HIV/AIDS Workplace Interventions in South Africa and the United States

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ABSTRACT

This thesis focuses on the private sector response to the human immunodeficiency virus and acquired immune deficiency syndrome (HIV/AIDS) in the Republic of South Africa (RSA) and the United States (US) in multinational businesses and corporations. From an epidemiological perspective HIV/AIDS and its co infections cause acute and chronic illness in the workforce leading to programs and interventions of various complexity and effectiveness. Workforce HIV/AIDS epidemiology in South Africa and the US is reviewed and discussed. From a critical medical anthropology perspective multinational corporations are political and economic entities with immense resources and power over people, communities, and governments globally. Corporate culture becomes important in the design of prevention and treatment strategies. Working with the Centers for Disease Control and Prevention’s (CDC) global AIDS program (GAP) allowed the researcher to conduct key informant interviews and participant observation in five multinational businesses in South Africa. Important issues are raised regarding workforce education, stigma, workplace and community relationships, rapid-saliva versus
blood sample testing, and the need for more disclosure and involvement of people with HIV/AIDS (PWHAs) in the workplace. In light of increasing global capitalization, poor government services for prevention and treatment, and the fact that HIV/AIDS discrimination is a human rights abuse, from a collective standpoint businesses have been slow to respond to HIV/AIDS, in southern Africa as well as in the United States, and should make it a core component of corporate social responsibility (CSR) strategies regardless of disease prevalence in the workforce.
INTRODUCTION

Corporations, businesses, and other private sector enterprises possess enormous resources globally often to the point of rivaling host country governments. On-site clinics or hospitals, the staff needed to run them, dependable transport and communications capabilities, and the availability of secure warehouses for storage place many large businesses in less developed countries (LDCs) in an excellent position to cooperate with and participate in public health surveillance and prevention efforts. In more developed countries (MDCs) the private sector offers medical benefits packages which can shelter an individual from personal economic ruin due to HIV. In many cases the actions and influences of large businesses are far-reaching and long lasting.

Corporations draw individuals into situations where HIV may be more prevalent, such as urban areas, and certain industries directly increase vulnerability. Townships spring up around factories in Africa and migrants travel and leave family in order to participate in wage earning activities. U.S. citizens often move to metropolitan areas pursuing work as well, in places such as New York City, Los Angeles, and Miami, cities which have the highest HIV infection rates in the US. Multinational corporations are able to develop and nurture the partnerships necessary to produce and obtain educational materials, lab tests, and drugs on a consistent basis through global contacts. They are
capable of supporting many of their workers in a variety of ways. This paper focuses on the private sector response to HIV/AIDS in multinational corporations and workplace initiatives to combat the disease, in the Republic of South Africa (RSA) and in the United States (US). These countries are the only two industrialized countries failing to record mortality data by socioeconomic status (Navarro 1990).

Workers spend a significant amount of time at work and are captive participants for prevention campaigns as well as treatment regimens. There are direct costs for businesses that are unavoidable and significantly less damaging if HIV/AIDS is addressed rather than ignored, and businesses have the option of inaction or taking the lead in the promotion of non-discrimination and human rights. Labor unions, investors, governments, and societies in general are increasingly searching for ways to compare and evaluate the business response to HIV and AIDS. This is occurring against a backdrop of transnational business reform known as ‘corporate governance’ which is bringing about a move from “the single to the triple bottom line, which embraces the economic, environmental and social aspects of a company’s activities” (King Committee: 9). To consider what businesses have done to combat HIV/AIDS I focus on five major areas: policy development, education and awareness, voluntary counseling and testing services, provision of medical services, and community involvement.
LITERATURE REVIEW

HIV/AIDS Epidemiology Overview

The Joint United Nations Program on HIV/AIDS (UNAIDS) estimates 39.4 million people living with HIV/AIDS at the end of 2004, with 4.9 million new infections that year and 3.1 million deaths (see table 1). Current estimates of regional rates (see table 2) show that Africa claims 60% of PWHAs as well as 63% of new infections and 74% of those killed by the disease in 2004. In spite of some claims that Africa’s pandemic is beginning to slow more improved estimates indicate that incidence levels continue to remain roughly the same while mortality rates increase. Southern Africa alone contains 30% of HIV/AIDS cases but only 2% of the world’s population (ILO 2002; UNAIDS 2004).
Table 1

Global summary of the HIV and AIDS pandemic, December 2004

<table>
<thead>
<tr>
<th>Number of people living with HIV in 2004</th>
<th>Total</th>
<th>39.4 million (35.9 – 44.3 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adults</td>
<td>37.2 million (33.8 – 41.7 million)</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>17.6 million (16.3 – 19.5 million)</td>
</tr>
<tr>
<td></td>
<td>Children under 15 years</td>
<td>2.2 million (2.0 – 2.6 million)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People newly infected with HIV in 2004</th>
<th>Total</th>
<th>4.9 million (4.3 – 6.4 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adults</td>
<td>4.3 million (3.7 – 5.7 million)</td>
</tr>
<tr>
<td></td>
<td>Children under 15 years</td>
<td>640 000 (570 000 – 750 000)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIDS deaths in 2004</th>
<th>Total</th>
<th>3.1 million (2.8 – 3.5 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adults</td>
<td>2.6 million (2.3 – 2.9 million)</td>
</tr>
<tr>
<td></td>
<td>Children under 15 years</td>
<td>510 000 (460 000 – 600 000)</td>
</tr>
</tbody>
</table>

Source: UNAIDS, 2004
## Table 2

### Regional AIDS Statistics, end 2004

<table>
<thead>
<tr>
<th>Region</th>
<th>Adults &amp; children living with HIV</th>
<th>Adults &amp; children newly infected with HIV</th>
<th>Adult prevalence [%]</th>
<th>Adult &amp; child deaths due to AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>25.4 million [23.4 – 28.4 million]</td>
<td>3.1 million [2.7 – 3.8 million]</td>
<td>7.4 [6.9 – 8.3]</td>
<td>2.3 million [2.1 – 2.6 million]</td>
</tr>
<tr>
<td>North Africa &amp; Middle East</td>
<td>540,000 [230,000 – 1.5 million]</td>
<td>92,000 [34,000 – 350,000]</td>
<td>0.3 [0.1 – 0.7]</td>
<td>28,000 [12,000 – 72,000]</td>
</tr>
<tr>
<td>South and South-East Asia</td>
<td>7.1 million [4.4 – 10.6 million]</td>
<td>890,000 [480,000 – 2.0 million]</td>
<td>0.6 [0.4 – 0.9]</td>
<td>490,000 [300,000 – 750,000]</td>
</tr>
<tr>
<td>East Asia</td>
<td>1.1 million [560,000 – 1.8 million]</td>
<td>290,000 [84,000 – 830,000]</td>
<td>0.1 [0.1 – 0.2]</td>
<td>51,000 [25,000 – 86,000]</td>
</tr>
<tr>
<td>Latin America</td>
<td>1.7 million [1.3 – 2.2 million]</td>
<td>240,000 [170,000 – 430,000]</td>
<td>0.6 [0.5 – 0.8]</td>
<td>95,000 [73,000 – 120,000]</td>
</tr>
<tr>
<td>Caribbean</td>
<td>440,000 [270,000 – 780 000]</td>
<td>53,000 [27,000 – 140,000]</td>
<td>2.3 [1.5 – 4.1]</td>
<td>36,000 [24,000 – 61,000]</td>
</tr>
<tr>
<td>Eastern Europe &amp; Central Asia</td>
<td>1.4 million [920,000 – 2.1 million]</td>
<td>210,000 [110,000 – 480,000]</td>
<td>0.8 [0.5 – 1.2]</td>
<td>60,000 [39,000 – 87,000]</td>
</tr>
<tr>
<td>Western &amp; Central Europe</td>
<td>610,000 [480,000 – 760,000]</td>
<td>21,000 [14,000 – 38,000]</td>
<td>0.3 [0.2 – 0.3]</td>
<td>6,500 [ &lt;8,500]</td>
</tr>
</tbody>
</table>
In the US between 850,000 and 950,000 people were living with HIV in 2003 and about 43,000 were diagnosed that year (CDC 2003a). From 1991 to 2001 the rate increased from 0.33% to 0.43% (KFF 2005a). Regional variation exists between states and the three topping the list are New York, California, and Florida (CDC 2003a). The U.S. epidemic has changed drastically in recent years as minorities and women, in particular African-Americans, are increasingly the victims of infection (UNAIDS 2004). Rates in blacks in the U.S. doubled from 1991 to 2001, from 1.1% to 2.14% while infection rates for whites remained the same at about 0.2%, making U.S. AIDS rates thirteen times higher in the black population than in the white. This is likely an

### Regional AIDS Statistics, end 2004, continued

<table>
<thead>
<tr>
<th>Region</th>
<th>Adults &amp; children living with HIV</th>
<th>Adults &amp; children newly infected with HIV</th>
<th>Adult prevalence [%]</th>
<th>Adult &amp; child deaths due to AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>1.0 million [540,000 – 1.6 million]</td>
<td>44,000 [16,000 – 120,000]</td>
<td>0.6 [0.3 – 1.0]</td>
<td>16,000 [8,400 – 25,000]</td>
</tr>
<tr>
<td>Oceania</td>
<td>35,000 [25,000 – 48,000]</td>
<td>5,000 [2,100 – 13,000]</td>
<td>0.2 [0.1 - 0.3]</td>
<td>700 [&lt;1 700]</td>
</tr>
</tbody>
</table>

Source: UNAIDS, 2004
underestimate because the sample used in this particular survey did not include the homeless or prison populations (KFF 2005a). AIDS diagnoses increased in women from 1999 to 2003 by 15% but only 1% in men, and infected women are 12% less likely to receive prescriptions for the best treatments (CDC 2003d). The number of infected persons receiving treatment in the U.S. is estimated at 268,000 or about 55% of those who are medically recommended to receive it (KFF 2005a). In spite of years of prevention education and a relatively high number of testing facilities, up to 280,000 people (almost one-third of those infected in the U.S.) do not realize they are infected (CDC 2003a).

South Africa contains 5.3 million PWHAs (2.9 are women), and prevalence levels are still increasing in all age groups, and show there is immense regional variation. Prevalence exceeds 30% in Mpumalanga, the Free State, and Kwa-Zulu Natal. Recent studies point out that official AIDS rate estimates in RSA are three times lower than they should be due to cause of death misclassification (Groenewald 2005). Variation across ethnicities is apparent as well. Like in the US, rates in blacks are thirteen times higher than in the white population (Basyurt 2005). Currently considerable concern exists regarding a consistently delayed anti-retroviral drug (ARV) rollout program planned by the government. The number of people on ARVs by March 2005 was supposed to be 53,000 but current estimates stand at only 30,000, or about 0.3% of those infected. Activists in the Treatment Action Campaign (TAC) note that while over half of the total health budget for the next five years will be spent on the program its reliance on doctors and hospitals will limit distribution efforts and major changes will have to occur in health infrastructure in order for the program to be successful (IRIN PlusNews 2005b)
The worst is supposedly still to come for Africa. About US $200 billion is necessary to save 16 million people from death and 43 million people from infection in the next 20 years. If current policies and funding levels continue Africa can expect to see 80 million deaths from HIV/AIDS by the year 2025. 6,500 people die each day from HIV or AIDS related complications in nine highly affected African countries (IRIN PlusNews 2005a).
HIV/AIDS Epidemiology in the Workplace

The term ‘workforce’ is defined here as persons of working age who are in paid employment or productive self employment. Informal sector employment is included in some statistics but is mostly outside the scope of this paper. The informal sector’s importance is well established however since many households, especially in LDCs, survive through members working in both the formal and informal sectors. A ‘workplace,’ is defined in this document as an office, factory, farm, or any holding of a multinational corporation where significant production or managerial processes occur. Again, the importance of small and medium sized enterprises (SMEs) should not be underestimated but is outside the scope of this paper. The term ‘multinational corporation’ is used in this document as a general term for a transnational businesses. It may mean that a given business has multiple workplaces in various countries, but a common trend is for corporate head offices to be located in one country (or the capital of a country) and production factories in another (often where labor is cheapest).

Finally, while it is widely recognized that HIV/AIDS is technically a pandemic, or present in nearly every country at above acceptable levels, I use the term ‘syndemic’ originating in anthropology (Baer, et al. 2003; Singer 1998) to better portray the multiple facets of the disease. Because of the synergistic relationship between tuberculosis (TB),
malaria, and other opportunistic infections and HIV/AIDS, and also because of the social and political factors which play into its transmission and prevention, ‘syndemic’ is a more appropriate reflection of the many smaller epidemics that contribute to the global pandemic. ‘Syndemic’ refers not simply to co-occurring epidemic rates of disease within the same population but the interaction of all potentially relevant health conditions including malnutrition, TB, and threatening environmental conditions such as migrant labor camps and poverty-stricken urban areas. The mutually enhancing nature of the factors involved in the HIV/AIDS syndemic must be appreciated in order to combat common reductionist conceptions of PWHAs and to consider local contexts and structural inequality on a level equal to the biology of the disease (Baer, et al. 2003).

In the world of HIV/AIDS prevention and treatment, institutions, organizations, and governments often use modeling to determine the number of infections averted by a particular intervention or economic costs saved or gained from HIV initiatives (Farnham 1994; ILO 2004a; Olson 2000). UNAIDS and the World Health Organization (WHO) estimate that 29 million new infections could be prevented by 2010 if 12 necessary interventions are undertaken by 2005. A three year delay would reduce this potential gain by 50%. Bringing these programs up to scale would cost US $27 billion and a multi-pronged approach including mass media campaigns, public sector condom promotion and distribution, condom social marketing, voluntary counseling and testing programs (VCT), prevention of mother-to-child transmission (PMTCT), school-based programs, programs for out-of-school youth, workplace programs, treatment of sexually transmitted infections, peer counseling for sex workers, outreach to men who have sex
with men (MSMs), and harm reduction programs for injecting drug users (IDUs) (PR 2002).

As I write this thesis in 2005, it is obvious that the three year delay has already occurred. It seems as if the very organizations that are supposed to be solidifying a response to the disease engage in more talk than action. Projections are consistently made but goals remain unachieved. Bernhard Schwartlander, director of WHO’s Department of HIV/AIDS, stated in 2002 that a reduction in prevalence levels of 25% by 2010 is achievable and this goal was adopted by all governments at the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS in 2001. Infection rates have continued to rise since that time. Most of the effect of HIV/AIDS will be felt in Africa, where the average age of the workforce is expected to decline by 2 years (Olson 2000).

Many studies in sub-Saharan Africa draw on sentinel surveillance of pregnant women attending antenatal clinics, numbers which are not representative of the private sector workforce. One survey of 34 businesses in South Africa, Botswana, and Zambia found an average prevalence rate of 16.6%, with country specific rates at 14.5%, 17.9%, and 24.6% respectively. Mining and metal processing industries had the highest rates concentrated more in the unskilled labor force than in upper management or skilled workers (Evian, et al. 2004).

The most sexually active segment of the US population is in the workforce (Pickering 1995) but many companies in the US are still unwilling to hire HIV positive workers and reasonable accommodations are regularly denied to PWHAs in companies, which has lead to lawsuits. About 2,100 complaints alleging discrimination over
HIV/AIDS issues were filed with the Equal Employment Opportunity Commission (EEOC) between 1992 and 1999, but it wasn’t until 1998 when the US Supreme Court ruled that federal laws against discrimination protect people infected with HIV (Armour 2000). US employers in general are complacent about HIV/AIDS workplace issues and there has been a recent decline in employer requests for such technical assistance in spite of rising infection rates (Vaughn 2001). By the end of the year 2000 it was estimated that AIDS costs American business about $55 billion in lost productivity, disability insurance and higher health premiums, and additional expenditures for hiring and training new employees (Miller 2000).

The International Labor Organization (ILO) recently produced “HIV/AIDS and work: global estimates, impact and response” (ILO 2004a), which highlights statistical modeling of the pandemic in the working world. Much of the remainder of this section is based on that report due primarily to the deficiency in epidemiological studies on the subject, many of which have low sample sizes, measure very different indicators, and differ in assumptions, country samples, methodology, and temporal focus. A number of studies have been important in laying the foundation for understanding, however, and have been helpful in making the case for HIV education and treatment in the workplace (Bloom 1997; Bonnel 2000; Coulibaly 2004; Dixon 2001; Evian, et al. 2004; Farnham 1994; GHI 2005a; Liu, et al. 2004; Over 1992; Rosen 2003). The ILO report assumes a lack of ARV therapy in the statistical models, surveys a total of 50 countries varying in prevalence rates from 1%-40%, and measures many indicators at 5 year intervals from 1995 to 2005 to 2015. The complete report can be viewed and technical notes on
statistical models accessed independently by the reader, but for the purposes of this paper relevant data is mentioned primarily for the US and the RSA.

