---------- cut here ----------

call for employers to keep information about the HIV status of health-care workers confidential. But doctors who know of an HIV-positive colleague who has not sought advice must inform the employing authority and the appropriate professional regulatory body. The guidelines also emphasize the significance of notifying all patients on whom an invasive procedure has been done by an infected health-care worker. A model letter to patients who have come into contact with such an individual is provided, along with suggestions for health officials on how to deal with the media. In addition, a U.K. advisory panel on HIV infection in health-care workers has been formed to provide specific occupational recommendations to those treating such patients.

"Properties of an HIV 'Vaccine'" Nature (04/08/93) Vol. 362, No. 6420, P. 504

(Volvovitz, Franklin and Smith, Gale)

The questions raised by Moore et al. about recombinant gp160 envelope glycoprotein precursor from HIV-1 produced by MicroGeneSys are advantages rather than disadvantages, write Franklin Volvovitz and Gale Smith of MicroGeneSys in Meriden, Conn. Moore et al. says that gp160 in a baculovirus expression system does not bind strongly to the CD4 receptor, and that this recombinant gp160 does not stimulate the same antibodies as the HIV-1 virus does in natural infection. But vaccination with recombinant gp160 in patients infected with HIV-1 broadens HIV-1 specific envelope-directed immune responses, including crossreactive antibodies to gp160 epitopes and CD4 and CD8 cytotoxic T-cell responses. Volvovitz and Smith claim that they never intended their gp160 molecule to be identical to the native protein. Antibody responses against native HIV-1 proteins, including the types described by Moore et al., exist in nearly all AIDS patients but do not prevent

progression of HIV disease. In addition, the binding of gp120 or gp120-antibody complexes to CD4 has been shown to interfere with antigen specific activation of CD4 cells and trigger programmed cell death in vitro, which may contribute to the pathogenesis of HIV infection. The absence of CD4 binding by the MicroGeneSys gp160 vaccine may therefore be viewed as an added safety feature. Phase I studies have demonstrated stable CD4 counts, stimulation of cytotoxic T cells, and the suggestion of restoration of immune function. Based on these and other clinical results, MicroGeneSys gp160 was chosen by researchers at the Karolinska Institute in Sweden for the first phase III vaccine therapy studies, conclude Volvovitz and Smith.

"HIV-1 Infection: Breast Milk and HIV-1 Transmission" Lancet (04/10/93) Vol. 341, No. 8850, P. 930 (Mok, Jacqueline)

There are still more questions than answers regarding HIV-1-positive women breastfeeding their babies, writes Jacqueline Mok of the Lancet. The anti-infective properties of milk are well documented. While the numbers of leukocytes, concentrations of lactoferrin and IgA, and lymphocyte mitogenic activity decline sharply during the first two to three months of lactation to barely detectable levels, lactoferrin and IgA then increase from three to twelve months, with 90 percent of total IgA in milk being secretory IgA. Breastfeeding protects infants against gastrointestinal and respiratory illnesses, in both normal and uninfected children born to HIV-positive mothers. The Italian National Registry of AIDS discovered that breastfed HIV-1 infected children had a longer median incubation time (19 months) than bottlefed infants (9.7 months). Breastfed children also had a slower

progression to AIDS. There is no agreement on which antibodies offer protection against HIV-1 infection. Studies of the biological properties of milk from 15 HIV-1 infected women showed the presence of IgG and IgA antibodies against envelope glycoproteins, as well as IgA antibodies against core antigens. Binding of HIV-1 to the CD4 receptor can be inhibited by a human milk factor. In the developing world, where infectious disease and malnutrition contribute significantly to infant mortality, breast milk is still the best food for infants, regardless of the mother's HIV status. Transmission might be restricted by breastfeeding after colostrum and early milk have been expressed and discarded. The possibility remains that breast milk could protect the infant who is already infected with HIV at birth and may even delay progression to AIDS, concludes Mok.

"Absence of HIV Transmission From an Infected Dentist to His Patients" Journal of the American Medical Association (04/14/93) Vol. 269, No. 14, P. 1802 (Dickinson, Gordon M. et al.)

