Zoonotic pathogens are transmissible from animals to humans. Nonhuman primates may carry a variety of zoonotic agents that can be transmitted to humans by direct (e.g. bite or scratch) or indirect exposure to the animals, their carcasses or body fluids. These diseases are viral, bacterial, fungal or parasitic in nature. Examples of primate viruses include filoviruses such as Ebola and Marburg, herpesviruses such as Macacine herpesvirus 1 (also known as Herpesvirus simiae or B-virus), and poxviruses such as monkeypox and Yaba virus. Shigellosis and Salmonellosis are two common bacterial infections affecting the gastrointestinal systems of both humans and nonhuman primates. Giardia, Entamoeba, Trichuris and Strongyloides infections represent four of the more common parasites, again affecting the gastrointestinal system. Ringworm is an example of a fungal disease that nonhuman primates can transmit to humans. It is important to note that in many cases, disease transmission can also occur from humans to nonhuman primates. Examples of such diseases include tuberculosis, measles and influenza.

The likelihood of people contracting any of these diseases from nonhuman primates is very small. Indeed, if the policies established by published recommendations and evaluation of workplace risks are followed, the likelihood of infection with any of these pathogens is extremely low.

Of most concern among nonhuman primate handlers is the potential for transmission of Macacine herpesvirus 1 - resulting in an acute and often fatal human infection. B-virus infection in humans is recognized as a rapidly ascending encephalomyelitis with a fatality rate of approximately 70% B-virus occurs naturally only in macaques, but can be present in a few other species of Old World primates if housed with B-virus positive macaques or if experimentally infected with the virus. New World monkeys, such as squirrel and owl monkeys, are not a source of B-virus infection. In macaques, the infection is usually latent. When reactivated, the virus can be shed intermittently in the saliva, ocular and reproductive tract secretions and may be present in thoracic and abdominal viscera and ONS tissues. Although the risk of acquiring a B-virus infection from macaques is very low, supported by the fact that thousands of people have handled macaques with approximately only 50 documented human B-virus cases, the fact remains that human B-virus clinical infection is associated with a high mortality rate.

Transmission of infectious diseases between animals and humans is generally the result of bites and scratches, contact of infectious materials with mucous membranes or broken skin, or poor personal hygiene. Inhalation of aerosols associated with general animal handling tasks represents a significant transmission route for siated win is assosstg th1.01 and

5. Access to areas where nonhuman primates are either housed or removed to shall be limited to

exam gloves may be worn if handling an anesthetized nonhuman primate or if having indirect contact with a nonhuman primate. Exam gloves do not offer adequate bite/scratch protection and therefore are not appropriate as the sole means of protection for direct handling of awake animals. The heavier purple nitrile gloves offer a higher level of protection. Double gloving with either exam or nitrile gloves is also an option. Elbow length leather gloves provide an even higher level of protection, and should be worn when direct contact with an unrestrained, conscious animal is necessary. Remember: gloves should be chosen such that they fit well, grip well, and provide the best bite/scratch protection possible without sacrificing the manual dexterity necessary to complete the task safely.

c. When working within a primate room or handling animals, a lab coat or gown is required. It is preferable that the dothing protection includes tight fitting cuffs and a neck closure (e.g. polyester Hospitex ®long-sleeved, cuffed lab coat). Tight cuffs ensure that the garment sleeves do not ride up above the wrist and the neck closure further assures skin coverage when wearing V-neck clothing. If the garment worn has loose fitting sleeves, then additional forearm protection (Tyvek or vinyl sleeves) must be worn. Such fluid resistant arm covers shall also be worn if skin is broken or compromised in any way and if scratch resistant barrier cannot also provide a fluid barrier. Shoe covers protect personnel from tracking feces outside of primate areas. Shoe covers must be worn in all monkey rooms and corridors dedicated to nonhuman primate housing. Long pants and closed toe shoes (e.g. no sandals) must be worn whenever working with monkeys.

Soiled reusable personal protective equipment shall be disinfected according to manufacturer's recommendations after use and may not be taken out of the work area unless it has been deaned and disinfected. Lab coats used while removing and returning animals to their housing cage may be worn while transporting the animals through the corridors. This assumes that these lab coats are not visibly soiled or contaminated. If a lab coat is soiled while in the animal housing room, it must be removed immediately upon exiting the housing room. The coat should then be turned inside out and taken to the laboratory. A laundering facility is available in the Vivarium. In no event shall gowns or lab coats worn in animal rooms be worn in non-laboratory or vivarium areas other than corridors between labs and housing areas.

8. The Macaque Exposure Protocol shall be followed for any exposure to Old World (macaque) nonhuman primate body fluids including bites, scratc oo TJETQ0.00000912 0 612 792 c0T/s 0 1 90.46.02 381.79 T

- a. Vivarium employees receive general and specific training regarding non-human primates from Vivarium personnel
- b. General non-human primate handling training is conducted by experienced research staff or the Animal Resource for the research community. Specific training for the research community shall be conducted

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