The ILO estimates that more than 26 million workforce participants are HIV positive worldwide with over 70% of them living in Africa. Kenya has 1 million, Mozambique 1.1 million, Ethiopia and Zimbabwe 1.3 million, Tanzania 1.4 million, and Nigeria 2.4 million HIV positive workers. South Africa, with a 2003 prevalence rate of 21.5%, has 3,698,827 HIV positive workers between the ages of 15 to 64 years old. The US, by stark contrast, had a 2003 prevalence rate of 0.6% which translates into 928,800 HIV positive workers between the ages of 15 to 64 years old. These estimates were obtained by summing the products of ILO estimated economic activity rates for each age and sex group and the population weights of those groups (see appendix I-A).

The estimated impact of HIV/AIDS on economic growth depends on prevalence and economic activity. In the US and other low prevalence countries economic impact is difficult to quantify and the ILO records a negligible direct domestic impact from the disease. The 2002 US gross domestic product (GDP) was US $9,221,212 million (i.e. add six more zeros) and per capita GDP was US $31,660. In South Africa, on the other hand, the economic impact of HIV/AIDS is more easily measurable. With a GDP of US $392,380 million and a per capita GDP of $8,923, South Africa lost 2.1% of its GDP to HIV/AIDS costs on an annual basis from 1992-2002 which equals about US $7,230 million every single year. In the countries included in the ILO’s analysis there was a global loss of US $25 billion per year from 1992-2002 because of HIV’s impact in the business world (see appendix I-B).
In the absence of treatment, and once symptomatic AIDS develops, the disease runs its course in 18-24 months. Workers who catch the disease inevitably show diminished capacity to work partially and intermittently at first, before total incapacity occurs. Measuring this impact globally shows that by 1995 there were already 500,000 people unable to work because of HIV/AIDS and 300,000 were in Africa. In the US this statistic stands at 58,610 people and 8,090 people in the RSA. By the end of 2005 it is predicted that 2 million workforce participants will be unable to work with 78% of them in Africa. The impact has decreased by this time in the US with 14,880 people unable to work but in South Africa there is a huge increase to 298,280 people. In the absence of treatment by 2015 estimates indicate that 4 million workforce participants will be unable to work because of HIV. Even with predicted increases in HIV rates in Asia those who are unable to work (6 out of 10) will still be in Africa. By that year the U.S. can expect to see about 20,740 people unable to work due to HIV and South Africa can expect another increase as well, of up to 481,740 people (see appendix I-C).

Another frightening indicator is the total cumulative AIDS deaths in workforces. The ILO measured this at 5 year intervals and in the absence of treatment. In 1995 about 5 million people had died because of HIV/AIDS, and both South Africa (at 64,900 workers) and the US (at 506,000 workers) had lost 0.4% of their workforce to AIDS. By 2000 the global estimate stood at 13 million people, with the U.S. losing 922,000 people (0.6%) of its workforce and South Africa experiencing losses of about 500,000 people or (2.5%) of its workforce. By 2005 these numbers will stand at about 27 million people globally (1.5%), 1.3 million (0.8%) in the US, and 2.07 million (9.2%) in South Africa. In the year 2015 the ILO predicts that globally we will have lost 74 million workers.
(3.2%) to HIV/AIDS, and that 2.14 million (1.3%) workers will have died from the disease in the US and 4.4 million (18.2%) in South Africa (see appendix I-D). These measurements are even more staggering in some other countries. For example by 2015 Zimbabwe will have lost more than 40% of its workforce to HIV/AIDS.

Keep in mind the above numbers represent men and women who are actually working in the formal sector and are unrepresentative of the informal sector including subsistence or small income generating agriculture, domestic house work, small personal or family businesses, or craft or goods production for home use. All working age family members are important to household function, for example, in many nations a working age parent or sibling often stays home with the young children. The death of parents not only leaves children with no home care but robs them of a livelihood as well. Orphaned children as a result of HIV/AIDS represent a human rights concern but also may lead to a less educated and less able workforce in the future along with an increase in child labor. Again the impact will be more felt in Africa and other low resource areas. In 2003 there were already nearly 15 million orphans (children ages 0-17) and 12 million were in Africa. In the US AIDS orphan estimates are negligible but stood at 1.1 million in RSA (see appendix I-E).

Estimates of men and women of working age who died because of HIV/AIDS during the year 1995 stood at almost 735,000 people, 78,860 of them in the U.S. and 10,880 in RSA. In 2005 3.2 million men and women of working age will die-- 20,020 in the US and 401,330 in RSA. That annual mortality estimate, which is current as I write this, will rise in the future. In 2015 almost 6 million people of working age will die in the
50 countries included, and 27,920 will be in the U.S. and 648,160 in South Africa. Half of that 6 million will be women and 72% of them will be in Africa (ILO 2004a).

The impact of deaths and illness related to HIV/AIDS was measured using an ‘economic burden’ ratio and a ‘social burden’ ratio estimated in 5 year intervals. Economic burden tells us how much more productive responsibility an economically active person (in the formal sector) will have compared to dependents or non-productive members, old or young, living in the household as a result of HIV/AIDS. In 1995 few countries were feeling an economic burden at all due to AIDS, but in 2005 the U.S. had an economic burden of 0.2% and South Africa’s stood at 3.5%. By 2015 this ratio will jump to 0.7% in the U.S. and 12.5% in South Africa. The social burden indicator takes into account all economically active persons, in the formal and informal sectors, and describes the change in dependency caused by the deaths and illness of all working age persons as well as circumstances involving caregivers’ increased investment in previously working adults who are now home dying of AIDS. In 1995 the U.S. had a social burden of 0.3% and South Africa 0.0%. In 2005 these numbers will stand at 0.6% and 7.2% respectively, increasing to 0.8% and 18.3% by 2015 (see appendix I-F).

Based on these numbers, the impact HIV will have on the world of work will be increasingly destructive and incapacitating, particularly in the absence of treatment and at the current level of education and prevention programs. It would be extremely naïve of businesses to assume that labor in developing nations is infinite especially considering the costs of training workforces from what will be increasingly educationally-deficient countries. Businesses may be forced to downsize and restructure and may find shrinking
markets among their consumer base (Groenewald 2005; ILO 2004a; UNAIDS 1998; UNAIDS 2000).

HIV in the United States workforce peaked in 1995 in terms of PWHAs unable to work, and the advent of anti-retroviral therapy (ART) in a country with access for many workers provides those victims a path to continued productivity. Existing literature reflects this since many businesses were spurned to action in the mid 1990s. The effect of HIV on the economy and social fabric in the US at this point, according to published studies, will be negligible when compared with South Africa’s plight and any other highly affected area (GHI 2005a; ILO 2004a). Also, the effects of the epidemic go deeper than the numbers presented here imply. The cumulative impact over the years of HIV has been underestimated considering the loss of institutional memory regarding locale-specific best practices (especially in the agriculture sector) and the weakening of institutions, organizations, networks, unions, and individual human capacity to sustain productive activities (Evian, et al. 2004; FAO 2005; ILO 2004a).
HIV/AIDS in multinational companies- the economic impacts

In 2002 in the US an HIV positive worker would cost companies an estimated $37,320 US dollars for asymptomatics and $50,374 US dollars for workers with symptomatic AIDS per person-year. This study by Liu et al (2004) suggests that HIV costs to businesses are mostly due to higher costs for insurance premiums, welfare benefits, less productivity, new recruitment and training, and downsized economies and labor markets. The authors also state that little guidance exists regarding examples of well designed, validated, and easily replicable cost analyses (Liu, et al. 2004). Economic costs to businesses will be even higher if employees are not treated with ARVs (Liu, et al. 2002). It is difficult to convince businesses in the US that HIV/AIDS will affect their businesses because economic impacts are under the radar (see appendix I, table 4), and there is consequently a dearth of literature and research about workplace HIV issues in the US (Newberger-Lowenstein 2001).

US companies are concerned about their investments in Africa and some formed a Corporate Task Force on AIDS in Africa in the year 2000. This group was formed to examine and propose courses of action for American corporations with investments in Africa. Offering a unified business approach for American companies to respond to the epidemic, this task force’s impact is yet to be documented (AIDS Weekly 2000).
HIV/AIDS in Africa “can be likened to the plague” (Caldwell 1997: 169). The disease takes the most productive members of society causing families to lose income, decrease agricultural output, suffer greater malnutrition, increase funeral costs, and increase health care costs, just to name a few associated problems (UNDP, 2002). Nearly everyone who is infected is doomed to die more quickly than usual, but the latency period allows the disease to move undetected within populations, particularly considering that less than 5% of Africans know they are infected until late stages of the disease are reached (Caldwell 1997). About half of infected Americans don’t realize it as well, in spite of more extensive testing and disease surveillance (CDC 2003a). Given the nature of the disease it needs to be regarded not only as a pandemic but also as a development issue. Even if there were no new cases from now on, the repercussions of HIV will be felt economically in Africa for generations (Reid 1997a). In LDCs the crisis as a whole has roots in colonialism, exacerbated poverty due to Structural Adjustment Programs (SAPs), limited products on a world market, war, and heavy debt burdens (Schoepf 1995). Politics play into corruption and mismanagement of funds and in the US also limits what information is available to the public particularly regarding controversial prevention programs (KFF 2003a).

Not too long ago companies were discriminating against PWHAs openly and few had policies or educational materials, especially in developing countries (Baggaley, et al. 1995). As it became more and more clear that this disease is not limited to marginalized populations, businesses began paying more attention to the consequences of HIV in their workforces (Bassett, et al. 1996; Mbizvo 1996). Now the problem is well recognized and
steps are being made to mitigate the negative consequences of the disease in the business world.

The impact of HIV on business is classified into two broad areas: direct and indirect costs (see table 3). Another way to conceptualize this is as external and internal impacts (see figure 1). Both of these areas refer to structural, political, economic, cultural, and ecological issues outside and within companies or businesses. External impacts may be couched in terms of markets, resources available for production and investment and subsequent decreases in gross domestic products (GDP) of the countries in which businesses operate. Per capita growth in half of sub-Saharan African countries is dropping at about 1% every year due to HIV/AIDS (Brookings Institution 2001). Conservative estimates for GDP losses in Kenya for 2000-2020 range from 20 to 30% (Robalino 2002). However, if Africa could achieve a 1% increase in its share of world exports, then net annual financial inflow to the continent would be $70 billion or 7 times its current aid level. This will depend more on the private sector than on official development assistance (De Waal 2002).

| Table 3 |
| Costs of HIV/AIDS to business |

<table>
<thead>
<tr>
<th></th>
<th>Direct Costs</th>
<th>Indirect Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual costs from one employee with HIV/AIDS</td>
<td>• Medical care</td>
<td>• Reduced productivity due to absenteeism/sickness</td>
</tr>
<tr>
<td></td>
<td>• Benefit payments</td>
<td>• Supervisors’ time dealing with productivity losses</td>
</tr>
<tr>
<td></td>
<td>• Recruitment and training of replacements</td>
<td>• Turnover costs</td>
</tr>
<tr>
<td>Organizational costs from many employers with HIV/AIDS</td>
<td>• Insurance premiums</td>
<td>• Senior management time</td>
</tr>
<tr>
<td></td>
<td>• Accidents related to sickness or inexperience</td>
<td>• Production disruptions</td>
</tr>
<tr>
<td></td>
<td>• Costs of litigation</td>
<td>• Depressed morale and motivation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Loss of experienced workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strain on labor relations</td>
</tr>
</tbody>
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Source: ILO, 2004
Figure 1

Flow Chart-HIV/AIDS Economic Impacts on Business
(Compiled from various sources)
Education is affected and thus quality of future labor supplies is compromised by HIV/AIDS. Primary school attendance will decrease by 20% in Zambia and nearly 25% in Zimbabwe by 2010 and education sector growth will be less than half of what it should be without the disease (World Bank 2000). In Zambia teachers have been dying faster than they can be trained and replaced (IOE 2002). In 1998 the World Bank had already estimated that over 40% of education personnel in urban parts of the country would be dead because of HIV by 2005, and in Tanzania 100 primary school teachers die every month because of the disease. South Africa’s teacher-student ratio rose from 1:27 in 1990 to 1:34 in 2001 and Botswana’s teacher death rates increased from 0.7/1,000 in 1994 to 7.1/1,000 in 1999 (ILO 2004a).

While Africa as a continent is expected to maintain a positive growth rate during the AIDS pandemic, expected fertility reductions formerly attributed to condom and contraceptive use are now attributable to biological mechanisms which will bring about reductions in future youth populations (Caldwell 1997). AIDS is also expected to increase child mortality by 20%, overtaking malaria and measles as a prime killer of children under 5 (Hope 1999). Orphan populations are expected to skyrocket, with 15 million uninfected children losing their parents to AIDS already, and 40 million expected by 2010 (Foster 2000). In spite of notions that traditional extended families could handle this burden, studies have shown that breakdown of family structure is occurring due to AIDS care giving (Jacques 1999). The implications for numbers of street children are staggering, especially considering that the family network breaks down more quickly in urban areas as opposed to rural villages, and fostering by non-relatives is uncommon (Foster 2000). Child labor will be on the increase as well as survival crime and survival
sex among street kids. Foreign direct investment may be damaged as outside investors recognize these challenges.

In LDCs with low financial capital, the primary economic asset is human capital and the size and quality of labor forces is drastically affected by HIV/AIDS. A drop in life expectancy of up to 27% is expected in southern Africa and adult mortality rates have tripled over the last 15 years. The age group of most working populations places them at risk and consists of the most productive segment of society. Deaths occur mainly in the 20 to 39 age group, which represents 42 percent of the total workforce. Five countries in southern Africa will lose one-third of their labor force by 2020 (Aventin 1999).

Unskilled and skilled labor forces are both affected. In Zambia two-thirds of the deaths are among managers (d'Adesky 2003). One study of pregnant women in Rwanda found prevalence rates of 38% for women whose husbands worked for the government, 32% for those with white collar working husbands, 22% for army families, and 9% for farmers (Bloom 2001). This presents a distinct problem in places where HIV is conceptually linked with social status and race, molding false perceptions of who is and is not vulnerable. Sufferer stories, such as the one about Acéphie in Haiti who acquires the disease because she marries a soldier for survival purposes, conjure concepts of structural violence which are best understood in context (Farmer 2003). In many cases people have no choice about preventing transmission in their personal lives because of the way power in society is wielded or abused.

As families spend more time and money caring for AIDS patients in their final years, household savings diminish, livelihood strategies (formal and informal) are more elusive, income decreases, and so does consequent investment and expenditure. Other
family members may enter the labor force including children who are forced to leave school reducing human resources in the future and for the collective economy. The effects of HIV on a business are similar to those on a household (ILO 2004a).

The internal impacts and direct costs of HIV are evident through decreased productivity and increased costs to businesses. Declining productivity is financial suicide when production costs are not declining as well. Ill employees lead to greater absenteeism, the costs of which are visible through the use of temporary staff and impaired potential to meet production deadlines and market demand. Employees in certain situations and cultural contexts may be called on to care for sick family members and attend or sponsor funerals. Household income in Thailand and Cote d’Ivoire declines by 40-60% when any family member is infected (UNAIDS 1998), indicating that education for the families of workers is equally important as for workers themselves.

Most infections occur among people before they reach the age of 25 and many will suffer symptoms before 35 indicating that AIDS affects the most productive and economically active members of societies. It is through loss of this workforce population that the most detrimental social and economic effects of HIV are felt. While it has become a manageable disease in high-income countries the potential to provide care and prevention is difficult in LDCs where 95% of those infected dwell and the realities of health care have always been dismal (Hope 1999). Decreased life expectancies and a reversal of recent development gains are direct results of the epidemic, and the resurgence of opportunistic infections associated with HIV are significantly debilitating as well. Ignorance, stigma, and denial exacerbate transmission and discourage efforts to fight the disease.
Deaths within a company generate disorganization obvious in staff turnover, the loss of skills and institutional memory or experience, and decreasing morale. While turnover is easily quantifiable, economists and other analysts are less likely to emphasize the devastation of losing intellectual capital and the ability of a workforce to share and transfer skills among one another. Employee morale and motivation does not improve under these circumstances. Businesses must compensate by increasing recruiting and training efforts as well as stepping up pension and insurance plans affecting the overall level of benefits available to the workforce. In South Africa where worker deaths have increased threefold the total costs of employee benefits will rise from 7% to 19% by 2005 (UNAIDS 1998). The increased cost of funerals, a common benefit to workers in Africa, is particularly evident.

Some companies put dollar amounts on interventions in cost-benefit analyses. One study in South Africa found that workers with AIDS take over 27 more sick days than the average worker and each death from AIDS equals 4 days of a manager’s time. Life insurance payouts increased seven times and 60% of the deaths were due to AIDS in Zimbabwe in the early 1990’s (d'Adesky 2003). In Kenya AIDS was estimated as costing US $25 per employee per year and will increase to US $56 by 2005, however a prevention program costs a one-time fee of US $15 per employee. A small company in Thailand found that AIDS cost US $80,000 annually while a prevention program would cost US $11,500. One large company in Zambia reported AIDS related illness and death costing more than entire profits for the year (UNAIDS 2000).

