**QUESTION:** Commensal E. coli organisms of a captive plains zebra in Africa are most likely to have antimicrobial resistance (AMR) to which antibiotic?

1. Ceftazidime
2. Doxycycline
3. Chloramphenicol
4. Ciprofloxacin
5. Amoxicillin

Answer: E

Source: COMPARING ANTIBIOTIC RESISTANCE IN FREE-RANGING VS. CAPTIVE AFRICAN WILD HERBIVORES. J Wildl Dis (2023) 59 (2): 224–233. Lucie Brisson; Alexandre Caron; Christine Mazuy-Cruchadet; Emmanuelle Gilot-Fromont; Alexis Lécu; Bourgarel Mathieu; Thierry Petit; Delphine Sergentet.

**QUESTION:** Which environmental contaminants are you most likely to detect in the blood of a free-ranging common snapping turtle in urban New York?

1. Lead, Organochlorines
2. Organochlorines, Cadmium
3. Cadmium, PCBs
4. PCBs, mercury
5. Mercury, lead

Answer: A

Source: HEALTH ASSESSMENT OF FREE-RANGING CHELONIANS IN AN URBAN SECTION OF THE BRONX RIVER, NEW YORK, USA. Journal of Wildlife Diseases, 55(2), 2019, pp. 352–362. Andrea C. Aplasca, Valorie Titus, Robert J. Ossiboff, Lisa Murphy, Tracie A. Seimon, Karen Ingerman, William E. Moser, Paul P. Calle, and John M. Sykes IV.

Question: Which of the following is the most common anticoagulant rodenticide found in wild Norwegian *Vulpus vulpes*?

1. Bromadiolone
2. Difenacoum
3. Flocoumafen
4. Brodifacoum
5. Difethialone

Answer: D- brodifacoum

Mercury concentrations in the whiskers of harbor seal pups in utero had the largest increase in which time period of gestation?

1. Early
2. Early to Mid
3. Mid
4. Mid to Late
5. Late

Answer: Mid to Late gestation

[**POSTRELEASE SURVIVAL OF CALIFORNIA BROWN PELICANS (*PELECANUS OCCIDENTALIS CALIFORNICUS*) FOLLOWING OILING AND REHABILITATION AFTER THE REFUGIO OIL SPILL**](https://doi.org/10.7589/jwd-d-20-00171)

**Practice Question:** When comparing post-release outcomes of California brown pelicans (*Pelecanus occidentalis californicus*), which of the following was found to be associated with the oiled, rehabilitated, and released group as opposed to the control group?

1. Increased survival, lower eosinophil count
2. Decreased survival, higher eosinophil count
3. Decreased survival, higher total protein level
4. Similar survival, higher total protein level
5. Similar survival, higher eosinophil count

Answer: D

[**AN EXPERIMENTAL STUDY OF THE EFFECTS OF CHEMICALLY DISPERSED OIL ON FEATHER STRUCTURE AND WATERPROOFING IN COMMON MURRES (*URIA AALGE*)**](https://doi.org/10.7589/2017-01-016)

**Practice Question:** In a recent study looking at the effects of chemically dispersed oil on feather structure and waterproofing in common murres (*Uria aalge*), which of the following was true?

1. Dispersant alone resulted in similar feather clumping as oil exposure.
2. The effects of oil on the feathers were similar regardless of the exposure dose.
3. There was no evidence of recovery of waterproofing 48 hours after oil exposure.
4. The impact of exposure to dispersant was delayed and most severe 24 hours after exposure.
5. Mixed oil and dispersant had similar waterproofing impacts to dispersant alone.

Answer: C

Based on anthropogenic inputs into the environment and diet/foraging habits, which of the following taxa has the highest predicted prevalence of antibiotic-resistant indicator bacteria?

A. Antarctic penguins

B. Avian scavengers of livestock carcasses

C. Birds of prey

**D. Landfill-foraging gulls**

E. Reptiles inhabiting remote Galapagos Islands

Which of the following chemical compounds may reduce scavenging behavior and delay onset of scavenging when applied to feral swine carcasses?

A. Sodium borate

B. Magnesium hydroxide

**C. Calcium hydroxide**

D. Sodium hydroxide

E. Potassium carbonate

QUESTION: Which of the following is false regarding blood lead and zinc levels in Ferret Badgers (*Melogale moschata*) in Taiwan.

1. Critical sources of lead and zinc in the environment are diet and water.
2. Ferret Badgers primarily consume rodents, likely leading to elevated levels of lead in the Ferret Badger.
3. Ferret Badgers with significantly elevated lead levels demonstrated elevation of hemoglobin rather than a microcytic, hypochromic anemia on clinical pathology.
4. Indian Civets and Masked Palm Civets had higher levels of zinc than Ferret Badgers.
5. Blood zinc levels in Ferret Badgers were below the range that would be considered toxic in the domestic dog.

ANSWER: B

QUESTION: Which of the following is false regarding oiled wildlife response and rehabilitation?

1. Petroleum-based ointments applied to volatile compound burns in birds can further disrupt waterproofing.
2. Marine mammals exposed to oil spills can experience an increased propensity for severe lung disease and adrenal hormone imbalances.
3. Mink incur adrenal atrophy, decreased reproductive success, decreased RBC’s, and elevated WBC counts when exposed to bunker fuel oil.
4. The following criteria should be met prior to de-oiling birds: ~48 hours of stabilization, alert mentation, and normalization of blood parameters (PCV/TS).
5. In washing/de-oiling, if water hardness is too high (>5 grains), calcium carbonate crystals can form in feathers/fur and further reduce waterproofing.

ANSWER C. Mink experience adrenal HYPERTROPHY. The remainder of the statement is true regarding mink and petroleum exposure.