Macacine herpsevirus

- Formerly *Cercopithecine herpsevirus 1* (CHV-1), also known as B virus, herpes B, monkey B virus
- Enzootic in macaque monkeys
- Viral infection in monkey:
  - Usually symptom free or mild illness
  - Intermittent shedding of virus particles
    - More likely if animal is ill, stressed, immunocompromised, etc.
- Transmission to humans
  - Potential routes of transmission
    - Bite or scratch from an infected animal
    - Needle stick from contaminated needle
    - Scratch from caging, equipment, other sharp materials
    - Mucus membrane exposure to macaque body fluid (urine, blood, saliva)
  - Low probability of transfer
    - Since discovery of the virus in 1932, there have been 31 documented human infections
    - Last documented infection was in 1997, a researcher died from B virus infection after a mucosal splash exposure
      - [http://www.ergriffinresearch.org/](http://www.ergriffinresearch.org/)
  - Severe morbidity
  - High probably of death
    - Of the 31 documented cases, 21 were fatal
- Signs and Symptoms
  - Disease onset typically occurs within 1 month
  - Skin lesions at site of exposure
  - Flu-like aches and pains
  - Fever and chills
  - Headache lasting longer than 24 hours
  - Fatigue
  - Muscular incoordination
  - Shortness of breath
  - Can result in acute ascending encephalomyelitis, resulting in death or severe neurological impairment
- Prevention
  - Follow published guidelines developed and updated by expert panels of virologists, veterinarians, and physicians – [Recommendations for the Prevention of and Therapy for Exposure to B virus (Cercopithecine herpsevirus 1)](http://www.ergriffinresearch.org/) (A copy of the article is included in the Primate Exposure Kits located in the animal)
facilities. It is recommended that you take a copy of the article if reporting to the ER after hours.)

- Use of personal protective equipment (PPE), including long sleeves, gloves, mask and face shield, must be used when working with monkeys
- All monkeys should be properly trained
- Any potential exposures must be cleansed immediately and reported to Employee Health (See First aid and treatment below)

- Environmental Controls
  - Negatively pressurized animal rooms
  - Squeeze-back caging
  - No eating or drinking in animal facilities
  - Hand washing sink
  - Eye washing stations

- First aid and treatment
  - First aid should begin immediately:
    - Primate Exposure Kits are located through the animal facilities and in all NHP use areas
    - For scratches and bites, cleanse and irrigate the exposed area by thoroughly washing and scrubbing the area or wound with povidone-iodine, or chlorhexidine and water for 15-20 minutes. For ocular exposures, irrigate exposed area immediately with sterile saline solution or water for 15-20 minutes
    - As soon as possible seek help from your supervisor or a member of the Laboratory Animal Facility
    - Report to Employee Health (after hours report to ER and take a copy of the article Recommendations for the Prevention of and Therapy for Exposure to B virus (Cercopithecine herpsevirus 1) located in the Primate Exposure Kit)
    - The LAF will collect samples from the monkey and deliver to Employee Health
    - Treatment will be prescribed by the Employee Health Physician