If universal precautions are practiced, the risk of HIV transmission from dentist to patient appears to be infinitesimal, write Gordon M. Dickinson

et al. of the University of Miami School of Medicine in Miami, Fla. The researchers contacted all patients treated by a dentist with AIDS and attempts were made to contact all patients for HIV testing. Living patients with newly detected HIV infection were interviewed, and DNA sequence analysis was performed to compare genetic relatedness of their HIV to that of the dentist. Death certificates were obtained for deceased patients, and the medical records of those with diagnoses suggestive of HIV disease or drug

abuse and those dying under the age of 50 years were examined in detail. There were 1,192 patients who had undergone 9,267 procedures, of whom 124 were deceased. An examination of the death certificates of patients identified five who had died with HIV infection, all of whom were either homosexuals or IV-drug users. The researchers were able to detect 962 of the remaining 1,048 patients, and 900 agreed to be tested. HIV infection was reported in five of the 900 patients, including four who had clear evidence of risk factors for the disease. One patient who had only a single evaluation by the dentist denied high-risk behavior. Comparative DNA sequence analysis showed that the viruses from the dentists and these five patients were not closely related. The study suggests the potential for HIV transmission from a general dentist to his patients is minimal in a setting in which universal precautions are strictly observed, conclude Dickinson et al.

April 22, 1993

"AIDS Patients are Susceptible to Recurrences of TB, Study Says" Washington Post (04/22/93), P. A13

Tuberculosis can strike AIDS patients more than once, which makes the resurging health hazard harder to control, according to a study published in today's New England Journal of Medicine. People who contract TB usually develop an immunity that protects them if they are exposed to the bacteria again. But a person whose immune system is depleted may not be able to fight off a new TB infection, doctors found. Peter M. Small of the Howard Hughes Medical Institute at Stanford University, director of the study, said that in order to protect against reinfection, it may be necessary for some people to use TB medicines permanently. The study examined the genetic makeup of TB

bacteria and how the germs changed over time in 17 patients at Kings County Hospital in New York.

"HIV-1 Infection: Breast Milk and HIV-1 Transmission" Lancet (04/10/93) Vol. 341, No. 8850, P. 930 (Mok, Jacqueline)

There are still more questions than answers regarding HIV-1-positive women breastfeeding their babies, writes Jacqueline Mok of the Lancet. The anti-infective properties of milk are well documented. While the numbers of

leukocytes, concentrations of lactoferrin and IgA, and lymphocyte mitogenic activity decline sharply during the first two to three months of lactation to barely detectable levels, lactoferrin and IgA then increase from three to twelve months, with 90 percent of total IgA in milk being secretory IgA. Breastfeeding protects infants against gastrointestinal and respiratory illnesses, in both normal and uninfected children born to HIV-positive mothers. The Italian National Registry of AIDS discovered that breastfed HIV-1 infected children had a longer median incubation time (19 months) than bottlefed infants (9.7 months). Breastfed children also had a slower progression to AIDS. There is no agreement on which antibodies offer protection against HIV-1 infection. Studies of the biological properties of milk from 15 HIV-1 infected women showed the presence of IgG and IgA antibodies against envelope glycoproteins, as well as IgA antibodies against core antigens. Binding of HIV-1 to the CD4 receptor can be inhibited by a human milk factor. In the developing world, where infectious disease and malnutrition contribute significantly to infant mortality, breast milk is still the best food for infants, regardless of the mother's HIV status.

Transmission might be restricted by breastfeeding after colostrum and early milk have been expressed and discarded. The possibility remains that breast milk could protect the infant who is already infected with HIV at birth and may even delay progression to AIDS, concludes Mok.