Many have found that providing education and drugs can be expensive but pays off in the long run. DaimlerChrysler estimates that averting one new infection in the
employee population saves the equivalent cost of 3 to 4 annual salaries. AngloGold found that gold prices would be US $3 greater per ounce if nothing was done to combat HIV in that company and has since initiated an ARV program for all employees (d'Adesky 2003).

If an epidemic becomes devastating it is because either prevention techniques are difficult or because of complacency and inaction during the early stages. A study in India found that 75% of employees were unaware that condoms prevent sexually transmitted diseases (STDs) and only 5% used condoms properly (UNAIDS 1998). HIV is easily preventable and avoidable but is subject to cultural taboos because transmission routes tend to be primarily through sexual contact in sub-Saharan Africa. Because of this the issues and realities of HIV/AIDS are frequently difficult to discuss from a cultural standpoint.

Mobility and migrant work consistently increase vulnerability to HIV. Studies have consistently found that HIV infection is higher in migrants compared to non-migrants in South Africa (Evian 1995; Lurie, et al. 2003), that those who have recently changed residence are more likely than the general population to be HIV positive (Karim 1992), and that migration is an independent risk factor for HIV infection (Lurie 1997; Lurie, et al. 2003). Migratory work is often linked with increased sexual networking not only for men but for women as well (Chirwa 1997; Romero-Daza 1998a). Moreover, the legacy of apartheid in South Africa has left a culture of migration and severed familial ties (Chapman 1998). Stigma is now attached to migrant labor in the African public consciousness for example in Swaziland where authorities recently banned a same-sex
worker’s hostel in an up market suburb for fear it would attract prostitutes and exacerbate disease transmission (IRIN News 2005d).

One huge challenge for programs remains uptake of VCT programs among workforces. While the level of knowledge about the disease may be high, perceived personal risk is low. Health complications are motivating factors for individuals to get tested but fear and stigmatization of HIV is still very high (Day 2003). Fear of a positive result seems to be the major barrier for HIV testing (Ginwalla 2002). Testing for other STDs is important as well and may decrease HIV incidence even without behavior change (Machekano 1998). In addition, treating a core group of high risk individuals (such as commercial sex workers) reduces community prevalence of STDs and can subsequently reduce STDs and HIV among a workforce (Steen 2000). Demands of the workforce and economy require that impact assessments on HIV/AIDS continue to become more targeted (Forsythe 1998; Forsythe 1995). Universities can help with this effort (Crewe 2000), and the cooperation of traditional healers and community health workers is necessary as well (Green 1999).

HIV is significantly different from what most businesses are used to dealing with in terms of occupational exposure. Workers do not generally acquire HIV at work but some industries increase the vulnerability of the workforce. This is linked with increased exposure through sexual transmission. Industries most affected include mining, tourism, transport, security, agriculture, and construction (d'Adesky 2003). The difference between HIV and other types of occupational health hazards requires that HIV be handled less through engineering, administrative, or personal controls in the workplace. One study found that in South Africa occupational health services should be making
better contributions to AIDS control and prevention particularly by improving worker participation, empowering women, and focusing on a critical understanding of related behavioral issues (London 1998). While all of the typical workplace protections related to traditional health threats are necessary and helpful (especially for immuno-compromised individuals) a shift toward heavy medical surveillance and protection for the worker when he or she is not at work becomes necessary as well in the world of HIV/AIDS, highlighting the importance of community and public sector partnerships with the private sector.
Legislation-discrimination in the workplace

Workplace discrimination continues everywhere as is the case in El Salvador where recent legislation allows workplaces to screen out applicants with HIV. The measure comes under wider legislation which guarantees rights to those with HIV, but the reality could be much different if the policies are used to keep PWHAs out of the workforce (Elton 2002). Also, the issue of large companies disenfranchising lower tiers of the workforce must be rectified. At the start of its initiatives Coca-Cola defined its African workforce as upper management and designed programs for this segment of its workforce while leaving bottlers and suppliers without support (Melvin 2001).

The Americans with Disabilities Act (ADA) protects HIV positive Americans in the workplace from unfair discrimination, based on the three main pillars of the act: non-discrimination, reasonable accommodations, and confidentiality of medical information. One lawsuit awarded $360,000 to an HIV positive bartender in Atlanta who was fired because of his disease (AIDS Policy & Law 1997). Another case resulted from one business owner who switched insurance carriers and forced exclusion of a positive employee from coverage (AIDS Policy & Law 1996a). One fast food manager who was stripped of his managerial duties after disclosing his status received a settlement of US$5 million (Petesch 2003). Still another case, in times before the Health Insurance
Portability and Accountability Act (HIPAA) was implemented, found an employer guilty of demanding prescription drug records from employees in violation of the ADA (AIDS Policy & Law 1996b). However, ADA does not always apply when a PWHA is asymptomatic. PWHAs may still be fired for excessive tardiness or poor performance at work (AIDS Policy & Law 1995a). Two separate hair salons in Texas fired HIV positive employees after learning of their status but were forced to re-hire them and pay back wages and punitive damages (AIDS Policy & Law 1995b). Bragdon v. Abbott found that one person’s asymptomatic HIV is a disability under ADA because it limits the major life activity of reproduction. Blanks v. Southwestern Bell Corporation found an HIV positive man was not covered in similar circumstances because he and his wife had decided not to have any more children. The ADA does, however, permit action for disability-based harassment under in hostile environment, and in general most persons with HIV are likely protected under the act (Petesch 2003).

While far from being ignored in the United States the business community mostly pays lip service to workplace AIDS education (Marc 2004). Pseudoscience and myth still surround the HIV pandemic in social conscience (Makgoba 2002). Wrongful firing practices still occur consistently, such as when a grocery bagger at a small grocery store was fired “for his own good” (Petesch 2003). More recently this occurred with a Cirque-du-Soleil performer who was fired by Cirque, which openly admitted doing so due to his HIV status (Romney 2004a). They also stated that employment positions "which would be suited to an individual with HIV include dishwashers, dining room attendants, prep cooks, [and] box office staff.” An activist remarked that this case is extremely disturbing because a number of Americans are navigating the workplace with HIV and this case has
bearing beyond the individual’s situation. Protests have been carried out against Cirque and the San Francisco Human Rights Commission is heading up the complaint litigation (Romney 2004b).

Employers may defend a discrimination charge if they can prove a clear risk to others, through medically proven methods of transmission, because of a PWHA in the workplace. This is generally not easy to prove but certain jobs involving blood to blood contact may pose a risk. In one case a dental hygienist was a risk to patient safety due to the potential for sticks or cuts during treatment. In another a surgeon performing invasive surgery was proven to be a risk to patients as well. However, the Chattanooga Police Department was charged with discrimination against an HIV positive applicant, as was the Attorney General of the US, when a suspected HIV positive medical facility director was qualified to perform routine physical exams of FBI agents due to no risk of infecting others. In such cases a “reasonable probability of substantial harm” must be demonstrated supported by medical evidence. There may be some issues regarding the side effects of certain medications for PWHAs on the job in the future (Petesch 2003).

Three people applying for employment with American Airlines were rejected, after being conditionally approved for jobs pending background checks, blood tests, and medical exams. None revealed their HIV status voluntarily but were denied jobs based on blood tests. Protection under the ADA includes that medical exams be performed only after initial screenings and background checks, making the process transparent and making it obvious that these three people were denied the final job offer based on their HIV status (Azulay 2005). The case is currently in litigation. Obviously the concept of
HIV/AIDS as a disease like any other has still not completely replaced ignorance, or outdated attitudes of discrimination and uncaring.

Under the ADA employee or customer fears are not a defense for discrimination. Employee PWHAs are also entitled to “reasonable accommodations” and employers refusing to attempt reasonable accommodations will subject themselves to litigation. This entire concept is flexible and in the case of HIV/AIDS displays a couple of interesting characteristics. First, due to the hidden nature of the disease, employees may have to bring the disability to the notice of superiors supported by medical evidence of a disability. Second, the progressive nature of HIV requires constant dialogue and evaluation regarding what accommodations are necessary and reasonable. This may include reassignment, providing special equipment, adjusting work schedules, and being flexible about leaves of absence (Petesch 2003). While the National Labor Relations Act (NLRA) gives a group of workers the right to engage in “concerted” action for mutual protection, the refusal to work must be grounded in objectively reasonable terms regarding dangers to health and safety (Petesch 2003). There are no mentioned examples of this occurring in the literature related to HIV/AIDS in the workplace.

In South Africa, PWHAs are covered under legislation very similar to the ADA but which is more sensitive to their needs specifically. The Employment Equity Act (EEA) of 1998 prohibits discrimination by employers for many reasons including HIV/AIDS status. The Act’s provisions are interpreted by South Africa’s Labour Court, are designed in part to protect women, and also cover issues related to sexual harassment, affirmative action, pay scale differentials, and training offered to employees. The Code of Good Practices on key aspects of HIV/AIDS was added to the EEA on December 1,
2000 but does not impose any specific legal obligations. Instead it addresses broader goals including “eliminating unfair discrimination in the workplace based on HIV status, promoting a non-discriminatory workplace in which people living with HIV or AIDS are able to be open about their HIV status without fear of stigma or rejection, promoting appropriate and effective ways of managing HIV in the workplace, creating a balance between the rights and responsibilities of all parties, and giving effect to the regional obligations of the Republic as a member of the Southern African Development Community (SADC)” (ILO 2004b). The Code also recognizes women as more vulnerable to infection due to culture and material economic situations.

Core principles of the Code include: “to promote equality and non-discrimination between individuals with HIV infection and those without, and between HIV/AIDS and other comparable health/medical conditions; to create a supportive environment so that HIV infected employees are able to continue working under normal conditions in their current employment for as long as they are medically fit to do so; to protect the human rights and dignity of people living with HIV/AIDS as that is essential to the prevention and control of HIV/AIDS; to ensure the fact that HIV/AIDS impacts disproportionately on women is taken into account in the development of workplace policies and programmes; and to ensure that consultation, inclusivity and encouragement of full participation of all stakeholders remain the key principles which should underpin every HIV/AIDS policy and programme” (ILO 2004b). The Code has major policy implications related to the Constitution of South Africa of 1996, the Labour Relations Act of 1995, the Occupational Health and Safety Act of 1993, the Mine Health and Safety Act of 1996, the Compensation for Occupational Injuries and Diseases Act of 1993, the

The AIDS Law Project (ALP), at Wits University Centre for Applied Legal Studies in Johannesburg, is an organization that helps people with HIV/AIDS to deal with their problems. They research the social, legal, and human rights implications of AIDS in order to develop law, policies and recommendations on questions related to HIV/AIDS and employment. They have a legal department which provides advice and resource links, three qualified attorneys capable of initiating legal action, and are one of the few organizations in Africa working primarily to promote equal rights for PWHAs. The ALP is also in partnership with the Canadian HIV/AIDS Legal Network, working together to promote a better understanding of the legal and human rights issues related to the global impact of HIV/AIDS, and are joining together for events and activities including creating conferences and undertaking research (ALP 2005).

A brief search for organizations similar to the ALP in the US returned few results. Much information touching on US legislation and human rights is found on the Canadian HIV/AIDS Legal Network website (www.aidslaw.ca) which underscores the complex relationship between federal and state governments. Areas in the US with higher concentrations of PWHAs have more extensive local resources such as San Francisco’s AIDS Law Referral Panel (ALRP). The US legal system has been called on to address social disputes on a regular basis and at least since the early 1990s, as a litigation survey from the years 1991 to 1997 shows over 550 cases appearing in the federal and state
courts, which is an underestimate (Gostin 1997). Therefore, the lack of something similar to South Africa’s ALP here in the US may represent disinterest, lack of profitability for lawyers, or the fact that the largest segment of infected individuals traditionally in the US (i.e., MSMs) have generally been able to fend for themselves in the legal arena. Increasing prevalence rates in minority populations suggest that an ALP-like project(s) may be very necessary here for infected and affected US citizens in the near future.
The business response to AIDS

In the US and in South Africa the business response to AIDS has been too slow and lacking in focus (Dickinson 2004; Studdert 2002). Many programs have been ineffective, politically motivated, reactive and poorly designed, and limited to low cost programs (Versteeg 2004). Multinational companies are adept at maximizing efficiency and minimizing losses, monitoring production, developing advertising, and assuring that bottom line profits can be reinvested in order to grow as a business. In highly affected areas a response to HIV should be equally well organized and include an HIV/AIDS policy and strategy, a preparedness and contingency plan, monitoring and reporting, internal epidemiological indicators such as morbidity and prevalence rates, company specific costs and losses due to HIV as well as future projections, a specific HIV/AIDS budget, VCT and counseling/support programs, education and awareness programs, condom and femidom distribution, healthcare provisions, and benefits for dying employees or family members (Fourie 2004). Reports should be prepared yearly for release and review in public forums.

The Global Health Initiative (GHI) run by the World Economic Forum (WEF) recently published “Business and HIV/AIDS: Commitment and Action?” (GHI 2005a) which presents the findings of a global business survey conducted among about 9,000
business executives in 104 countries. Because the report is based on the opinions of corporate elites I will leave it up to the reader to judge the validity of the responses but would like to highlight the fact that these are decision makers in companies capable of making significant changes. The survey included similar questions about malaria and tuberculosis, which interact significantly with HIV/AIDS and are part of the syndemic in developing nations especially. Again, the RSA and the US statistics are of primary interest in this document. Globally, however, about 30% of respondents to the survey indicated some current impact in their business from HIV/AIDS and 37% expect impacts in the future. About 67% of the respondents said that impacts on their businesses are minimal but only 55% thought the same about the communities in which their businesses are located, suggesting that some businesses feel they are shielded from the worst impacts of the virus. In addition 45% reported that workforce prevalence rates are lower than community rates in spite of a lack of clear evidence in most cases.

Many more South African business leaders expect current serious impacts than in the US. The survey shows that 41% of RSA businesses expect serious impacts, 88% expect some impacts, and 8% expect no impact. With corresponding numbers in the US at 6%, 39% and 61% respectively it is no surprise that there are fewer workplace programs in that country (see appendix I-G). When questioned about the future impact of the disease on their businesses responses in the US remained the same, however responses from RSA indicate that 51% of the companies surveyed expect a serious impact in the future (see appendix I-H).

In general it can be assumed that most companies have not evaluated how HIV will impact their business and do not distinguish the effect of HIV on aspects of
operations or finance, although awareness is immensely greater in high-prevalence countries. Decisions are being made regarding whether and how to respond to AIDS without information on how it affects businesses. Globally, 71% of companies have no specific written policy to deal with HIV/AIDS. Companies in the health and social sectors are more likely to have written policies as well as the mining, hotel and restaurant, fishing, manufacturing, and transport industries. Industries more often lacking policies include agriculture, construction, real estate, and retail. In the US surveyed companies lacking written policies stand at 45% compared to 7% in the RSA. South African companies surveyed were more likely to have a written HIV specific policy (77%) than US companies (15%) (see appendix I-I). However, North American and sub-Saharan African companies have the most comprehensive policies when compared to other regions of the world. In addition, companies that had carried out formal risk or prevalence assessments were more likely to have a written policy (GHI 2005a).

In low income countries programs are focused on prevention. In countries with greater than a 20% prevalence rate 82% of the companies provide information about HIV/AIDS, 69% provide condoms, and 57% VCT services. In terms of treatment, however, the picture is quite different. Only 17% of companies surveyed in low income settings provide ARVs versus 30% in MDCs. Many businesses in Africa provide treatment primarily through the care of sexually transmitted infections (STIs) (40%) and opportunistic infections (OIs) (32%) while only 24% provide ARVs and 11% home based care (HBC). African companies are also 48% more likely to report serious negative effects on their HIV/AIDS programs due to stigma and discrimination, which is nearly double the global survey average (GHI 2005a).
Various industries and enterprises are affected differently by HIV but one universal issue is skilled worker loss, which represents the main problem for companies particularly when such workers have job or location specific competencies that are difficult to replace. Certain industries increase vulnerability to the disease particularly when it involves migratory/mobile work or activities that separate families (ILO 2004a). For example, about 56% of the truck drivers in the RSA’s Kwa-Zulu Natal province are HIV positive (News24 2005). Contract workers are more vulnerable as well as the mining and metal processing industries in African nations (Evian, et al. 2004). In the US workers in the travel and tourism industry are more vulnerable to infection. While concern over HIV/AIDS, as well as perceptions of its impact, varies little between industries, many large sector high risk industries such as mining and transportation perceive no greater threat than industries that do not as greatly exacerbate the risk of infection for employees (GHI 2005a).

According to the GHI, more companies are responding to the epidemic in 2004-2005 than in 2003-2004 and also reporting higher workplace prevalence rates. Confidence in high prevalence countries is increasing and more aspects of disease prevention and treatment are being covered in the business world than in previous years. A lot remains to be done, however, particularly in the area of public-private partnerships. Globally, 72% of business prevention programs do not provide condoms, over half provide no information about HIV/AIDS, and even in heavily affected areas many companies have failed to act on their concerns about the virus. There seems to be an information gap in spite of the plethora of online tools and technical assistance, and the GHI suggests that governments and international donors should fill this gap even to the
point of helping with the costs of programs. The GHI report advocates raising company awareness of the impacts of HIV/AIDS as one important path to stimulating more and sustaining current responses. Effective monitoring systems must be developed for this purpose (GHI 2005a).

