RECOMMENDED QUARANTINE GUIDELINES FOR RHINOCEROS

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Due to the size, strength, and temperament of rhinoceros, it may be logistically difficult to maintain isolation from other animals during arrival and quarantine. The Recommended Preshipment Protocol for Rhinoceros lists a comprehensive battery of tests to detect disease prior to shipment. Since most zoological institutions will not have facilities available to safely house and manage a newly arriving rhinoceros, it is important that the receiving institution work closely with the sending institution to ensure that all (or as many as possible) of the listed tests are conducted and results reviewed. Following the preshipment protocol may help compensate for some of the quarantine compromises that may be required. Regardless of preshipment test results, every attempt should be made to maintain some degree of physical separation from the resident rhinos after arrival.

Current quarantine practices recommend a minimum 30-90 day quarantine period for most species found in zoos and aquaria. Social concerns, physical facility design, and availability of trained rhino staff may dictate a modified quarantine protocol. The final decision for specific quarantine protocols at each institution should be made by the veterinary staff in consultation with the animal management staff. For additional information, refer to the AZA Rhinoceros Husbandry Manual, AZA Quarantine Guidelines, and the AAZV Preventive Medicine Recommendations.

The following guidelines provide recommendations for minimum standards for rhinoceros quarantine.

1. Whenever possible, the newly arrived rhinoceros should be maintained with physical separation from all other resident rhinoceros. This should include provisions to prevent contact with feed, bedding, or feces/urine between animals.

2. Initial visual assessment of the rhinoceros, along with review of the medical records, to determine health status should be used to develop an individual quarantine plan.
    - Ideally, the recommended length of quarantine is a minimum of 30 days. However, this may be changed in light of concerns for confinement or detection of abnormal health status.
    - Risk of disease transmission between animals should be balanced with the concern for well being (physical, psychological, and social) of the rhinoceros.

3. Quarantine procedures should be planned as soon as the rhinoceros can be safely managed and appears to be settling in the facility. Procedures to consider performing (based on the facilities and expertise of the staff) include the following:
    - Thorough physical examination including a review of all systems.
    - Blood collection for CBC, serum chemistry panel, fibrinogen, serum protein electrophoresis, and serum bank.
    - Fecal collection for parasite screening should be done weekly for the first 3 weeks.
    - Fecal cultures (+/- PCR) for Salmonella should be conducted at least weekly for the first 3 weeks.
    - Any procedures that were not completed prior to transport or that may be due, such as vaccination, serologic screening, or TB testing (see “Recommended Rhinoceros Preshipment Guidelines”).

4. Release from quarantine should be the decision of the veterinary staff (after completion and review of results from any quarantine procedures), in conjunction with the assessment of the rhinoceros management staff.

It should be emphasized that the quarantine test requirements should be strongly considered regardless of the preshipment testing. The stress of transport and quarantine may result in changes (for example, Salmonella shedding) that were inapparent during testing at the sending institution.

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