"HIV and the Aetiology of AIDS" Lancet (04/10/93) Vol. 341, No. 8850, P. 957 (Duesberg, Peter)

Because there is no proof that HIV is the cause of AIDS, the hypothesis that drug use leads to AIDS will hopefully become a hindrance to the physiologically (AZT) and psychologically (positive AIDS test) toxic public health initiatives, writes Peter Duesberg of the University of California--Berkeley. In the Lancet's March 13 issue, Schechter et al. call Duesberg's hypothesis that injected and orally used recreational drugs and AZT lead to AIDS, "a hindrance to public health initiatives." However, their hypothesis that HIV is the cause of AIDS has not attained any public health benefits. The U.S. government spends $4 billion annually, but no vaccine, no therapy, no prevention, and no AIDS control have resulted from work on this hypothesis. Schechter et al. conclude that HIV has a key role in CD4 depletion and AIDS based on epidemiological correlations with antibodies against HIV and with self reported recreational drug use among homosexuals from Vancouver. However, their survey neglects to disprove Duesberg's drug-AIDS hypothesis, because it does not provide controls--i.e., confirmed drug-free AIDS cases--and because it does not quantify drug use and ignores AZT use altogether. To refute Duesberg's hypothesis Schechter would have to produce a controlled study demonstrating that over a period of up to 10 years HIV-positive patients who use recreational drugs or AZT or both have the same AIDS risks as positives who do not do so. The 10 year period is claimed by

proponents of the HIV hypothesis to be the time needed for HIV to cause AIDS. Alternatively, they could show that HIV-free individuals who have used drugs for 10 years never get AIDS-defining illnesses, concludes Duesberg.

"Rapid Decline of CD4+ Cells After IFNa Treatment in HIV-1 Infection"
Lancet (04/10/93) Vol. 341, No. 8850, P. 959 (Vento, Sandro et al.)

Interferon (IFN), which induces autoantibodies and autoimmune diseases in some settings, may hasten CD4 T-cell loss in some HIV-1 infected individuals through the amplification of harmful "autoimmune" reactions, write Sandro Vento et al. of the A. Pugliese Hospital in Catanzaro, Italy. The researchers report three asymptomatic HIV-1 infected individuals with hepatitis C Virus related chronic active hepatitis (CAH) who had a rapid, profound decline of CD4 cells after IFN. All three patients throughout the observation were consistently negative for serum HIV p24 antigen and had circulating antibodies to p24. Sera from all three patients, obtained at the end of IFN treatment and testing in enzyme-linked immunosorbent assay, contained high titres of antibodies reacting to a sequence located in the aminoterminal of the beta chain of all human HLA class II antigens, homologous to a sequence located in the carboxy terminus of HIV-1 gp41. These autoantibodies, which also recognize "native" class II molecules and may contribute to the elimination of CD4 T cells "in vivo", were at low tires (50-100) in all three patients six months after stopping IFN. Such autoantibodies were not detected in 28 other patients with HIV infection and HCV related CAH treated with IFN and who did not experience CD4 T-cell loss

in some HIV-1 infected individuals through the amplification of harmful

"autoimmune" reactions. The subjects had A1; B8; DR3; and B35, DR1 HLA antigen combinations which are linked with a more rapid fall in CD4 cell counts and clinical progression of HIV-1 disease. IFN can induce a very rapid decline of CD4 cells and should be used cautiously in patients with these HLA haplotypes, the researchers conclude.

April 23, 1993

"TB Makes a Comeback" State Government News (04/93) Vol. 36, No. 4, P. 6 (Voit, William and Knapp, Elaine S.)

Although tuberculosis was once believed to be eliminated in the United States, it is emerging again among the homeless, AIDS patients, immigrants, minorities, and prisoners. Dr. Lee B. Reichman, professor of medicine at the University of New Jersey Medical School and president of the American Lung Association, said, "Right now, it's a big city problem, but potentially it's everyone's problem." The ALA predicts that 10 million Americans are infected with TB, and about 10 percent of them will develop the disease because their immune systems are depressed, especially those with AIDS or HIV. Gene

Tammes, a Centers for Disease Control expert, said that is why the CDC has issued guidelines warning hospitals and institutions not to mix AIDS with TB patients. State health officials believe the TB is also spreading because those who are most susceptible are the least likely to follow through with treatment. In addition, the increase is attributed to a shortage of public health services. In New York City, TB is an epidemic "because the number of cases is increasing faster than we can treat people," said Dr. George Diferdinando, director of the New York State TB Control. According to

Diferdinando, curbing the spread of TB entails keeping 85 percent or more of diagnosed TB cases in treatment. About 40 percent of infected New York City residents don't complete therapy. When TB patients don't finish taking their medication, multi-drug resistant TB can develop, which requires taking more expensive drugs and can take two years instead of the normal six months to treat.