Size, industry type, and available resources help determine which responses are effective, relevant, and appropriate. In many cases, businesses develop responses centered on advocacy or philanthropy rather than a specific workplace, which is more common in the US. Due to the fact that some representative South African business programs are described in detail in the primary data collection sections of this thesis, I have included some examples of HIV/AIDS programs in US-based companies here to highlight some of the public and private sector partnerships and the diversity in approaches.

The Bill and Melinda Gates Foundation, which serves as a philanthropic arm of Microsoft, Inc. founder Bill Gates has donated since its inception in 1994 more than 3.6 billion to organizations in global health grants alone. HIV/AIDS priorities include improving voluntary counseling and testing programs as well as STI treatment, funding for research to reduce transmission such as vaccines and microbicides, as well as expanding access to treatment and prevention education. This includes $50 million to support an HIV prevention and treatment program in Botswana known as the African Comprehensive HIV/AIDS Partnership (ACHAP). The Gates Foundation provided enough ARVs to treat the entire population of Botswana but many of the medications expired because of stigma and lack of access to testing sites. Avahan, a $200 million initiative, is a project intended to expand access to HIV prevention programs for high-risk
populations and to combat stigma in India. The foundation also donated $100 million to the Global Fund to Fight AIDS, Tuberculosis and Malaria at the country level. To accelerate the global effort to create and distribute an HIV vaccine the International AIDS Vaccine Initiative was given $126 million. Another $60 million was awarded to the International Partnership for Microbicides to help develop that prevention method (Gates Foundation 2005).

Black Entertainment Television’s (BET) ‘Rap-It-Up’ campaign is now in it’s 7th season. Launched in 1998 in partnership with Kaiser Family Foundation (KFF), the campaign claims to be the nation’s largest public education campaign focusing on the African-American community in the U.S. The television station’s efforts include programming related to sexual issues and HIV, a road tour that conducts on site testing and sponsors concerts featuring popular hip-hop artists, a comprehensive web site with public service announcements (PSA’s) and other multimedia and news resources, a toll free hotline that has handled over 900,000 calls, printed materials about HIV and sexual issues, teen forums featuring students and AIDS activists, and a comprehensive curriculum for high school teachers to inform their students about the disease (BET 2005).

Music Television’s (MTV) campaign, “Fight for Your Rights: Protect Yourself” is intended to empower and inform youth on issues of sexual health. Like BET’s initiative this is in partnership with Kaiser Family Foundation, and the campaign helps provide recent information on HIV and other sexually transmitted diseases, as well as unintended pregnancy to its target youth audience. It includes special programming, PSAs, a website with comprehensive information and links (including VCT sites), and a
resource and referral service. Partners include the CDC and Advocates for Youth (MTV 2005). MTV supports a similar campaign through their international affiliates that includes regional specific hotlines, websites, and PSAs in 164 countries. This campaign is known as “Staying Alive” (KFF 2005b).

Since 2001 the National Basketball Association (NBA) has been conducting annual “Basketball without Borders” camps all over the world. The program is a summer camp format for youth which promotes goodwill and friendship through the sport of basketball, bringing NBA players from different teams to act as coaches. In the former Soviet Bloc European players also attempt to smooth over ethnic barriers, while in South Africa African players have coached camps with kids from all over the continent. Sponsored by Algida, American Airlines, Champion, Gatorade, Nike, Spalding and United Colors of Benetton the program also partnered with UNICEF in 2004 to include HIV/AIDS prevention education. The Fédération Internationale de Basketball (FIBA) is responsible for the selection of kids which hinges on basketball ability and dedication. UNICEF conducted seminars with the kids in Brazil, Italy, and Johannesburg, South Africa which focused on HIV and drug abuse, living with the disease, and prevention. The NBA and FIBA donated items like basketballs, nets, books, and computers to local basketball federations and have refurbished recreation facilities as well (NBA 2004).

Home Depot, which has a workforce of over 250,000 employees, began HIV/AIDS initiatives in 1991 by hosting quarterly health promotion talks on HIV, partnering with Red Cross to provide education to managers and employees at each Home Depot site across the country. By 1999, the program had conducted more than 60 education sessions for about 1008 managers at a cost of $19 per employee. The program
focuses on raising awareness, supporting PWHA’s, and alleviating the impact of the virus. The partnership with Red Cross facilitates access to their existing 26,000 trained HIV/AIDS instructors across the US (GBC 2005b).

The Red Cross Workplace Program is a modular format which makes it flexible to the needs of a variety of workplaces. The program includes facts about transmission and prevention, employee and employer rights and responsibilities such as legislation and medical concerns, and decreases stigma by explaining why employees can work safely with PWHAs. The Red Cross program claims to “promote a compassionate environment for workers living with HIV, or those whose family members, friends, or partners may be HIV-positive.” It also helps those who are interested to identify local resources and services related to the disease (Red Cross 2005).

PepsiCo, makers of Pepsi-Cola as well as Gatorade, Tropicana, Frito-Lay, and Quaker products, supports employee PWHAs with access to a medical plan with no pre-existing condition clause, prescription drug coverage for ARVs, help with clinical trial enrollment, and comprehensive case management for affected employees. They also provide services for seriously ill employees such as end-of-life provisions regarding wills and post-death benefits. There is, however, no mention of prevention or education initiatives (PepsiCo 2005).

In 2001 and 2002 at least eight US corporations were important HIV/AIDS grant makers giving more than US$600,000 in HIV/AIDS related grants both years, and 15 others made grants of more than US$100,000. In kind donations were also common including information technology application and resources in communications or marketing. Partly because philanthropic efforts are tied to a company’s profit margins
stigma continues to be a serious barrier to workplace programs and PWHAs in the US. Some groups commonly stigmatized as HIV positive include racial minorities, MSMs, IDUs and other substance abusers, women with multiple sexual partners, sexually active young people, and former prisoners. In the workplace some of these groups are obvious and some are not. Stigma can directly lead to firing or rejection in the workplace and discriminatory workplace environments. PWHAs are often concerned about being seen as receiving special treatment due to their disability and people who have been affected by the virus may not want to discuss, for example, how their son, daughter, or father died from the disease. For a business to not have a policy on HIV/AIDS discrimination prohibition, to not address HIV/AIDS in wellness and benefits programs, and to not encourage employees to learn their status implies that silence about the disease is acceptable in the workplace. Someone with HIV may fear losing their job or being treated unfairly by an employer because of this lack of focus, and the workplace without
HIV/AIDS initiatives may be rejecting qualified individuals based on an issue that is as pervasive as the rejection of someone based on color, gender, sexual orientation, religion, or age. Businesses may not be responsible for the beliefs of their employees but they can foster fair work environments. In most cases the prejudices held by employers and employees can be overcome by training, clear and obvious policies that support tolerance for PWHAs and intolerance for discrimination, and enhancements such as awareness posters, VCT, AIDS charities, and widespread prevention information (Milan 2004).

The business world felt the impacts of HIV in the US particularly in the 1990’s through discrimination issues, rising health care costs, as well as increased life insurance and disability costs. Many people in the work force died because of AIDS (see table 6) and many left the workplace altogether, walking away from potential benefits because they did not understand how they worked or failed to apply for them because of stigma. A supportive work environment for PWHAs includes an appropriate benefits package which can help a business see reduced turnover, lower health plan costs and premiums, and increased respect from employees (Franzoi 2005).

Some ways that employers can provide appropriate benefits at reasonable costs include health savings accounts, which are designed to accumulate non-taxable savings for health care services and can be effective when paired with a high-deductible health care plan. Businesses also can establish partnerships with a disease management firm able to offer PWHAs clear explanations of their rights and provisions while helping them navigate through the complex medical environment of being positive. Short term disability benefits are important as well for salary continuation and extended life or health insurance. Even if a business cannot help provide short term benefits the Social
Security Administration may find the individual eligible for Consolidated Omnibus Budget Reconciliation Act (COBRA) benefits which can help to bridge the gap before Medicare programs kick in. Life insurance is important as well and many PWHAs cash out these settlements at a loss. Companies can offer accelerated death benefits, such as a living benefit option, under group life insurance at no extra premium costs but which allow a portion of life insurance to be given out to a beneficiary when an employee is expected to die in less than 12 months. Employers can also provide continuation of life insurance coverage after a PWHA ceases to work allowing the employee to convert to an individual policy without providing evidence of good health. Long term disability plans are also available in case of total disability and allow an employer to combine successive periods of disability common in PWHAs into one period, which keeps an employee from losing benefits. Certain plans also allow employers to safeguard employees’ benefits so they are not reduced until work salary reaches the typical level. Long term care, also known as HBC, can also be offered by employers which allows a positive person to secure future help in daily living activities and maintenance for chronically ill persons. Employee assistance plans (EAPs) offer PWHAs and their household members the option to obtain assistance for personal problems such as confidential counseling, family problems, stress, and chemical dependency. Whether it is a dependent or employee who needs this assistance EAPs, particularly when combined with disease management programs, help an employee stay focused at work. Pension plans, while providing more obvious benefits for married couples, provide monetary compensation for spouses when they die at work or in retirement. However, a lump sum benefit for single employees (such as higher death benefits) or a plan which allows an employee to designate a
beneficiary under a contingent annuitant benefit can be developed in lieu of access to pension (Franzoi 2005).
Workplace intervention evaluation

Evaluating responses requires data and other relevant information. In spite of legislation and codes designed to foster corporate responsibility in the US (NYSE 2002; OECD 2004; US Congress 2002) and in South Africa (ILO 2004b; King Committee 2002) companies have options when it comes to how much information they choose to share with researchers. The source of the request can make a difference as well as whether or not the requesting individual or organization invokes laws or codes in order to facilitate the process. Uniform reporting guidelines are necessary but cannot always be enforced and laws designed to promote corporate governance vary in context and interpretation (Sorenson 2004), and AIDS service providers in South Africa are playing a key role in legislative interpretation even for some businesses (Vass 2004). Again, more evaluation literature comes out of South Africa rather than the US, and US based interventions do not possess the same characteristics as South African interventions such as repeated KAP or prevalence assessments, peer education, and VCT services for example.

Many companies feel under pressure to act and in South Africa this has resulted in a competitive environment, one in which quality is being sacrificed for quantity with businesses “jostling for awards and so forth” (Vass 2004: 10). This should not be viewed
as a principle motivator and the presence of a sympathetic key individual with some authority in the company greatly facilitates an effective response, as well as pressure from employees themselves and the visible effects of AIDS in the workforce. Many companies are under pressure to be seen doing something. Having a policy, even a plagiarized version taken from another company, is seen to be sufficient. Often companies fail to move into the implementation phase after developing a policy and if they do often only satisfy minimum legal requirements in order to avoid sanctions. There are often notable failures to follow up initial peer educator trainings, and codes or guidelines are not well understood and consequently not used as effective leverage to build and sustain a successful response (Vass 2004).

In regard to M&E activities specifically, a general lack of standard effectiveness criteria relating to program components like peer education and awareness raising exists. Peer education, while recognized as an effective tool, is “being hamstrung due to a lack of operational support at shopfloor level” (Vass 2004: 11). VCT services are sometimes used to screen out HIV negative employees from prevention and awareness activities presumably to save money and the efficacy of counseling and confidentiality maintenance have been called into question. In short, the “high level of self-regulation in the workplace HIV/AIDS management context” (Vass 2004: 12) with no noticeable intervention from Departments of Health or other formal structures calls into question the validity of any M&E data whatsoever.

The abundance of literature on the economic impacts of HIV on business has spurned action globally, however, the results of such action are not well studied and are difficult to assess (Wilson, et al. 1996). Moreover, many businesses may not conduct
program evaluations at all and/or may decide not to report their results. As close back as 2003 little literature existed on workplace programs but this is changing quickly. Several publications and advances have occurred in the area of monitoring and evaluation (M&E) of HIV/AIDS programs in recent years.

The Global Health Initiative has done several case studies in cooperation with specific businesses. Responses are varied and difficult to compare due in part to regional and industrial differences. However, explanations are bulleted and easy to skim and information regarding numbers of employees and varieties of insurance/medical schemes is available as well as businesses’ motivations for initial and continued action. Also, one may get an idea of exactly what companies are doing such as how HIV affects particular industries in different ways. Prevalence surveys, results from knowledge, attitudes, and practices (KAP) surveys, economic impact assessments, money spent on prevention and medical efforts, key successes, self-evaluations, and future goals of the companies are examples of other reported information about company specific programs. This is the most comprehensive and consistently structured resource available to discern impacts of workplace programs, and includes ‘best practices’ sections specific to Africa and Asia (GHI 2005b).

Case studies are written by Peter DeYoung in collaboration with the company, thus, the studies can not be judged as unbiased. A causal link between specific programs and selected company indicators cannot be established but these case studies are the basis for appendix I and the statistical analysis contained in the results section of this document. Notably, none of the case studies is on a business in the US but many of the
businesses are US based, further indicating the lack of response or interest in that country’s workplaces and more of an interest in the disease’s impacts abroad.

The Global Reporting Initiative (GRI), based in South Africa but operating globally, represents one attempt at establishing a unified and universal reporting framework for businesses. Guidelines have been developed, and are currently in their 3rd phase of revision, which address the lack of consistency in case studies about corporate or business responses to HIV. This initiative acknowledges that labor unions, society in general, governments, and investors are looking more toward how and if businesses are attempting to turn the tide of the disease and looking to make corporations accountable for turning awareness into action. Guidelines are component based and participation is completely voluntary. GRI was started in 1997, became independent in 2002, and collaborates with the United Nations Environment Program (UNEP) as an official center as well as with the UN’s Global Compact (GRI 2005).

The GRI accepts “sustainability reports” from companies and provides information necessary for businesses to determine their own reporting indicators within the guideline framework. Companies that have used the guidelines include the Ford Foundation, General Motors, Deutsche Bank, Heineken International, Shell, Starbucks, McDonald’s, Anglo-American, Microsoft, Bayer, and Nike (GRI 2005). Much like the GHI reports these are approved by the company and therefore contain biases related to information which may harm aspects of company operations.

The International Labor Organization is a UN agency that seeks the “promotion of social justice and internationally recognized human and labor rights” (ILO 2005). Founded in 1919, the ILO is the only surviving creation of the Treaty of Versailles and
became the first specialized agency of the UN in 1946. The organization forms standards for international labor through conventions, recommendations, and setting minimum rights standards. It also provides technical assistance in the fields of “vocational training and vocational rehabilitation, employment policy, labor administration, labor law and industrial relations, working conditions, management development, cooperatives, social security, labor statistics, and occupational safety and health” (ILO 2005). The International Labor Organization provides case studies and exercises for program coordinators to use and adapt to their own needs and has provided the most comprehensive account of HIV workplace epidemiology to date (ILO 2002; ILO 2004a).

Family Health International (FHI) published an action guide for managers which focuses on policy development, prevention and care programs, managing impacts on companies, and company leadership (Rau 2002). In addition the organization has published a training resource designed to build skills for conducting monitoring and evaluation activities including data collection and analysis and developing an M&E work plan. Additional modules exist for different contexts including HBC, VCT, orphan programs, and clinical care. Based on adult learning theory the module combines lectures, discussions, group work, and role-plays (FHI 2005)

The Global Business Coalition on HIV/AIDS (GBC) was established in 1997 to increase the numbers of businesses that fight AIDS, profile their responses and advocate for changes, fundraise for HIV/AIDS programs around the world, and to increase the quality of business sector programs in the workplace and in the wider community. Funding came from Bill Gates, George Soros, and Ted Turner to help start this organization, and additional funding and technical help has been provided by other
corporate executives and companies. The GBC provides technical advice and advocacy support for business organizations and helps to develop formal partnerships. The GBC acts as a liaison between governments, businesses, the UN, the media, and civil society organizations (GBC 2005a).

There are now 180 corporate members of the GBC. This is up from less than 20 in 2001. The board of directors includes representatives from Virgin Group Companies, Standard Chartered Bank, Viropharma, Estée Lauder, Edelman, GlaxoSmithKline, Merck Inc., Coca-Cola, Haco Industries, Getty Images, AREVA, Care Capital, Home Box Office (HBO), MTV Networks, Heineken Breweries, DaimlerChrysler, and the NBA to name a few. African employers are heavily represented, particularly the mining industry, and ties have been formed with the Asian and Thai Business Coalitions on HIV/AIDS (d'Adesky 2003). The GBC is an advocacy group and urges employers not to pre-screen candidates for jobs and not to discriminate against HIV positive employees. A five-step action plan calls for a risk assessment, the development of a non-discriminatory policy, prevention and awareness programs, a VCT program, and care and treatment for positive employees. While the GBC had accomplished almost nothing prior to 2001, it has had recent success recruiting multinationals to its cause, however, its true effectiveness is still somewhat questionable (Schoofs 2001).

