

Reference ranges from National Vet Laboratories.

(Normals may vary from lab to lab.)

Blood Chemistry

Glucose mg/dL	85-210
Sodium mmol/L	139-157
Potassium mmol/L	4.7-6.0
Chloride mmol/L	95-114
Co2 mmol/L	18-30
Anion Gap	14-34
Serum Osmolality mosmo/kg	275-325
Urea Nitrogen mg/dL	9-30
Creatinine mg/DL	0.5-1.5
BUN/Creatinine (ratio)	8-30
Total Protein g/dL	5.3-8.5
Albumin g/dL	2.7
Globulin g/dL	2.2-4.9
A/G Ratio	0.7-1.9
Calcium mg/dL	7.8-10.3
Phosphorus mg/dL	4.0-8.2
Cl/P Ratio	<35
Bilirubin, Total mg/dL	0.1-0.5
Bilirubin, Direct mg/dL	0-0.2
Bilirubin, Indirect mg/dL	0-0.2
Alk Phosphatase U/L	0-89
ALT U/L	<250

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LDH U/L	200-850
GGT U/L	<15
Creatinine Kinase U/L	80-1000
Cholesterol mg/dL	60-250
Triglycerides mg/dL	25-190
Amylase U/L	80-230
Lipase U/L	0-45
Total T4 ug/dL	1.0-3.5 (In my experience the normal T4 can be much higher then 3.5)

Hematology

Leukocytes WBC 10 ³ /uL	3.0-11.5
Erythrocytes RBC 10 ⁶ /uL	4.4-10.0
Hemoglobin g/dL	9.0-20.7
Hematocrit %	33.0-60.0
MCV um ³	40-100
MCHC g/dL	29.0-37
Seg Neutrophils %	45-80
Absolute 10 ³ /ul	1.91-3.40
Band Neutrophils %	0-1
Absolute 10 ³ /ul	0.0-0.04
Lymphocytes %	15-40
Absolute 10 ³ /ul	0.64-1.70
Monocytes %	1-5
Absolute 10 ³ /ul	0.04-0.21
Eosinophils %	0-11

Absolute $10^3/\text{ul}$ 0.00-0.80

Basophils % 0-1

Absolute $10^3/\text{ul}$ 0.00-0.40

Platelet Est

*Note that the normal ranges may vary from Lab to Lab. Your veterinarian should check with their lab for normal ranges.

Aluetian Disease Virus Testing.

Avecon Diagnostics dose an antibody test. This test does not tell you if your skunk is sick from Aluetian disease, only if it has mounted antibodies against the disease.

Idexx Laboratories does a PCR. This test can be used to determine if the animal is shedding the disease. If it were positive, it would indicate that other animals in contact with the skunk are at risk of getting the virus.

Aluetian disease virus testing is controversial because there can be false negatives and false positives. Furthermore, a positive animal may not be sick, and may or may not be shedding the virus (making it contagious.) Discuss the reasons for testing with your veterinarian, and realize that testing results are not black and white.

Distemper Virus Testing

Titers can be ran on serum. The dilutions that are used to detect disease may be much weaker than those used to determine if booster vaccines are required. The veterinarian should discuss this with their lab at the time that the sample is submitted. When the dilution is too weak, a false negative may occur. When the dilution is too strong, there may be too much background noise on the test, and a false positive may occur.

PCR can be done on urine. If the PCR is positive, the animal is shedding the virus and is a carrier of the disease. The animal may also be sick, and this test could confirm that the virus is there, and not just anti-bodies against the virus.

Histopathology

Biopsies and tissues from deceased animals should be sent to a reputable lab that is familiar with common skunk problems. The more tissues that are analyzed the more data that we can collect and share.

If your veterinarian is willing to share any necropsy, biopsy or other histopathology reports please have them send them to dr.schneider@theexoticpetvet.com, or fax them to 1-866-924-5818.

I use **Zoo/Exotic Pathology Service** in West Sacramento, CA.