"Increasing Frequency of Heterosexually Transmitted AIDS in Southern Florida: Artifact or Reality?" American Journal of Public Health (04/93) Vol. 83, No. 4, P. 571 (Nwanyanwu, Okey C. et al.)

The alarmingly high rate of heterosexually acquired AIDS cases in southern Florida was partially related to misclassification of risk, write Okey C. Nwanyanwu et al. of the Centers for Disease Control in Atlanta, Ga. The researchers investigated 168 such AIDS cases from Broward and coastal Palm Beach counties. All of these cases attributed to heterosexual transmission reported sexual contact with bisexual men, injecting drug users, or persons born in countries where heterosexual contact is the primary route of HIV transmission. Medical records of patients, in addition to records from social services, HIV counseling and testing centers, and sexually transmitted disease (STD) clinics were reviewed. If no other HIV risk factor was found from medical record review, patients were interviewed using a standardized questionnaire. Once STD clinic and other medical records were reviewed, 29 men and 7 women were reclassified into other HIV transmission categories. After adjustments were made for the reclassification, the percentage of AIDS cases reported from Palm Beach and Broward counties between January 1, 1989, and March 31, 1990, that was attributed to heterosexual transmission decreased from 10 percent to 6 percent among men

and from 33 percent to 28 percent among women. While the percentage of heterosexually transmitted AIDS cases in southern Florida decreased after adjustment was made for reclassified cases, it still remained above the national average, the researchers conclude.

AIDS Statistics

World Health Organization, Geneva

Organisation mondiale de la Sante, Geneve

15 January 1993 - 68th Year

DATA AS AT 31 December 1992

DONNEES AU 31 Decembre 1992

Algeria - Algerie	92	31.08.91
Angola	514	24.09.92
Benin - Benin	247	31.03.92
Botswana	353	30.06.92
Burkina Faso	1,263	20.03.92
Burundi	6,052	20.03.92
Cameroon - Cameroun	1,407	05.10.92
Cape Verde - Cap-Vert	52	08.02.92
Central African Republic - Republique centrafricaine	1,864	20.03.92
Chad - Tchad	382	17.09.92
Comoros - Comores	3	11.03.92
Congo	3,482	30.01.92
Cote d'Ivoire	10,792	09.03.92

Djibouti	265	17.12.92
Egypt - Egypte	57	17.12.92
Equatorial Guinea - Guinee equatoriale	13	16.05.92
Ethiopia - Ethiopie	3,978	11.11.92

Gabon	215	31.05.92
Gambia - Gambie	180	25.02.92
Ghana	3,612	01.07.92
Guinea - Guinee	338	20.03.92
Guinea-Bissau - Guinee-Bissau	189	13.07.92
Kenya	31,185	01.10.92
Lesotho	64	31.03.92
Liberia - Liberia	28	31.03.92
Libyan Arab Jamahiriya - Jamahiriya arabe libyenne	7	17.12.92
Madagascar	2	06.11.92
Malawi	22,300	02.12.92
Mali	1,111	17.07.92
Mauritania - Mauritanie	36	19.07.92
Mauritius - Maurice	11	29.02.92
Morocco - Maroc	121	17.12.92
Mozambique	538	10.10.92
Namibia - Namibie	311	20.03.92
Niger	497	07.02.92

Nigeria - Nigeria	184	12.03.92
Reunion - Reunion	65	20.03.92
Rwanda	8,483	12.11.92
Sao Tome and Principe - Sao Tome-et-Principe	11	03.07.92
Senegal - Senegal	648	09.03.92
Seychelles	---	18.02.92
Sierra Leone	40	20.03.92
Somalia - Somalie	13	17.12.92
South Africa - Afrique du Sud	1,316	30.06.92
Sudan - Soudan	650	17.12.92
Swaziland	197	08.07.92
Togo	1,278	03.04.92
Tunisia - Tunisie	114	17.12.92
Uganda - Ouganda	34,611	01.11.92
United Republic of Tanzania - Republique-Unie de Tanzanie	34,605	31.05.92
Zaire - Zaire	18,186	14.05.92
Zambia - Zambie	6,556	15.10.92
Zimbabwe	12,514	31.03.92