The tools and materials necessary for businesses to take action are at this point well developed and available. The Centers for Disease Control and Prevention (CDC) pioneered the Business and Labor Responds to AIDS (BRTA/LRTA) Programs that include “five pillars” for businesses and employees to consider: policy development, training for managers and labor leaders, employee education, education for employees’
families, and community service and philanthropy (CDC 1993; CDC 2005a). ‘Global strategies for global companies’ has been added recently as a concern which includes a few case studies and a section on global policy and law (CDC 2005b). BRTA/LRTA interests are represented as workplace interventions or private-public partnerships within the CDC’s international global AIDS program, which utilizes a variety of strategies to combat HIV (CDC 2003c). Dating back to 1991, the BRTA/LRTA program hasn’t been as successful as originally intended, however, the systems it seeks to put in place in the form of private-public partnerships is still very valid (CDC 1993; Williams, et al. 1991).

Companies and businesses all over the world have developed booklets, manuals, and tools specific to their own workplaces and intended for their own workforces and their family members. Nearly every multinational business operating in highly affected areas have such materials and many go further in developing posters, screen savers, other photographic resources, as well as clothing and other ‘a-wear-ables.’
Medical anthropology; relevant theories and perspectives

HIV/AIDS, like all illnesses, should be viewed in social as well as medical terms. The poor are disproportionately affected by HIV in every region, and in sub-Saharan Africa the effects are near catastrophic. Prevention remains extremely relevant and important since the majority of people in the world have not been infected. Education is necessary and anthropological research can help to insure that education is conducted in culturally sensitive ways and that prevention methods are possible given the social and economic constraints on individuals. The importance of local context is a key to successful HIV/AIDS programs. An African solution must be widely implemented on that continent in order to see change and anthropologists have the training to help facilitate this process.

In many ways AIDS is a fragile disease. It is unable to reproduce outside of its host and even laboratory-high concentrations of the virus lose 90-99 percent of pathogenicity in only a few hours (CDC 2003b). It is impossible to contract HIV through casual daily contact, virtually impossible through kissing, and rather difficult to do so through oral sex. AIDS is even so fragile that if caught within 72 hours of invading the human body a post-exposure prophylaxis could prevent permanent infection (CDC 2003a). Workplaces practicing universal precautions regarding blood and bio-hazardous
waste have little concern over the virus being transmitted in the workplace itself (with the exception of certain industries like health care). Therefore many businesses, including billion dollar corporations, see no reason to be concerned.

Coca-Cola, an Atlanta based company that has enjoyed years of cheap labor and high profits in Africa, issued a policy in June 2001 which provided treatment for upper tier staff (about 1,200 people) but left 100,000 bottlers and distributors with nothing. The situation received considerable attention from activists and Coca-Cola has since formed a partnership with its bottlers costing the company about US$11 million per year. The plan requires Coke to pay 50% of related costs, bottlers to pay 40%, and employees to pay 10% of their ARV costs. It is unclear how far the plan has rolled out following an announcement on March 31, 2003 by the company stating that 100% of its bottlers and employees (including dependents) are now able to access ARVs in 54 of 56 African countries. Getting Coca-Cola involved in public sector treatment should now be a focus given that one finds the product in even some of the most remote parts of Africa, including crisis areas (Coca-Cola Africa Foundation 2003; Lynch 2002).

Similar examples of activism playing a positive role occurred when African mining giants Anglo-American, Anglo-Gold, and De Beers agreed to provide treatment for their workers, but there are still many corporations not doing their part to fight the disease. McDonald’s, the transnational fast food chain, has a significant market in the US and the RSA. The company refuses to provide transportation to late shift workers in South Africa and employees are ambushed regularly. One woman was raped after her late shift and subsequently contracted HIV/AIDS. Refusing to provide her with ARVs
the region’s human resources director stated “we can’t just give money to everyone who asks for it” and the company instead offered her a short-term loan (IRIN News 2001).

Nike continues to differentiate between its Thai “workforce” (230 direct hires with access to benefits) from “workers” in factories (who number about 50,000 and receive no benefits) (GHI 2003d). The company is thus able to claim that it provides education and treatment for its workforce, when in reality it pays a number of individuals a pittance without providing healthcare or AIDS education. In the same way Coca-Cola defined their workforce to protect the elites, companies all over the world continue to differentiate between skilled staff and expendable unskilled workers, who get paid next to nothing and receive no benefits packages. Contractors, who consistently show higher infection rates (Versteeg 2004) are also often left out of treatment access. Nestle, in Brazil, has 15,000 direct hires with access to benefits and 220,000 workers without (GHI 2003c). Timberland in China has about 5,400 direct hires worldwide and 33,000 factory workers in China alone. While 45% of them have received workplace prevention education, Timberland has no HIV/AIDS policy and refuses to share its HIV/AIDS budget figures publicly (GHI 2003e). Modicare in India defines its staff as 250 people, yet employs 950,000 “consultants” (GHI 2003b)

The businesses and workplaces mentioned above are not high risk industries where occupational exposure to HIV is common, but the situations in which some industries and businesses place their workers can exacerbate spread of the disease. Coca-Cola truck drivers travel large distances spending long periods of time away from regular sexual partners. Timberland and Nike factory workers tend to be women who have migrated to earn work. Working the late shift at McDonald’s in South Africa can even be
a risk factor for HIV. In this world of risk groups and labeling, is it fair to define specific workforces as HIV/AIDS risk groups?

In general, researchers have mislabeled risk groups since the start of the syndemic. For example, CDC categories included ‘sex partners of injecting drug users.’ As Kane (1991) points out this is not a valid social identity or natural category. Sex partners of drug users may not even know that their partner uses drugs (Kane 1991). Herdt (1990) notes that “though the notion of sexual partner may seem obvious, it varies across cultures and is probably the source of significant error in research design. Whether a partnership is sexual and/or social, culturally approved or disapproved, voluntary or coercive, is of real import” (Herdt 1990). Using words such as prostitute or commercial sex worker can introduce bias into a study as well because in spite of financial or material transactions women who are involved often conceptualize the exchange differently, seeing the man as a customer or even a boyfriend (Baer, et al. 2003). If a commercial sex worker actually works in a brothel or established facility specifically for prostitution she/he may be more likely to define themselves as such.

In that sense the workplace provides social identity. Anyone participating in wage earning activities in the formal sector will in most circumstances claim his/her workplace as a defining part of him/herself. The workplace can be viewed as a geographical unit and analyzed on a group level like a school, prison, or hospital. It can also be conceptualized as a social and political unit with a government-like structure complete with hierarchy and class-based divisions. When workplaces initiate HIV/AIDS programs they transcend blame-assigning risk group categories, allowing diverse groups of people to learn together, and lend legitimacy in the eyes of employees to the full
weight of the syndemic as a discrimination and human rights issue as well as a medical one.
Critical Medical Anthropology, political economy, and participatory action research

Frederick Engels’ study *The Condition of the Working Class in England* examined the oppressive hierarchy of factory conditions in that country as far back as 1840 including accounts of poor health among workers such as TB, STDs, and alcohol addiction. He relates specific health problems with factory conditions and the class structured, oppressive society. Merrill Singer notes how this study had an effect on Rudolph Virchow, a pathologist who developed the cell theory in 1858, as he examined a typhus outbreak in Prussia. Virchow’s accounts indicate that hunger was the primary means through which typhus spread but he also spoke of local physicians’ failures to take care of poor people due to their love for money as well as linguistic differences with Polish speaking patients. Virchow and Engels are credited by Singer with setting the foundation for a political economy of health long before the recent struggle to relate macro-social conditions to diseases on a causal scale (Singer 1998). Just as the political economy of health model has ebbed and flowed through history, the idea of the workplace as an analyzable unit may or may not have been pioneered by Engels but is certainly nothing new.

Neither the discipline of epidemiology nor medical anthropology focuses enough research on the ways in which larger global, political, and social structures define
individual behaviors on the local level (Baer, et al. 2003; Doyal 1979; Farmer 1999).Among the biggest contributors to HIV/AIDS research, prevention, and treatment programs are the U.S. Agency for International Development (USAID), WHO, and the United Nations Development Program (UNDP) as well as UNAIDS. However, the type of assistance given is in general inconsistent with known health problems associated with the disease and does not take into account ever worsening health services, particularly in African countries. Poor governance in highly affected countries, lack of participation on the part of the poor, and a less than clear understanding of the details of a country’s specific crises all contribute to failed programs and wasted money. Most programs receiving international support are top-down technical measures not designed to facilitate community involvement (Schoepf 1991; Turshen 1997).

In Africa, such projects are integrated into family planning measures, promoting population control rather than treatment or prevention of HIV, in a region where birth is “part and parcel of sexual and social fulfillment” and “the pressure to prevent pregnancy is not strong” (Preston-Whyte 1995). Condom use has been the focus of prevention accompanied by a dialogue of ‘cultural barriers.’ Funding directed toward local approaches and responses to high rates of HIV may reveal more effective methods of prevention, but at this point the preoccupation with condoms has left little room for holism (LeClerc-Madlala 2002; Susser 2000). Vaccine trials tend to receive more funding than prevention efforts in Africa but these require high risk or infected cohorts (Schoepf 1991). Ethical dilemmas continue to arise in clinical trials in Africa, particularly regarding participants’ access to care if they become sick as well as quality control and informed consent cross-cultural understanding (IRIN News 2005b).
Considering that Africa’s infrastructure, physical and medical, is insufficiently developed enough to cope with proper delivery of and patient adherence to ARVs, vaccine intervention will not be Africa’s most important weapon against AIDS in the near future (see Ezzell 2000).

Another major concept researchers should convey about sub-Saharan Africa is that most women are dependent on men economically and multi-partner sex is normal in the region. Many men feel they cannot be satisfied by one woman and feel it is their right to have many partners. Many women exchange sex for food, clothing, gifts, or school grades as well as money in pre- and extra-marital relationships. Prostitution is also common in Africa in a variety of forms (LeClerc-Madlala 2002; Preston-Whyte 1995; Schoepf 1995) but those unfamiliar with local concepts of resource exchange may not fully understand the importance and function of economic relationships such as multiple sexual partners among the Basotho (Romero-Daza 1998a).

Men’s earning power, local ideology favoring men, and a large background of infected persons combine to make the sub-Saharan African environment particularly dangerous for women. Condom usage is rare in relationships in general and most women do not have the skill to protect themselves this way. Even so 60 to 80% of all infected women have only one sexual partner (Reid 1997b), and men’s sexual behavior needs to be addressed on an equal footing. Often, older men attempt sexual relations with younger girls because they are assumed to be HIV negative. In addition, due to the myth of a virgin rape cure many men believe that following through with this act will cure them of AIDS, consequently, almost one-third of South African teenage girls report being forced into sex (Tracey 2000). The situation is no less dire in the US, where survival sex and
sex for drugs contribute significantly to the syndemic (Singer 1994). Commercial sex workers in the States, for example, are consistently taken advantage of due to their low social status and struggle for survival on the streets. In many cases selling sex is not a personal choice but a forced one because of drug addiction and cycles of poverty (Romero-Daza 1998b).

An important component of HIV in general is the stigma attached to carriers of the disease. Particularly in areas where social belonging to a group or family is critical to one’s personhood, a “spoiled identity is greatly feared by all but the most heroic individuals” (Herdt 2001: 144). Given the now inherent Christianity brought to Africa by missionaries, being infected with HIV implies the stigmata of sin, especially for women. In the US this stigma has been targeted toward MSM populations. Many African prevention campaigns in the past focused on men avoiding prostitutes, another stigmatized group (Schoepf 1995). Having a condom ready for sex in many situations implies being promiscuous, or a lack of trust with a partner. Moreover, stigma has aroused very defensive reactions from officials and African intellectuals making it difficult to conduct qualitative research (Schoepf 2001). Stigma affects our ability to address prevention and treatment issues openly and limits the effectiveness of workplace programs.

Historically in Africa the major source of HIV transmission was considered to be through heterosexual sex and from mother to infant. This has been viewed as distinctly different from in the US where intravenous drug use and bisexual or homosexual acts have been considered the main transmission routes (Bond 1997a; Mufune 1999). Researchers of the disease realized early on in the emergence of HIV that this
epidemiology was different, but many had limited knowledge of the societies or cultures of foreign areas. Much like early discourse on tuberculosis and syphilis in Africa, the search was on to find out why it was different there as opposed to the west and the result was an essentially behavioral paradigm (Packard 1991). The prevailing notion was that Africans, with their “super-potent men and wild, lascivious women” (Schoepf 1995: 32) were over promiscuous, much like homosexuals and Haitians. Such stereotypes are misconstrued, place blame on the victims, and supply labels for risk groups with which people in danger may or may not identify. In depth studies of people grouped into epidemiological categories reveal significant diversity between and among groups. For example IDU comparisons in the US show regional differences including sociodemographic, drug use, and needle use pattern variability as well as relationship status, family involvement, homelessness, occupation and employment history, and education (Singer 1998).

Risk categories pertaining to this disease, in every society, limit the scope of viable research and subsequent policy by limiting the research questions that are originally asked. Research employing classical epidemiological methods to HIV places risk and individual behavior as the main determinant, giving little note to social context and cultural barriers or motivators (Schoepf 2001). Power structures may ban research that challenges authority or exposes vulnerabilities (Farmer 2003). Still, studies that are epidemiological in nature are the main source of authority on the transmission of HIV/AIDS. However, sexuality is a culturally constructed phenomenon and in the case of HIV, numbers of partners are less indicative of risk than the social context in which sex takes place. Many such studies rely on data that is self-reported and few give
information on how questions were formulated for questionnaires, who carried out the interviews, and under what conditions (Standing 1992).

Schoepf argues that from the beginning of the HIV/AIDS pandemic the social sciences were marginalized, that governmentally employed epidemiologists labeled entire populations as risk groups, and that such methods and approaches “are part of a ‘hegemonic process’ that helps dominant groups to maintain, reinforce, re-construct, and obscure the workings of the established social order” (2001: 337). While early HIV research drew on the existing ethnographic record such knowledge was misused by analysts and policy makers. The problem in general was that anthropologists themselves were not involved from the beginning, but were called on to fill gaps in the knowledge of other researchers (Packard 1991; Schoepf 1991; Standing 1992).

The focus on HIV as a gay disease in the early 1980’s in the US lead to the misclassification of a number of IDU deaths and illnesses, at which an “epidemiology skewed by class and racial bias failed to begin to look until 1987” (Baer 2003: 239) and continues to limit our ability to reach those currently in the most danger such as minority communities and women in particular. There was also debate over which country’s scientists actually isolated the blood borne pathogen first with the US taking the credit for the discovery over the French in 1984, which some have criticized as imperialism through rights obtained to develop blood tests and vaccines. The stigma initiated by researchers pre-emptively labeling the disease gay related immune deficiency (GRID) persists in the form of a blame-the-victim mentality for all those infected well into the present period, and extends past the gay issue to affect even more oppressed and marginalized populations.
In general in the developed world, the political economy of AIDS has analyzed the syndemic in terms of class inequality, gender, sexual preference, and ethnic differences. In the developing world the focus has been on AIDS as a disease which exacerbates underdevelopment and has frustrated recent development gains in LDCs. The segregation between these two ideals is outdated in that AIDS strikes more often in those already suffering discrimination, neighborhood decline, less than adequate housing, poor sanitation, hunger, lack of access to medical care, and naïveté or disregard from decision and policy makers. The fact that AIDS spreads along the fault lines of society (Farmer 1999) and the vectors of disadvantage (Singer 1998) is in this researcher’s opinion a more realistic way to frame discussions about the disease.

In recent years, anthropologists have become extremely involved in the HIV/AIDS field in many ways including surveys of population knowledge and attitudes, analyses of AIDS discourse, evaluations of existing AIDS programs, discourse on societal responses to the epidemic, ethnographies of high risk groups, discussions of ethical and methodological issues, studies of sexual networking, and discourse on vulnerability. Such studies have broadened our understanding of the epidemic in general (Bolton 1992). Given the deadly nature of HIV, I recommend an approach that allows us to contribute to the private sector response to HIV/AIDS and claim that anthropology is well suited for it. I view the following statement as equally applicable to treatment as it is to prevention:

Prevention works best when it promotes change through individual and community empowerment strategies informed by holistic understandings of the local context, when it acknowledges the positive contributions of local cultural values to the process of change, and when it incorporates an array of options that permit individuals to transform their lives in ways that enhance their physical, emotional, and material well-being. [Bolton and Singer 1992: 142]
Schoepf (2001) provides an overview of participatory action research (PAR). This is a “transdisciplinary method designed to foster social change” (344). It is linked to the empowerment of communities in that it enhances people to be socially responsible for their own well being. This method has a history going back to Rapoport who claimed that:

Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework (Rapoport 1970).

The method itself uses ethnographic data gathering techniques as a basis for participatory action against a problem or situation. At the same time, it contributes to the knowledge base of the social science community (Clark 1972), which is different from applied social science, where this is not always the case (Myers 2002).

