experiments show evidence of IgG reactive antibodies in 5.8% (3 of 52) samples, with strongest reactivity against Seoul N antigen, indicating the possibility of a Seoul-like virus. Current experiments are underway in order to determine the sensitivity and specificity of these findings. Seropositive rodents will further be analyzed through rt-PCR of stored tissues and sequencing of any amplimers. Hantaviruses have not been previously reported in red backed voles in this area, however several cases of human disease (HPS) have been reported in Alaska and antibodies to various hantaviruses are documented in Forestry and Geological personal. Red grey voles(*C. rufocanus*) were found to carry a Puumala like virus in the Maritime Territory in Russia. We describe the related red-backed voles as another possible host for hantaviruses in Alaska.

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#### SEROPREVALENCE AGAINST PUUMALA VIRUS IN DIFFERENT POPULATIONS DURING AN OUTBREAK IN EASTERN BAVARIA, GERMANY

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Puumala virus (PUUV) is circulating in endemic form in some areas of Germany. In 2004 for the first time an epidemic focus of hemorrhagic fever with renal syndrome (HFRS) was detected in Eastern Germany. More than 30 severe human cases of HFRS were diagnosed. In addition to prevalence studies in mice of the affected region a serosurvey study was initiated to determine the prevalence of PUUV antibodies and herewith infection in different human populations and to make a risk assessment for these human populations. 227 sera of soldiers stationed in the affected area, 235 sera from inhabitants of 4 different locations in the area of outbreak visiting physicians for reasons other than fever or renal involvement, and 226 sera of blood donors of the affected region were tested for PUUV IgG antibodies. For screening an indirect immunofluorescence (IIF) test using Vero E6 cells infected with PUUV strain Vranica was used. Positive sera were retested and titrated in a commercial PUUV and Hantaan Virus IIF. Furthermore positive sera were tested in a commercial recombinant Westernblot and in a recombinant ELISA. Results were compared to each other for sensitivity and specificity of different test systems. Two of the four patient collectives of private physicians showed high IgG prevalence rates of 5% and 8%. In contrary the two other collectives of patients were negative. The soldiers exhibited PUUV IgG prevalences of 2 %. In blood donors a PUUV IgG seroprevalence rate of 1% was found. For singular sera major differences in the Westernblot and IIF were detected. Only a combination of several test systems could confirm seropositivity of all sera. In conclusion, risk assessment of our data showed that soldiers were not at an increased risk compared to non-epidemic situations in other parts of Germany. Blood donors were not suitable at all to detect increased activity of PUUV in the defined area. The population with the highest rates of seropositives for PUUV was found in the ambulant patients of private physicians. In two of the four groups the seroprevalence rates against PUUV IgG were highly above average seropositivity rates found in general human population in Germany. The different test systems used showed only moderate sensitivity and specificity in detecting PUUV specific antibodies.

#### MORBIDITY AND MORTALITY AMONG CHILDREN LIVING WITH HIV IN BLANTYRE, MALAWI

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Very little is known about HIV infection among children beyond infancy, especially those who are identified through voluntary counseling and testing. We conducted an observational study of children ages 2 to 15 years living with HIV who were identified through voluntary counseling and testing. They were followed monthly and encouraged to return when they were ill. Adults who were identified were also enrolled in this study. We enrolled 45 children with a mean age of 7 years and a mean CD4 count of 521 cells/mm<sup>3</sup>. Ten of the children died. The most common diagnosis was malaria (74 cases per 100 personyears), followed by pneumonia and impetigo (both 63 per 100 person-years). The incidence of all secondary infections, except for pulmonary tuberculosis, was higher among the pediatric population than among adults who were recruited into the same study. In univariate analysis, weight-for-age Z score (Z score) predicted the odds of bacterial sepsis and Kaposi's sarcoma more accurately than CD4 cell count. For children under 6 years of age, bacterial sepsis, fever of unknown origin and cryptosporidiosis occurred with mean CD4 cell counts less than 500/mm<sup>3</sup>. For children over 6 years of age, oral candidiasis, fever of unknown origin and meningitis occurred with mean CD4 cell counts less than 200/mm<sup>3</sup>. Both CD4 cell count and Z score were associated with vital status at the close of the study. Only the diagnosis of oral candidiasis during the study period was associated with a statistically significant increased risk of death. In conclusion, children living with HIV who are identified through voluntary counseling and testing are much more ill than adults who are identified through the same route. Assessment of weight for age can be useful for determining prognosis, especially if CD4 testing is not available.

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#### BURDEN OF HIV/AIDS IN A MEDICAL EMERGENCY SETTING AT MULAGO NATIONAL REFERRAL HOSPITAL, UGANDA

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Although the new global estimates are slightly lower that the previously published estimates, the actual number of people living with HIV is still high and the epidemic continues to grow. Despite the global movement to scale up access to antiretroviral therapy (ART) in developing countries, the majority people who urgently need HIV/AIDS care are not being reached. In Uganda, HIV testing and ART are not widely offered as part of routine medical in acute care settings and the burden of HIV has not been evaluated in this setting. This study determined the burden of HIV infection and the demand for ART in a medical emergency setting. This was a cross-sectional study where 233 patients were systematically selected from the patients' register in the medical emergency unit at Mulago national referral hospital (MNRH) from October through December 2004. HIV

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