Anguilla	6	10.12.92
Antigua and Barbuda -		

Antigua-et-Barbuda	6	10.12.92
Argentina - Argentine	1,820	10.12.92
Bahamas	934	10.12.92
Barbados - Barbade	315	10.12.92
Belize	53	10.12.92
Bermuda - Bermudes	199	10.12.92
Bolivia - Bolivie	49	10.12.92
Brazil - Bresil	31,364	10.12.92
British Virgin Islands - Iles Vierges britanniques	4	10.12.92
Canada	6,889	10.12.92
Cayman Islands - Iles Caimanes	13	10.12.92
Chile - Chili	573	10.12.92
Colombia - Colombie	2,957	10.12.92
Costa Rica	419	10.12.92
Cuba	137	10.12.92
Dominica - Dominique	12	10.12.92
Dominican Republic - Republique dominicaine	1,809	10.12.92
Ecuador - Equateur	224	10.12.92
El Salvador	382	10.12.92
French Guiana - Guyane francaise	232	10.12.92
Grenada - Grenade	32	10.12.92
Guadeloupe	182	10.12.92

Guatemala	273	10.12.92
Guyana	333	10.12.92
Haiti - Haiti	3,086	10.12.92
Honduras	1,976	10.12.92
Jamaica - Jamaique	361	10.12.92
Martinique	227	10.12.92
Mexico - Mexique	11,034	10.12.92
Montserrat	1	10.12.92
Netherlands Antilles and Aruba - Antilles neerlandaises et Aruba	110	10.12.92
Nicaragua	31	10.12.92
Panama	388	10.12.92
Paraguay	51	10.12.92
Peru - Perou	614	10.12.92

Saint Kitts and Nevis - Saint-Kitts-et-Nevis	37	10.12.92
Saint Lucia - Sainte-Lucie	48	10.12.92
Saint Vincent and the Grenadines - Saint-Vincent-et-Grenadines	41	10.12.92
Suriname	122	10.12.92
Trinidad and Tobago - Trinite-et-Tobago	1,085	10.12.92

Turks and Caicos Islands - Iles Turques et Caiques	25	10.12.92
United States of America - Etats-Unis d'Amerique	242,146	10.12.92
Uruguay	310	10.12.92
Venezuela	2,173	10.12.92
Afghanistan	---	17.12.92
Bahrain - Bahrein	3	31.03.92
Bangladesh	1	30.11.92
Bhutan - Bhoutan	---	30.11.92
Brunei Darussalam - Brunei Darussalam	2	19.12.91
Burma see Myanmar - Birmanie voir Myanmar		
Cambodia - Cambodge	---	31.10.92
China(a) - Chine(a)	11	28.04.92
Cyprus - Chypre	24	17.12.92
Democratic People's Republic of Korea - Republique populaire democratique de Coree	---	30.11.92
Hong Kong	61	26.09.92
India - Inde	242	30.11.92
Indonesia - Indonesie	24	30.11.92
Iran (Islamic Republic of) -		

Iran (Republique islamique d')	56	17.12.92
Iraq	7	17.12.92
Israel - Israel	192	17.12.92

Japan - Japon	508	04.12.92
Jordan - Jordanie	24	17.12.92
Kuwait - Koweit	7	17.12.92
Lao People's Democratic Republic - Republique democratique populaire lao	1	23.04.92
Lebanon - Liban	35	17.12.92
Macao	2	03.11.92
Malaysia - Malaisie	46	25.05.92
Maldives	---	30.11.92
Mongolia - Mongolie	1	30.11.92
Myanmar	16	30.11.92
Nepal - Nepal	12	30.11.92
Oman	27	17.12.92
Pakistan	25	17.12.92
Philippines	80	07.10.92
Qatar	31	17.12.92
Republic of Korea - Republique de Coree	10	19.11.92
Saudi Arabia - Arabie saoudite	46	17.12.92