Such an approach is useful for developing workplace programs. It allows researchers to discover how the workers in a business socially construct disease and risk, and how they might go about molding their own protective strategies. By involving the recipients of the programs (workers and communities) in design strategies it is more certain that all of the work and money put into the effort will have a sustainable and positive effect. PAR allows us to combine research with our own personal concerns about the health of the populations and individuals we are studying so that we give something back to them.

My own experience in Zambia among the Lunda-Ndembu, the same tribe studied on a long term basis by Victor Turner and his wife Edith, initially piqued my interest in reducing the impacts of HIV/AIDS through applied and participatory methods. I came to the country as a Peace Corps volunteer in January of 2000 as a ‘health outreach worker.’
Because Zambia is one of the countries hardest hit by the epidemic I knew that HIV would have to be a focus during my two year work stint. What I didn’t know was that Zambians themselves were mostly unknowledgeable about the disease modes of transmission, methods of prevention, and its vast potential to disrupt their lives. Also, I could not have expected the intense atmosphere of silence that made prevention and education efforts so difficult. I certainly did not expect the level of denial that I faced among government health workers as well as among the rural villagers with whom I worked.

The apparent apathy was startling. Zero AIDS deaths were recorded in the clinic records. During needs assessments the last thing to be addressed by locals was HIV. The school was full of educational materials in the local language that had never been used. Funerals occurred regularly of young people who had traveled to towns for work, returned sick, and died suddenly, with no explanation of death from the family members other than shrugged shoulders. At the local clinic, teens were refused condoms while young children made homemade latex soccer balls from them. Downcast and bored faces were the only reactions I received to my early attempts to address the issue of ‘Kapokota,’ the thinning disease.

I was a development worker and health educator and most of the people could not read. I floundered for a while wondering how to address HIV, and spent a better portion of eight months before I had made enough friends and was comfortable enough with social customs and local understandings of the disease to begin addressing it directly. Along with local volunteers (my informants/friends) we used lectures, fill in the gap story pictures, participatory games, and drama to educate on prevention. This took place in
schools with kids and young adults as well as with adults in the villages. We always asked for questions from the audience afterward and their questions revealed gaps in our teaching which allowed us to improve, in essence, a simple and basic form of monitoring and evaluation. The prevalence rate in Zambia has been decreasing steadily for years now and hopefully will continue to fall.

Businesses in Zambia have begun to address the pandemic, some starting as far back as the early 1990’s (Baggaley, et al. 1995). Konkola Copper Mines has had a policy as far back as 2001 (GHI 2001) and LaFarge Construction has implemented awareness raising campaigns (GHI 2003a) but neither company is able to provide ARVs for the workforce. The economic climate in Zambia and the continually falling price of copper leaves many mines and other companies with negative profits and will probably prevent any organized action on a scale parallel to South Africa’s.

Parker and Ehrhardt (2001) give us examples of how ethnographic knowledge can uncover hidden aspects of social life as well as misunderstood epidemiological risk behavior patterns, especially in places where denial, discrimination, or stigma exist heavily. They talk about ways in which HIV has challenged ethnography to document and analyze why prevention programs are not always transferable from one setting to another, how political and social processes affect what may be achieved by individuals, and to contribute to more effective and multilayered approaches to prevention. It has shed new light on the cross-cultural diversity of sexual exchanges, provided descriptive data for the triangulation of data sets, and expanded investigation efforts through oral histories and in-depth interviews contributing to community mobilization. The ‘ethnographic lens’ has much to offer researchers (Parker 2001).
Herdt (2001) recommends the study of stigma to enhance HIV/AIDS interventions. Differences across sexual cultures and within communities are important if we want to generate improved anthropological studies. Stigma can focus our attention to the vulnerabilities of communities, particularly when considering social exclusion. People attempt to pass for ‘normal’ so that they are not stigmatized as an ‘other,’ because if this occurs then blame is placed. In realistic contexts this can lead to loss of belonging and therefore loss of personhood (Herdt 2001).

The closeness of the anthropologist-informant relationship is stressed in Preston-Whyte’s style of action-research in Kwa-Zulu Natal, South Africa (1995). When mutual cultural understanding occurs, both parties are empowered, and the resulting trust can be used as a basis for intervention. She found that through the process of interviews with young people they often made good suggestions on how to battle HIV in their communities. Simply being in the community and gaining their trust meant that she and her team were ‘half-way’ to intervention. Informants began asking for condoms themselves and decided to put together drama pieces for performance. The research team helped in all these endeavors, but the ideas came from the community. Research led directly to effective HIV/AIDS programmatic concepts inspired by locals (Preston-Whyte 1995).

Schoepf (1995) gives us examples of appropriate intervention techniques which are easily implemented by teachers, but which would not be obvious to outsiders of local culture. Based on her own ethnography in Zaire she notes that “misunderstanding leads to neglect of protection” (38) and participatory learning methods can help groups understand the facts of transmission quickly. Using local knowledge and metaphors to
create role plays, puppet performances, and pictures that tell stories can open up dialogue among the group. It is lack of such dialogue that underscores the silence surrounding HIV. Also, since family is important in Africa it is more helpful to construct prevention messages in terms of family survival rather than as a betrayal of the spouse or as Christian immorality. In addition, condom use can be discussed as a way of family planning rather than as a way to prevent AIDS. Such indirect talk is characteristic of discussions relating to taboo subjects in Africa (Schoepf 1995).

Knowing a culture through ethnography provided the grounds for a study of beer halls in Zimbabwe by Fritz et al (2002), who note that drinking is a large part of many African men’s social lives and this behavior has been positively correlated to HIV/AIDS rates, because it often leads to unprotected sexual intercourse. Focus groups and in-depth interviews were conducted at beer halls to determine whether prevention methods would be appropriate in this forum. They found that acceptability was high among patrons and managers, and the mere presence of the study team steered conversations toward sharing information about HIV. Free condoms were distributed, proper use was demonstrated, and pamphlets were distributed about HIV. Patrons of the beer halls also expressed interest in having further prevention related activities at their drinking establishments (Fritz 2002). Mataure et al (2002) also studied beer halls using participant observation, key informant interviews, and focus groups and found that opportunities exist there for outreach education particularly with the adolescent crowd (Mataure 2002).

An article based on ethnographic research, which involved a multi-disciplinary team of anthropologists and South African politicians, found that women’s level of political mobilization affected their ability to adopt prevention strategies (Susser 2001).
In an earlier study involving communities in Namibia and Botswana as well as South Africa, she notes the importance of considering access to resources and employment, level of political involvement and awareness, and local perceptions of the boundaries of sexual authority between men and women. Her studies imply that such differences are important when designing fresh HIV/AIDS programs and should be taken into account by policymakers (Susser 2000).

HIV/AIDS interventions should also be directed toward the issue of migration, an area anthropologists are especially equipped to study due to its international and inter-tribal implications. Virginia Bond studied migration on a commercial farm in Zambia to develop an educational program for this population. She found there was a lot of ‘hit and run sex’ between migrant workers and local girls. Her study also brings up the ethical implications of anthropologists becoming involved in local matters, a consideration for action-researchers (Bond 1997b).

Chirwa used interviews spaced 4 years apart with the same cohort to assess the relationship between migrant labor, multi-partnered sex, sexual networking, and HIV/AIDS in Malawian workers returning from South African mines (Chirwa 1997). Government censuses are inadequate when studying migration and further probing is necessary. In many cases assumptions are made that returning migrants bring HIV to their home partners, but infection can also be the other way around (Lurie 1997). Employers should provide more family-friendly housing options at migrant workcamps as well as interventions for migrants’ home villages. Romero-Daza and Himmelgreen (1998) discuss migrants between the highlands of Lesotho and the mines of South Africa, and is one of the few to even mention homosexuality in Africa.
Little is known about this subject and next to no literature is available on it. However, “its occurrence cannot be dismissed” (191) and it is reportedly common in the same sex segregated worker compounds of African mines. Teunis (2001) notes that long-term ethnography is invaluable pertaining to this subject, that diversity in Africa is underreported, and that the dismissal of AIDS as strictly a heterosexual disease on an entire continent is hegemonic. His own study took place in Senegal (West Africa), but as one of the only studies on homosexuality in Africa it is worth mentioning that he conducted ethnography on an entire same-sex community whose members engage in sexual relations, which suggests that similar studies are missing from the ethnographic record in the sub-Saharan context (Teunis 2001).

To date much AIDS prevention has been dominated by psychological models about behavior change such as the Theory of Reasoned Action, the Health Belief Model, Self-Efficacy Theory, and the Stages of Change model, which focus attention at the individual level often ignoring society, community, and family levels of analysis (CDC 2005c). By focusing on how individuals process, value, interpret, and act on information many interventions have ignored larger structural and political influences which may constrain an individual’s ability to act on knowledge of HIV and/or increase the vulnerability of certain populations (Singer 1998).

Ideally PAR should be long term to avoid the pitfalls of rapid assessment. The research presented in section II of this thesis could best be described as rapid assessment, however, this researcher was constrained by time, funding, and the need to attend classes. PAR in multinational companies must be carried out to truly obtain a qualitative understanding of the effectiveness and results of workplace programs on HIV/AIDS. My
suggestion is that researchers attend internal company meetings on the subject, participate in health education, grief counseling, prevalence testing, or other program activities, and if possible become involved in community events and activities as well.

PAR in critical medical anthropology highlights the client-researcher relationship and the issue of trust, knowledge of the local context, the role of stigma, empowerment and the adoption of effective strategies, local metaphors to convey meaning, creative places and ways for conducting ethnography, and the overall importance of ethnography and qualitative methodology in AIDS research. It is difficult to ignore larger societal oppression and obvious human rights abuses when one is well versed in the attitudes and opinions of sufferers. Knowledge of the local context inevitably improves the questions we ask as researchers, which has a direct bearing on reducing lives lost to this epidemic. From this researcher’s perspective the workplace and the workforce represent relevant settings in which to carry out PAR and subsequently design better informed interventions.
**Political ecology**

Political ecology is a synthesis of political economy and cultural ecology approaches to researching the human condition. It describes the political sources of environmental change as well as associated consequences. Critical medical anthropologists are increasingly interested in political ecological perspectives (Baer 1996). Concerned with power differences and the ways they shape social processes, this branch of the discipline traces roots back to Karl Marx. Current concepts of political ecology vary yet reflect the recent history of human and environment relations and span disciplines, methodology, and many areas of overall focus. In many ways it is a loosely defined term but the field is considered a critical social science (Mayer 2000).

Julian Steward is credited with coining the term “cultural ecology” in the late 1930’s and early 40’s, but this and many other attempts at defining such a field yielded deterministic and reductionist theories (Hvalkof 1998). Still, even including humans in a discussion about ecology challenged more prevalent modes of thought that strictly separated humans and environmental science (Paulson 2003). Processual ecological anthropology, brought to the surface by Rappaport and Bateson, is where we see more politics included in the framework (Hvalkof 1998). The actual term “political ecology”
dates back to the 70’s, is credited to journalist Alexander Cockburn, anthropologist Eric Wolf, and environmental scientist Grahame Beakhurst.

However, there is no main article or publication that heralds the advent of political ecology. The most comprehensive overview (Bryant 1992) is entirely devoted to third world regional political ecology. Geography, as a discipline, contributed significantly through radical development geography, questions surrounding the growing population and ecological crises, and increasing involvement and concern for social movements such as feminism and liberation ideology. Today we have socialist ecology, social ecology, ecofeminism, deep ecology, and cultural ecology all as coexisting fields in political ecology (Clark 2001). The intellectual genealogy of political ecology as a whole stems from Green politics in Europe and ecoanarchism, purporting that capitalism is inherently self destructive due to its productivist ethics (Baer 1996). It is the spread of capitalism and the concentration of wealth and resources that is seen to be a problem and from this stems the need for far reaching changes in political economic processes on local, national, and global levels (Bryant 1992; Mayer 2000). Analysis on a variety of levels is essential and important but the question of which level to start on and how to move between different scales of analysis can be difficult because of assumptions about history, space, causality, and time (Paulson et al 2003).

Neo-Marxism was eventually adopted by political ecology in general, and became the basis of many deeply embedded assumptions, to link social oppression and environmental degradation to wider political and economic processes. This contributed to the focus on how unequal power affects the use of, access to, and conflicts over environmental resources. This brings historical perspective as well especially in Africa
and other colonized areas of the developing world where people are forced to compete on a level of capitalism for which their history and social development did not prepare them (Bryant 1998). It is analysis on a variety of levels, historical understanding, and the relationships between social actors that political ecologists focus on to achieve results and raise interesting points and perspectives.

In Fall 2003 an entire issue of *Human Organization* was devoted to studies in political ecology but none touched on medical or biological anthropology. There seems to be a predisposition toward the traditional focus on land development, degradation, and management which has always been typical of political ecology. The existing literature, in particular anthropological literature, reveals little in the way of disease research. In medical geography work has been done on development and disease in Africa (Hughes 1970) and historical impacts on endemic disease in Tanzania (Turshen 1984).

Often studies focus on rural regions and political ecology has rarely been applied to urban settings (Myers 1999). Political ecologists have not yet addressed the issue of multinational companies systematically. Also, much work has focused on the role of the state rather than institutions such as businesses, NGOs, multilateral institutions, or people’s organizations (Bryant 1998).

Another area of research that is lacking is the synthesis of medical foci and political ecology, particularly in the area of disease causality. Such a conceptual framework would include the combination of traditional disease ecology with political economy. It would also allow a researcher to demonstrate that disease can be caused by humans as well as natural forces and particularly look at the unintended results of human interaction with the environment (Mayer 2000).
Mayer (2000) takes a political ecology framework in a global analysis of emerging and resurgent infectious diseases. Disease ecology is just as much the result of political and economic power as it is smaller scale molecular phenomena. The very cause of a disease can change when considered from socio-ecological angles. Mayer uses global interdependency to point out flaws in public health structure and inconsistencies in trade and policy matters. The “health transition” and the West’s declaration that the battle against infectious disease was over in 1969 meant that in developed countries more money and effort is now put into battling non-infectious diseases rather than infectious ones.

Human-environment interaction has led to disease for example in situations involving Schistosomiasis and dam construction, clearing land for rubber plantations and accompanying increases in malaria, vectored diseases such as HIV/AIDS spreading along transportation roots, and lyme disease due to suburbanization and real estate development in the US. Assumptions that developing countries’ health problems cannot seriously affect developed nations and that infectious disease is a problem of the past are false and dangerous. Mayer uses five factors to describe the flow of disease: cross-species transfer, spatial diffusion, pathogenic evolution, recognition of a pathogen that was
formerly unnoticeable or unrecognized, and changes in the human-environment relationship. I would like to point out that HIV serves as a solid example of all five of these factors. The virus may have crossed over from a chimpanzee species during hunting and dressing activities (Gao, et al. 1999), has diffused over the entire globe through travel and war (Smallman-Raynor 1991), evolves for its own survival and protection from ARVs (Lipsitch and Nowak 1995), was probably harming populations before it was discovered (Discovery Health 2005), and its transmission can be exacerbated by humans and environmental change (Coetzee 1996). In Mayer’s analysis, public health surveillance measures are assumed to be highly inadequate and in need of drastic change and increased funding.

Urbanization also tends to increase infectious disease, however, an equally important issue is that transmission patterns and interactions of possible vectors change in ways that are little understood in urban environments and introduce new problems concerning control. In Africa the spread of HIV is exacerbated by urbanization (Coetzee 1996; Nunn 1996). This is particularly notable in studies looking at pregnancy, birth, and HIV (Mwakagile 1996; Taha 1995) Street prostitution and consequently STDs increase with poverty in urban areas as well (Lockhart 2002). Malaria transmission, while generally believed to decrease in urban areas, has also been shown to increase (Brieger 2001; Campbell 1997; Ladhani 2003; Sethi 1990) and one study in particular demonstrates higher levels in peri-urban townships compared with city centers (Robert 2003).

Power is reflected in the ability of one social actor to control the environment of another and is often institutionalized (Bryant 1998). In this case, control is
institutionalized through the private sector through a given company’s actions which have far reaching results in South Africa. One of the results is that people often leave rural villages to come to the city to work. Power is further consolidated on the part of multinational companies when settlements or camps, formal or informal, spring up around million dollar factories whose executives may hire or fire at a whim due to a seemingly endless available supply of cheap labor. Infrastructure within company grounds is often near flawless, especially the barbed wire fences and security checkpoints, but the immediate surrounding community often looks like a desolate urban hellscrape to the outsider.

Historically limits to movement as well as lifestyle changes were imposed on African people by drawing political lines according to the desires of colonial powers. Groups that were mobile were forced to settle and resort solely to agricultural practices. They were exposed to manufactured or imported goods that often out performed local tools and became favored in most circumstances. Traditional practices waned and were forgotten. The Lunda-Ndembu people in Zambia no longer mine and produce their own metal tools, but must go and purchase (for example) an axe head from town to attach to their village-produced wooden handles.

