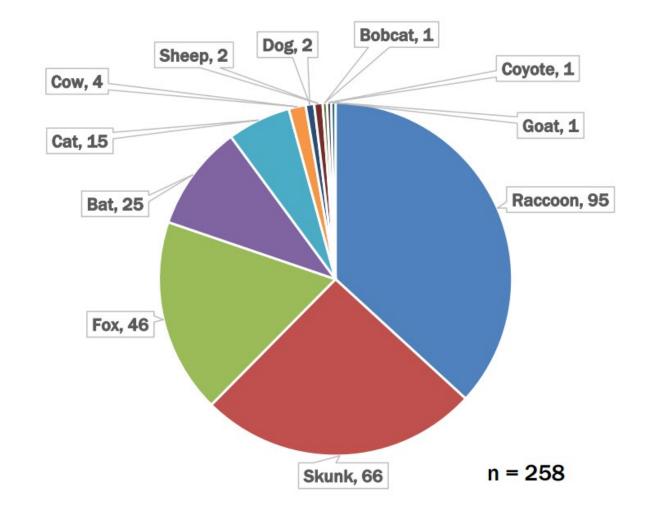
- 146 rabies investigations
- No animals tested positive
- 15 people started post-exposure prophylaxis due to unknown status or uncaptured animal
- Most common exposures were dog bites/handling (87), cats (26), bats (24), horses, groundhogs, raccoon, fox, coyote

Animal/Rabies Investigations Initiated by Transylvania Public Health



Rabies Positive Mammals and Percent Positivity by Species, North Carolina, 2022

ANIMAL	# pos	# tested	% pos
Raccoon	95	319	29.6%
Skunk	66	82	80.5%
Fox	46	90	51.1%
Bat	25	1016	2.5%
Cat	15	779	1.9%
Cow	4	62	6.5%
Dog	2	744	0.3%
Sheep	2	25	8.0%
Coyote	1	10	10.0%
Bobcat	1	1	100.0%
Goat	1	78	1.3%





Source: N.C. State Laboratory of Public Health Data Accessed Jan 2023

Rabies Exposure

Varies by species and circumstance!

- All bites!!! Any time an animal's tooth breaks human skin
- All direct physical contact with a bat
- Any time a bat is found in a room with a person who was sleeping, unconscious, or unable to confirm that no direct contact occurred





Rabies Exposure Reporting

If *possible* rabies exposure occurs:

- Get everyone out of the cabin or area where animal is located
- Call Animal Control
- Animal Control will capture animal
- Animal Control will report to TPH Communicable Disease nurse
- Camp will have parent contact information available
- TPH nurse will contact camp and follow up with parents according to CDC guidelines

All possible exposures to a rabies vector (bat, dog, cat, raccoon, fox, skunk, coyote) MUST BE REPORTED

Transylvania County Animal Services Monday-Friday, 8:30am-5pm (828) 883-3713

After Hours: call (828) 884-3188 and request Animal Control Callback

Rabies Exposure Treatment

Seek medical advice for rabies prevention

- TPH nurse will refer victim to primary care physician or Transylvania Regional Hospital emergency department
- Post-exposure prophylaxis (PEP) is determined by the physician









Vector-Borne Disease

Neill Cagle, REHS

Environmental Health Program Specialist



Prevent Tick and Mosquito Bites

Reduce Exposures

TICKS

- Remove leaf litter and cut back or mow tall grass and brush
- Discourage deer activity
- Avoid walking through thick brush and tall grass
- Check for ticks at the end of each day (also take a shower to help wash them off)

MOSQUITOS

- Eliminate standing water
- Check and fix holes in screens



Prevent Tick and Mosquito Bites

Wear Protective Clothing

TICKS

- Wear light-colored clothing and hats so ticks can be seen
- Wear long sleeves and pants;
 tuck pants into boots or socks
- Don't re-wear clothes that might still have ticks on them; wash and dry on "hot" settings to kill any ticks

MOSQUITOS

- Wear light-colored, loosefitting clothing to reduce bites
- When practical, wear long sleeves and pants



Prevent Tick and Mosquito Bites

Use Repellent

TICKS

- Choose a repellant with 20-50% DEET
- Use and reapply on exposed skin and clothes according to label instructions
- Use permethrin-treated clothes and gear for greater protection

MOSQUITOS

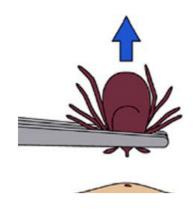
- Choose an EPA-registered repellent:
 - DEET
 - Picaridin
 - Oil of Lemon Eucalyptus
 - IR 3535
- Use and reapply on exposed skin according to label instructions



Remove Ticks

- Use fine-tipped tweezers to grasp tick close to skin's surface.
- Pull upward with steady, even pressure.
 - Don't twist or jerk: mouth-parts can break off and remain in skin. If this happens, remove mouth-parts with tweezers. If unable to remove easily, leave it alone and let skin heal.
- Clean bite area and hands with rubbing alcohol, iodine scrub, or soap and water.
- Dispose by submersing in alcohol, placing in sealed bag/container, wrapping tightly in tape, or flushing down toilet. Do not crush with fingers.