Singapore - Singapour	43	05.08.92
Sri Lanka	20	30.11.92
Syrian Arab Republic - Republique arabe syrienne	19	17.12.92
Thailand - Thailande	909	30.11.92
Turkey - Turquie	89	17.12.92
United Arab Emirates - Emirats arabes unis	8	17.12.92
Viet Nam	---	28.04.92
Yemen - Yemen	---	17.12.92
Albania - Albanie	---	30.09.92
Austria - Autriche	828	30.09.92
Belarus - Belarus	6	30.09.92
Belgium - Belgique	1,224	17.12.92
Bulgaria - Bulgarie	16	17.12.92
Czechoslovakia - Tchecoslovaquie	32	17.12.92
Denmark - Danemark	1,072	17.12.92
Finland - Finlande	112	17.12.92

France	21,487	17.12.92
Germany - Allemagne	8,893	17.12.92
Greece - Grece	689	17.12.92
Hungary - Hongrie	105	17.12.92
Iceland - Islande	22	17.12.92
Ireland - Irlande	294	17.12.92

Italy - Italie	14,783	17.12.92
Latvia - Lettonie	2	30.09.92
Lithuania - Lituanie	2	30.09.92
Luxembourg	55	17.12.92
Malta - Malte	25	17.12.92
Monaco	9	17.12.92
Netherlands - Pays-Bas	2,330	17.12.92
Norway - Norvege	283	17.12.92
Poland - Pologne	118	17.12.92
Portugal	1,007	17.12.92
Romania - Roumanie	2,073	17.12.92
Russian Federation - Federation de Russie	94	30.09.92
San Marino - Saint-Marin	1	17.12.92
Spain - Espagne	14,991	17.12.92
Sweden - Suede	743	17.12.92
Switzerland - Suisse	2,691	17.12.92
United Kingdom - Royaume-Uni	6,510	17.12.92
Yugoslavia(b) - Yougoslavie(b)	313	30.09.92
American Samoa - Samoa americaines	---	18.11.92
Australia - Australie	3,615	02.12.92
Cook Islands - Iles Cook	---	18.02.92
Federated States of Micronesia - Etats federes de Micronesie	2	01.09.92
Fiji - Fidji	4	28.11.91
French Polynesia - Polynesie francaise	27	28.11.91

Guam	10	13.09.91
Kiribati	---	08.11.91
Mariana Islands - Iles Mariannes	4	14.10.92
Marshall Islands - Iles Marshall	2	18.03.91
Nauru	---	17.12.92
New Caledonia and Dependencies -		

Nouvelle-Caledonie et		
dependances	22	26.08.92
New Zealand - Nouvelle-Zelande	348	03.11.92
Niue	---	18.02.92
Palau	---	15.10.92
Papua New Guinea - Papouasie-		
Nouvelle-Guinee	45	10.08.92
Samoa	1	18.02.92
Solomon Islands - Iles Salomon	---	19.12.91
Tokelau	---	18.02.92
Tonga	2	24.07.92
Tuvalu	---	22.11.92
Vanuatu	---	08.06.92
Wallis and Futuna Islands - Iles		
Wallis et Futuna	---	27.05.91

(a) The above statistics relating to China do not include 48 cases of AIDS in the Province of Taiwan. -- Les statistiques ci-dessus se rapportant a la Chine ne comprennent pas 48 cas de SIDA dans la province de Taiwan.

(b) Refers to Republics and areas of the former Socialist Federal Republic of Yugoslavia: Bosnia and Herzegovina; Croatia; Macedonia; Montenegro; Serbia; Slovenia. -- Se refere aux republiques et territoires de l'ancienne Republique federative socialiste de Yougoslavie: Bosnie-Herzegovine; Croatie; Macedoine; Montenegro; Serbie; Slovenie.

---------- cut here ----------

-- This is the last part ----------

Internet: david@stat.com FAX: +1 (602) 451-1165

Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15

Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na