In South Africa, workers were funneled from rural areas to work in often white owned mines and factories. Urban areas developed in this way growing in unplanned and haphazard ways. While the wealthier areas of any South African city are often indistinguishable from wealthy areas of any MDC, the townships and mining towns of industry workers remain unhealthy and undeveloped through conditions often directly
augmented by the company or industry itself. Polluted ambient air, groundwater, and intolerable noise levels are all common results.

On a global level, companies search for cheap labor and expanding markets. The reasons for why multinational businesses become multinational often revolve around self interest and profit making. Some companies and businesses possess more resources than LDC governments themselves. Ford, Coca-Cola, and Volkswagen are examples of businesses that can enter a foreign market and compete on a level equal to or better than local companies. In this way businesses choose where they will operate, who they will do business with and who they will hire. This translates into considerable power in South Africa, a country with a 31% unemployment rate (CIA 2003). A village in KwaZulu-Natal may lose significant human and social capital to jobs at an auto-manufacturing plant 300 km away in Gauteng Province.

On a national level, South Africa has done a poor job at developing rural areas when compared to urban ones. The apartheid system, which forced many black Africans back onto traditional homelands, also spread illness to rural areas on a national scale (Farmer 1999). While a leader in establishing corporate governance guidelines companies in South Africa “co-exist in an environment where many of the country’s citizens disturbingly remain on the fringe’s of society’s economic benefits” (King Committee 2002). As is common in other African nations, rural dwellers are forced to make a choice between poor services versus trying their luck and integrating into the wider economy and competing on a more capitalist level. This usually involves some or all of a family relocating or migrating seasonally in order to add cash income to the household budget. Businesses have been consciously located in urban city areas for
convenience sake. Specifically, the convenience I refer to is that the rural and semi-urban areas can remain undeveloped. The irony is that when families move they often must survive in worse living conditions in the city than those they left behind initially. In the greater African culture and worldview intense stress is put on communal values, consensus and cooperation, interdependence, and co-existence among and between families and communities (Sorenson 2004).

On a local level, poor people are striving for survival. Moving to town for a better life represents an ideological myth that often fails to live up to expected standards. However, people are so desperate for wage labor that many are willing to relocate to urban areas without any proof that life will indeed get better, working the informal sector economy, begging, or committing crimes. In many cases the government forces displacement of residents from an area into squatter camps. In some case people claim sections of land, squat, and turn it into an informal township, continuing to occupy the land until it is officially recognized by the government. This is happening in townships and informal townships all across sub-Saharan Africa (IRIN News 2005c).

Communities spring up around factories in South Africa and often begin as informal settlements containing people working for, or who want to work for, the company. Services slowly become available and proper housing is eventually built if growth circumstances warrant that action, but not all residents are equally accommodated at any given time. When an informal settlement becomes a township, more squatter camps immediately appear on the borders of the new township itself, indicating that this process is a consistent one (Chapman 1998; IRIN News 2005c). Disease surveillance and prevention efforts are not likely to be up to acceptable standards in squatter camps, and
provisions of government service are rarely satisfactory. Nevertheless, many of the people living there would not be doing so if the factory were elsewhere.

Growth rates in developed countries have leveled or are negative while developing countries maintain high birth and fertility rates and lower death rates (see figure 2). Even HIV is not expected to negatively affect population growth in Africa (Chamie 2001). Doubling time for the global population has decreased exponentially (see table 4) mostly because of the agricultural and industrial/scientific revolutions. This has resulted in what public health professionals term the “incomplete demographic transition” or the “health transition” where 95% of the annual global population growth occurs in less developed countries that already have trouble caring for the majority of citizens (Nadakavukaren 2000). Even using the word ‘incomplete’ while describing LDCs underscores the continued hegemony and paternalism of governments and researchers in donor nations by assuming that other countries’ demographics should and will one day evolve and possible even mirror their own.

Figure 2
Population Growth Rates in Urban and Rural Areas, Less and More Developed Countries, 1975 to 2000 and 2000 to 2025

Source: (Brockerhoff 2000)
Table 4-Doubling time for the human population (Nadakavukaren 2000)

<table>
<thead>
<tr>
<th>Date</th>
<th>Estimated global population</th>
<th>Doubling Time (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8000 B.C.</td>
<td>5 million</td>
<td>1500</td>
</tr>
<tr>
<td>A.D. 1650</td>
<td>500 million</td>
<td>200</td>
</tr>
<tr>
<td>A.D. 1850</td>
<td>1 billion</td>
<td>80</td>
</tr>
<tr>
<td>A.D. 1930</td>
<td>2 billion</td>
<td>45</td>
</tr>
<tr>
<td>A.D. 1975</td>
<td>4 billion</td>
<td>36</td>
</tr>
<tr>
<td>A.D. 1999</td>
<td>6 billion</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Urbanization rates are also alarming (see figure 3). This trend is leading to megacities that deplete environmental resources, contribute to urban sprawl, acid rain, global warming, and establish large semi-urban slums. Governments must strive to improve and provide services at such quick rates and most often fail in one capacity or another. Africa has the highest urbanization rate and its population is growing faster than that of any other continent. By 2030 nearly 800 million people, or a number equivalent to the current population of the whole continent, will be living in urban areas (Mosha 2001). By 2050 it will be three times more populated than Europe (Chamie 2001). Arguably this is due more to natural growth than migration.

Such rapid urbanization combined with population growth and economic difficulties is related to deteriorating services in areas like transportation, water, health, and education. Squatter settlements often claim 50% of the inhabitants in African cities,
where people use dirty water and live in polluted areas and fragile environments. Poor municipal management in cities means that vehicle emissions are unchecked and garbage collection is not fully carried out. Many cities lack drainage or sewage systems and the majority of urban dwellers have no indoor plumbing and use simple pit latrines (see appendix I-J) (Mosha 2001). The richer residential and commercial areas are spared such disaster. The conditions in large African cities and particularly in the slums and townships are favorable to disease transmission and outbreak. Moreover, the urban status of residents means an increase in chronic diseases as well (Stephens 1996).

**Figure 3**


Source: Brocherhoff, 2000
Several structural relationships are important in this scenario. International Monetary Fund (IMF), World Bank policies, and SAPs geared toward privatization have made their mark on South Africa, preventing the country from safeguarding its own economy from foreign investment and takeover. This has helped to establish the push and pull factors typically evident in migration patterns. Poor population control in the country and cultural factors valuing pregnancy and child birth mean that natural growth is taking place in the cities at alarming rates. This growth is equally if not more important than migration issues (Coetzee 1996; Schoepf 1995).

The stigmatization of HIV is an important issue as well. Particularly important for workplace intervention issues is the fact that individuals are not willing to get tested and are afraid of losing their jobs if found positive for the infection. This stems from society’s imposition of morality on the disease, which was further hindered by President Mbeki’s statement that HIV does not cause AIDS.

My main points in this section are that: 1) urbanization is imposed on populations, is unchecked, and will impact our global environment and 2) those who benefit most from urbanization are the companies, factories, and businesses involved. To solve this we can start with a couple of initiatives: requiring businesses to keep the environment clean and employees healthy, and by putting more effort into rural development. Urbanization can be reversed by groups moving back to villages or rural areas, which is not likely to happen easily, but is an idea that governments and companies could support through rural development. Another angle to consider is the development of smaller urbanized areas where unchecked development has not yet occurred. These
areas could represent a hybrid of urban and rural benefits and hopefully attract some of
the overflow from the cities.

Political ecology provides a framework to analyze such complex issues and can
help discover solutions to related problems. However, in the real world the radical
changes which political ecology often endorses will not be acceptable to those in power.
For example, to remedy Africa’s refugee crisis Kalipeni and Oppong recommend
redrawing national boundaries to reflect tribal or ethnic classification (Kalipeni 1998).

Businesses and corporations are willing to work with people to solve crises. In
most cases the crisis must be one that will clearly impact business markets or overhead
costs. Not being overly political with political ecological concepts perhaps is a better
way to start making significant changes than touting Marxist principles as the primary
path to success. While I feel that drastic changes are necessary we need to involve as
many parties as possible in discussion and measure our successes and failures regularly to
determine progress.
RESEARCH SETTING

The Global AIDS Program

I was first introduced to the topic of HIV in the workplace as an intern for a joint program between the Association of Schools of Public Health (ASPH) and the CDC in which I participated from May 7, 2003 until July 29, 2003. ASPH, a non-profit organization, supplies interns with a living stipend while the intern works with CDC staff using CDC office space, equipment, and other necessary resources. Both organizations are based in Atlanta, Georgia and this was the primary location of my internship experience. I was given an office for the summer at the Corporate Square offices of the CDC, in the Division of HIV/AIDS Prevention (DHAP). My immediate supervisors were Dr. Richard Keenlyside, Associate Director for Science in the Global AIDS Program (GAP), and Jennifer Lowenstein, MPH, who works for both GAP and DHAP. My official title was ‘public-private partnership research assistant’ and while I was technically working for the Global AIDS Program I was privileged also to work with members of DHAP and people involved in the BRTA/LRTA program.

Initially started in the year 2000, GAP focuses on prevention, treatment, surveillance, and support for capacity building to address the global aids pandemic by
partnering with communities and community organizations, governments, universities, international health organizations, and private-sector enterprises such as businesses working in low resource countries. GAP also partners with U.S. government agencies such as the National Institutes of Health (NIH), the Health Resources Services Administration (HRSA), the USAID, the Department of Defense, and the Peace Corps to achieve its goals. GAP includes 25 country programs and four regional programs, focusing in particular on the 15 countries deemed recipients of the President’s Emergency Plan for AIDS Relief (PEPFAR). GAP countries include Angola, Botswana, Brazil, Cambodia, China, Cote d’Ivoire, the Democratic Republic of the Congo, Ethiopia, Guyana, Haiti, India, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Thailand, Uganda, Vietnam, Zambia, and Zimbabwe.

GAP uses three broad based technical strategies which include prevention, HIV/AIDS treatment and care, and surveillance and infrastructure development. My role as public-private partnership research assistant was subsumed under the prevention strategy, hence the association with DHAP, and many of the partnerships nourished by CDC are between public health and private business, usually multinational businesses interested in decreasing the impact of HIV on their workforces. This desire to engage business and labor in HIV/AIDS workplace policy, education, and prevention stemmed in part from the U.S. domestic business program known as BRTA/LRTA, a program more thoroughly discussed above in the workplace intervention evaluation section.
Internship goals and objectives

Original goals were decided upon by my supervisors and I. These included:

1) Conduct a literature review of HIV/AIDS international workplace programs in order to establish the effectiveness and validity of such programs as well as to identify factors contributing to or discouraging policy formulation, program implementation, success, and monitoring or evaluation.
2) Conduct research and data collection which contributes directly to the Business and Labor responds to AIDS (BRTA/LRTA) international agenda as well the Global AIDS Program (GAP).
3) Contribute toward a draft formulation of a sub-Saharan version of the BRTA/LRTA toolkits (manuals) for employers and employees.

These goals later became modified and the connection between my research and the BRTA/LRTA program became less clear. My supervisors were interested in obtaining and analyzing monitoring and evaluation data from existing workplace programs, but reality dictated that few businesses had programs at all, even fewer evaluated the progress of programs, and very few indeed published data on monitoring/evaluation results. It was decided that I would partner with GAP country personnel in South Africa, Botswana, and Zimbabwe to conduct interviews with businesses possessing HIV/AIDS programs in each country.

The process and challenge of conducting international research nudged goal number 3 off of the agenda. I began to focus on establishing contacts with businesses to conduct interviews, reviewing literature directly related to potential interviewees, writing a research protocol and key informant questionnaire, and completing the necessary
procedure to conduct human research through the University of South Florida (USF) Institutional Review Board (IRB). The CDC IRB would have been unable to review the potential research within the internship time frame. This turned out to be a huge disadvantage in Botswana because the GAP director in that country would not accept the USF IRB clearance and prevented me from conducting active research in Botswana, although I did visit GAP offices and attend meetings. Turnover in GAP staff and people taking vacation in Zimbabwe left me without counterparts during the intended time frame, thus this country was dropped from the research entirely.

I based my research question on one that my supervisor suggested: “in existing workplace programs, what mechanisms and strategies are working and not working to lower the prevalence of HIV, and what systems of support must be in place to sustain effective programs?” This central question alludes to the fact that the study falls into a category known as ‘monitoring and evaluation’ but we avoided those words intentionally, primarily because of the intimidating nature and implied authority associated with monitoring or evaluating a given project.

It is unusual, or less common, for anthropologists to ‘study up’ or collect ethnographic data from powerful entities instead of powerless ones. In many cases participants in anthropological research studies have something to gain from the research materialistically, politically, or socially. Apart from being allowed to participate based on rapport, trust, or other relationship markers, it is the leverage of some type of aid or help being offered to the source community that can cement an anthropologist’s place as friend and ally. While multinational companies are powerful entities, their workforces and the economies of the communities purchasing products are ravaged by AIDS
particularly in Southern Africa. Companies in the study were approached with an attitude of beneficence and anonymity, because this research is intended to help the common good and because company names associated with successes and failures of workplace programs are unnecessary and potentially incriminating. Also, I admittedly had some leverage with many of these companies simply because my email address and phone number originated from the CDC, and because GAP is a multinational global health initiative with connections to country level ministries of health and other institutions.
Experiences and Events

Within the first two weeks of my internship I attended two conferences. The first was a 2 day BRTA/LRTA conference in Washington, D.C. intended to share ideas between CDC and BRTA/LRTA board members or representatives from companies, labor unions, law firms, community groups, and pharmaceutical sales. This was a housekeeping meeting where the board decided on goals and priorities for the next year as well as events and activities that should be planned to raise awareness of HIV/AIDS issues.

During this meeting the head of BRTA/LRTA, Victor Barnes, addressed the board regarding Tommy Thompson’s restructuring of the CDC center which deals with the AIDS epidemic. Most of DHAP was against the restructuring, which places importance on testing and identifying HIV positive individuals particularly in minority communities, and effectively de-funds hundreds of community based organizations here in the States that deal with HIV prevention. The board was equally shocked, noting that asking businesses to start testing employees goes against the standard of anonymity and equal opportunity that BRTA/LRTA has been striving for since its inception. Key concepts of this ‘new initiative’ directly handed down by the Bush administration targets minority communities and high prevalence populations for rapid HIV/AIDS testing (IRIN
News 2005b; KFF 2003a; KFF 2003b). Not only do the reductionist risk categories re-
stigmatize the disease as one of Blacks and Latinos in the US, but the government’s 
funding was restricted to programs favored by the administration. In keeping with pro-
life policies, abstinence is favored while condoms are disregarded as a method which 
does not provide 100% protection. Not only is the ‘new initiative’ actually an old 
initiative, that of stigmatizing populations on purpose for political reasons, but policies 
favoring abstinence have restricted information about condoms on government websites 
which limits information available to the general public and ignores science.

Far reaching results of this Christian faith-driven policy shift have been observed 
in Uganda, where the US is the largest single donor, and condoms are gradually being 
removed from HIV/AIDS strategies. School textbooks there falsely state that latex 
condoms have microscopic pores which allow HIV through and that pre-marital sex is 
deviant behavior (IRIN News 2005e). Restricting information about how to protect one’s 
health in case of a sexual encounter is actually pro-death rather than pro-life.

The second conference I attended was the GAP annual conference held in Atlanta, 
GA. Directors, nurses, social workers, epidemiologists, and lab personnel from each of 
the 25 GAP countries were present to share experiences and the results of initiatives in 
their respective countries. This meeting allowed me to hear presentations on each of the 
technical strategies GAP utilizes to combat AIDS. It also gave me a clear indication that 
public-private partnerships, as a strategy, received little attention in a room full of 
biomedical professionals when compared to surveillance, treatment, and even other 
prevention strategies such as presumptive treatment for commercial sex workers with 
ARVs. Partnerships with businesses seemed neglected, for example, when few people
turned up for the general session on this issue which happened to be scheduled immediately after lunch, a time when many were likely to show up late. Through meetings and conversations with staff all through my experience with the CDC, I was under the impression that the public-private partnerships strategy of the Global AIDS Program did not receive enough attention in the field offices.

The convenient and most memorable aspect of this conference was the privilege of networking with advanced professionals all over the world involved with AIDS treatment and prevention. This happened before Zimbabwe was crossed off of my research list, and I was able to meet the appropriate GAP contacts from the countries in which I would soon be conducting research, and spoke in length with the GAP staff from Zambia, where I lived for two years.

After that week long conference and for the next seven weeks, I continued preparing for research by completing IRB materials, continuing to review literature and summarize information for my background section, and attend internal CDC meetings, conference calls, and workshops sponsored by ASPH to educate interns on how to present research and speak effectively in public. This time was also used to finalize travel arrangements for airfare and hotels as well as for interview appointments with program directors in South Africa.
METHODS

This research looks specifically at impacts of the private sector response to HIV/AIDS in South Africa focusing on large businesses and corporations. The purpose is to obtain a current understanding of what is working and not working for HIV/AIDS workplace programs as well as what systems of support must be in place in order to maintain effective and successful programs. Five multinational corporations were singled out, three in the automotive industry, one financial services bank, and one company which produces food, chemicals, and detergents. One auto manufacturer already working with GAP/CDC agreed to participate and the GBC website and GHI case studies provided contact information for other multinational companies. Companies volunteered to participate in the study by responding to an email sent from the author at the CDC in Atlanta, Georgia requesting study participants. After emailing more than 25 companies in South Africa, seven responded and five were able to participate. Key informants within these companies were interviewed.