Avoid remedies such as nail polish, petroleum jelly, or heat. Your goal is to remove the tick as quickly as possible, not wait for it to detach.

If you develop a rash or fever within several weeks of removing a tick, see your doctor. Be sure to tell the doctor about your recent tick bite, when the bite occurred, and where you acquired the tick.



Help with Tick Surveillance

Should you choose to participate...

- Correctly remove tick, place in container, and freeze
- Record:
 - Name of camp
 - Date collected
 - General area tick was picked up (within camp, outside of camp)
 - Body area where tick was removed, if attached
- Contact TPH when you have collections that need to be picked up:
 - Neill Cagle, REHS at (828) 884-1758





Head Lice

Haley Putnam, MPH

Preparedness/Accreditation Coordinator



Lice Facts for Camps

- Educate campers on head lice: explain how it transmitted so they can avoid direct head-to-head contact with others during camp activities
 - Use products to keep hair artificially dirty
 - For campers with longer hair, keep hair up in a bun, braid, or other style that keeps hair close to the head
 - Advise campers to not share towels or other vectors (hats, helmets, etc.)
- Perform regular head lice checks on all campers
 - Inspect hair in a well-lit area
- Do not use fumigant sprays or fogs to get rid of lice





Pink Eye

Kathy Kelley, BSN, RN

Communicable Disease Nurse



Responding to Pink Eye at Camp

- Pink eye (conjunctivitis) can be very contagious
 - Spreads by close personal contact, coughing and sneezing, and touching eyes before washing hands
 - Bacterial can spread as soon as symptoms appear until discharge stops or until 24 hours after starting antibiotics (be sure to finish all antibiotics)
 - Viral cases often cause outbreaks and may take longer to resolve
 - Not contagious if caused by allergies or irritants like dust or fumes
- A doctor can usually diagnose the cause based on symptoms and patient history



Responding to Pink Eye at Camp

- Educate campers on prevention:
 - Wash hands often with soap and water
 - Avoid touching or rubbing eyes
 - Don't share personal items like makeup, eye drops, towels, bedding, contact lenses and containers, eyeglasses, or sunglasses
 - Don't use the same eye products for infected and non-infected eyes
 - Stop wearing contact lenses until eye doctor says it's okay; clean, store, and replace lenses as recommended by eye doctor
- Don't allow swimming for people with pink eye
 - It's possible to spread bacterial and viral pink eye to others via water sources, even in chlorinated water





Test Your Knowledge!

Tara Rybka, MPH

Community Health Coordinator



Test Your Knowledge!

Ways to participate:

- Text to 22333 with the message TARARYBKA999
- Go to PollEv.com/tararybka999
- Scan the QR code →
- Ask for a paper copy





A camper notices a tick on his leg after a hike. What is the proper way to remove it?

Hold a cotton ball soaked in rubbing alcohol on it for several minutes.

Use tweezers to grasp it close to the skin and pull upwards.

Place a drop of peppermint oil on it and wait for it to back out.

Use a tick remover tool to twist the tick out.

Why is it a good idea to request immunization records for staff and campers, even if you don't require certain immunizations?

So you can be aware of unprotected individuals within your camp population.

To avoid unnecessary isolation and quarantine for vaccinated individuals.

To prevent delays in care while waiting for records from home.

All of the above.

Which of the following is NOT a reason to send someone home from work to prevent the spread of illness to others?

Head lice

Vomiting or diarrhea

Jaundice

Fever

A counselor reports that he found a bat in the cabin when he and the campers woke up this morning, but he doesn't think it touched anyone. What should you do first?

Open the doors and windows and hope it flies out.

Smack it with a broom.

Catch it in a net and release it outside.

Get everyone out of the cabin and call Animal Control to capture the bat.

If a camper tests positive for COVID-19, how many days must they stay in isolation away from others?

48 hours

5 days

10 days

2 weeks



QUESTIONS?





Post-Training Evaluation

Tara Rybka, MPH

Community Health Coordinator





THANK YOU!