Verbal consent was obtained following an explanation of the purpose/intent of the study, which was also provided to participants in a written document. Confidentiality was guaranteed for informants and companies thus company names are not used in this thesis. This data is complemented by direct observation as well as a review of literature.
Literature review began in May 2003 and continued until August. The ethnographic portion of this study could best be described as rapid assessment and was carried out from July 5, 2003 until July 19, 2003, in Johannesburg and Pretoria, South Africa as well as in Gaborone, Botswana. To complement the literature, I specifically sought supplemental information in the domains of risk and health seeking beliefs and behaviors, knowledge systems, structural and cultural contexts of behavior, symbolism, and communication that could be used to guide the development of appropriate intervention materials and action. The interview schedule was made up of open-ended questions that allowed for extensive probing.

Key informants included 5 HIV/AIDS program coordinators for large, multinational businesses as well as 4 peer educators and 2 government employees in South Africa. The first key informant is a doctor at the on-site clinic on factory grounds. She is a white woman in her mid-forties and has worked with the company for about 6 years, and is responsible for the HIV/AIDS program on a full time basis. From what I saw she was very well liked and known by workers. The second key informant had worked with the company, through a partnering foreign agency, since the beginning of the project in 1999. She is an ethnically white epidemiologist in her mid-forties and our interview occurred in the corporate offices in Pretoria. In another company, I spoke with a human resources manager who was a white woman, probably about 30 years old, who had been with the company for about almost 7 years and also traveled frequently to help with the global rollout of the HIV/AIDS program. Another key informant was the nurse primarily responsible for the HIV/AIDS program in the company who had worked there for over 10 years. She is a white woman in her mid-fifties. In the same company I spoke
with a white, middle-age consultant who worked as a technical advisor on the program. I also received a PowerPoint presentation about the program from a younger, black South African man who had worked for the company since his entry into a professional career. Another key informant was a white man in his retirement years that had spent the majority of his professional career in human resources for the company. I was able to visit this company’s community outreach center where PWHAs from the community come to participate in income generation activities. Four peer educators presented themselves for interviews as well. One was a middle-aged black woman who visited the center regularly and used faith as a teaching tool and support mechanism for her education. Another was a mid-level, middle aged black professional working for the company (a desk job). Another middle-aged black man was a factory floor worker for the company for over a decade and a “shop steward,” which is someone responsible for a team of employees. The final peer educator was a middle aged man of Indian heritage who had worked on the factory floor for about 4 years. Two more key informants were one middle-aged black woman and one young black woman who worked for a government AIDS Treatment, Training, and Information Center (ATTIC).

During a brief visit in Botswana, the researcher talked with one NGO staff member as well as individuals working for the CDC/ACHAP project in that country. Observations were documented through written field notes. In South Africa this occurred primarily within the workplace and included factory floors, corporate offices, on site health clinics, and one community outreach project site. People and businesses retained the right to remain completely anonymous throughout any interview, conversation, or
observation exercise. No person was asked to disclose his or her HIV status. Questions asked during the interview included the following:

1) What type of intervention(s) is the company carrying out?

2) Are programs effective and useful to workers? Workers families? Why or why not? Are workers receptive to the programs? If peer educators/counselors are involved how are they selected?

3) Are there any other obvious results of the program(s)?

4) Is the program cost efficient for the company? Is the role of HIV educator/program coordinator/peer counselor an added duty to typical work roles? Are such individuals paid or somehow compensated for their efforts?

5) What factors or circumstances contributed to management or other decision makers deciding to implement an HIV/AIDS program and policy?

6) Were there or are there currently barriers to implementing the program(s)? What circumstances, if any, make implementing the program(s) easier for your company?

7) What role has stigma played in implementation of workplace programs?

8) Do you think workers in other companies should have access to HIV/AIDS programs in the workplace? Are programs more important for skilled or unskilled workers?

9) If you could change something about the programs/interventions available to you and your workers what would it be? Does the company supply ARVs for workers? Spouses or children? Are there co-pays? How does distribution occur (clinic, mail) and how does this affect participation?

10) Do you have any suggestions for small businesses that may be interested in becoming more involved in workplace interventions? Would your company work with small businesses during education sessions or in any other capacity?

Data collected from the interviews and from observation were coded into five main areas of analysis: (1) policy development, (2) prevention, education, and awareness, (3) care, counseling, and treatment, (4) community involvement, and (5) implementation and success. The research attempts to identify reasons for success or failure beyond what information is available in documented research and program evaluation literature to this date. Program coordinators, workers, and peer counselors had the opportunity to express their opinions and share their experiences confidentially and in a way that can strengthen existing programs.
In this area of occupational safety and health, which is still in its infancy, many businesses and workplaces suffer from lack of evaluation criteria and structures making it difficult to collect unified, easy to compare responses. In the literature, it seems as if companies are not admitting the weaknesses and failures of programs, or worse yet, not even aware of them. This thesis attests to the fact that many businesses are aware of and attempting to address the problems that arise within their programs. Workplaces vary widely and must take the time necessary to assess situations that are specific to industry, education levels and backgrounds of workers, locations, community and political influences, as well as religious, ideological, and economic factors. Local situations are important yet are shaped by larger political and economic patterns, representing integrated contextual situations which anthropology and social science in general is well suited to study.

Formulas or guidelines for workplace programs must be flexible and change as needs arise. Differences are apparent between the programs and various locales and industries of any given multinational company. Smaller companies in similar areas and situations may benefit immensely from the larger private sector response and efforts should focus on adaptable, component based approaches that allow for variations between locations and according to available resources. Programs should not remain constant because this implies a lack of communication among parties involved regarding a disease that requires multi-sectoral and multi-stakeholder feedback.
RESULTS

Company Profiles

To protect confidentiality companies are assigned letters in lieu of actual names and data has been de-identified to the fullest extent possible. Here I will describe company profiles such as relevant financial and production information, project descriptions, risk and prevalence data, and expected outcomes or monitoring results. Some information is based on global aspects of company performance but when possible I have included information specific to South Africa’s branch of the company.

Much of the information in the following sections is reported or published through projects and company specific websites. However, those sources are not cited here to protect the confidentiality of the companies involved. I have done this for several reasons. In my own qualitative research interviewees mentioned statistics which closely mirror some published case studies. The interviews were carried out in the summer of 2003, so some information was updated as it became available on the World Wide Web. Also, already published case studies of company’s were presented in a more structured and standardized format which I have subsequently adopted post-research. In addition all of the sources used in this next section which are not cited are present, either
protected sources are necessary to maintain anonymity for companies. Other information in the following sections come directly from the author’s field notes and notes from interviews (Reed 2003)

Company A is in the top five of the world’s largest automotive and transportation companies manufacturing in 37 countries and distributing in more than 200 countries. It employed 370,000 people in 2001 and handled revenues of more than US $130 billion with a net income of more than US $580 million. Company A employs about 8,000 people in South Africa including contractors. Estimated 2001 revenues were US$ 1.4 billion and net income was US$ 79 million for the South African branch. Company A established its workplace project in 2001 in partnership with a foreign government agency to address the syndemic based on increasing financial burdens related to AIDS and as part of stakeholder principles of Corporate Social Responsibility (CSR), with the objective to reduce further spread of HIV infection and STIs through treatment, care and support for PWHAs in their workforce and their families and communities. The company estimated a 2001 HIV prevalence of 9% among its employees and observed an increase in the proportion of employee deaths attributable to HIV/AIDS for more than 5 years. The average cost of an infection was US $31,000 in 2002 but goes up to US$ 126,000 for highly paid employees. The 2002 HIV/AIDS project budget was US$44 per employee per year. The company also spent more than US$100,000 for community HIV initiatives.

On a global scale Company B employed 100,000 people in 2002, revenues were around US $44 billion and net income US $2.1 billion. An automobile and motorcycle
manufacturer in South Africa, Company B employs about 5,000 people and exports 80% of its product. The company’s HIV/AIDS budget for 2002 was US $54 per employee per year and workplace prevalence was estimated at 6%. Company B based its program on prevention and awareness training, peer educators, condom distribution, treatment for STIs, events, workshops, and theatre. Employees have access to VCT services as well as ARVs. The program has a multi-stakeholder HIV/AIDS committee and a full time non-medical ‘champion.’

Company C manufactures and markets food, hygiene products, and other consumable materials. It employed about 250,000 people in 2001 and generated US$ 46 billion in revenues and US$ 1.6 billion in net income. In South Africa Company C employs about 5,000 people and has more than 4 manufacturing sites. Condom distribution, peer education, and management training are all components of the 2002 HIV/AIDS program which had a budget of about US$ 78 per employee per year of which 60% is spent on awareness and education programs and 40% spent on VCT services. This money is supplemented with about US$ 130,000 for community involvement.

Company D is a major auto manufacturer and distributor with 300,000 employees in more than 100 countries. The South Africa branch employs about 3200 people with an average age of 41 and a male-female ratio of ten to one. Prevalence in the workforce is about half of the national RSA average or ten to twelve percent and less than 20% of the workforce is white and even fewer are of Indian heritage. Global revenues currently are in the US $80 billion range with net profits at about US $4 billion per year. The company delivers trainings for all South Africa employees and facilitates and hosts a variety of community events. One of the first auto companies and big businesses to
develop an effective response, it was clear to relevant company committee members that the RSA government could not handle this fight alone. Widespread denial and stigma also prompted the company to action.

Company E is an international commercial financial institution that focuses on emerging markets in Asia, India, the Middle East, Africa, and Latin America. Globally Company E employs 30,000 people in 50 countries. Response to the pandemic was initiated by country managing directors in Africa, where the company employs about 6,000 people. Expected impacts due to HIV/AIDS on the company included absenteeism, medical costs, and staff death and turnover, and human resource managers were requesting advice on how to deal with positive employees. The program is mostly awareness raising but medical benefits allow employees access to treatment services.

These companies, due to their self selection and agreement to do the study, represent more successful programs than the norm. Many businesses have no policy or program at all, and among those that do such comprehensive programs are rare. I would therefore caution the reader not to take these companies as a representative sample of South African business performance or ethics in relation to HIV/AIDS workplace programs. All of these companies are multi-million or multi-billion dollar transnational entities with massive funding and extremely large workforces capable of initiating HIV/AIDS programs. This is in contrast to many SMEs which do not possess the financial resources. For them, however, public-private partnerships are even more important. Many of the multinationals sampled in this research agreed that they would work with SMEs on a consistent basis.
Policy Development

Company HIV/AIDS policies typically have five components: non-discrimination, confidentiality and disclosure, employee benefits, ill health retirement, and contractor benefits. Many appear similar and while each defines the above five components in different ways several commonalities exist. Non-discrimination components typically state that employees will not be dismissed based on their HIV status and that hiring decisions and will not be based on an HIV test. Confidentiality and disclosure components typically state that employees are not required to disclose status and if status is disclosed it may only be done so with written consent from the management. Benefits components typically give employees access to health insurance plans and estimate expected health care premiums and payouts, allowing PWHAs access to ARVs in the process and often stating maximum benefits. Ill-health retirement components allow the employee and management to strike a balance between stay-at-home and job-alternative options, usually encouraging employees to work as long as they can in conjunction with their wellness program. Many businesses have outside contractors who are not considered employees with the typical benefits. Policies typically outline benefits available to contractors often stating that they are not required to adhere to the policy, do not have treatment benefits, but do have access to prevention
programs. Most policies are approved by labor, labor unions, and company management.

Company A’s policy dates back to 1996 and possesses all of the components mentioned above. Other company policies are very similar but enacted much later. Company B’s policy dates back to December 2000 and includes all of the same components with added provisions for the immediate dismissal of medical personnel should they breach confidentiality with patients. Company C launched a policy in May of 2002 and plans on continuing to develop site-specific policies. Company D launched its program and policy in 1999 with the support of management and labor unions. An HIV/AIDS steering committee was established as well. Company D’s policy stands out in that it imposes a zero tolerance rule on harassment and discrimination, and engages in active partnerships with others for the reduction of HIV/AIDS in South Africa. Company E developed a policy in 1999 to enhance human rights and equal opportunity protection in the workplace. The policy includes procedures for managing HIV+ employees that are flexible enough for adaptation by country-specific branches.

All companies had developed an HIV/AIDS policy that is accessible to employees in a variety of ways including posting in public places, inclusion in newsletters, and in one case interactive computer stations available to employees. Keeping the policy available and accessible is necessary for boldening individuals to learn their status and to be cognizant of their rights, but policy development is not always the necessary first step toward an effective strategy against the disease. A policy may come later after motivation is assessed and support initiated. Newsletters or other ways to view the policy in private are necessary in the face of stigma. Finally, an HIV/AIDS policy must be a living one that is subject to change and revision as companies and workers see fit, barring
any backward steps which may negatively impact universal human rights for those living with and affected by the disease.
Prevention, Education, and Awareness

Many companies conduct economic impact, KAP, and/or prevalence surveys. Company A used a stratified random sampling technique to determine prevalence rates in their workforce. With a response rate of 79% and more than 1,300 people surveyed, average prevalence stood at about 9% in 2001. A multilingual KAP survey conducted that same year revealed that many employees believe traditional African medicine can cure the disease, that sex with a virgin will cure AIDS, and about half have never used a condom. In addition, many employees do not discuss HIV due to fears of rejection. The percentage of worker deaths attributable to HIV/AIDS has increased from 15% to 40% in recent years.

Training, condom promotion and distribution, peer educators, and community activities are all components of Company A’s program. Employees belong to a health plan which funds treatment for them and dependants including ARVs, general health promotion, nutritional counseling, STI treatment, and TB treatment. The company also has touch screen computer kiosks available in workplaces for employees to gather information. One informant stated that many people access the kiosks primarily for entertainment because the most highly visited pages involve condom demonstrations rather than STD or opportunistic infection information searches. Many are scared to
access the policy in public on the kiosks. A more confidential manner for information access is given through a national employee helpline for employees with questions. All new employees receive training in basic HIV/AIDS knowledge and the company program guidelines. Condoms are distributed in 200 different dispensers placed throughout the workplace at a rate of about 1.2 condoms per employee per month. Treatment of STIs is available at company clinics or through external providers and the KAP survey suggested that most employees prefer to seek treatment externally. One company clinic recorded 76 STI cases per 1,000 employees.

Company B did not conduct a prevalence study or an economic assessment but did conduct a KAP study on which to base interventions. Company B claims CSR as its reason for initiating an HIV/AIDS program. Awareness raising is accomplished through events, workshops, and theatre performance planned on a regular basis. The company also trains targeted groups of employees, in particular shop stewards and supervisors, and all new employees are educated on the policy and program.

Company B provides free government condoms via dispensers in the workplace. Distribution rose from about 4 condoms per employee per month in 2002 up to about 9 condoms per employee per month in 2003. Female condoms are available at the clinic which also treats STIs. Most employees seek STI treatment through external providers who are compensated through an insurance scheme. Such infections have decreased by 50% since program implementation.

Company C did not conduct a prevalence survey or an economic assessment but has begun tracking HIV/AIDS related retirement, disability, deaths, and turnover. A KAP study was done exposing the fact that many employees had false knowledge about
the disease. Upper management attended trainings in 2001 which have rolled out to other units through time and also been added to initial trainings upon hire. Company C’s condom distribution corresponds to about 0.4 per employee per month.

Company D conducted KAP surveys and discovered that myths about disease transmission and treatment were common among employees HIV/AIDS program coordinators were appointed as well as peer educators and company specific educational materials developed. All employees were trained about HIV/AIDS via a half day session during which the entire production line was shut down solely for this purpose, and presentations were made by the CEO, PWHAs, and professional drama groups. Condoms are distributed in areas such as restrooms and at entrances and exits so that workers can grab some on their way home from work. Distribution increased in 1999 from 700 per month to 17,000 per month (or 63 condoms per employee per year).

Company E, in 1999, assessed its policies and prevalence of HIV/AIDS in 45 branches and developed a three-pronged strategy that includes education, monitoring, and management. In 2000 Company E initiated an awareness campaign to educate staff, change risky behavior, and reduce the impact of the disease through peer education and the distribution and posting of company specific handbooks and information. This information was created with the help of NGOs and other companies and was made available to other financial companies and organizations after production. A second awareness campaign for 2002 focused more on living with the disease by providing positive images of PWHAs, giving information on treatment and nutrition, dispelling myths about the disease, and giving guidance for caretakers.
Workplace interventions among companies surveyed indicate moves toward holistic, flexible, and long-term approaches for combating HIV/AIDS. Prevention efforts include condom distribution, often in the form of dispensers placed in high-traffic areas, and all informants reported increases in the number of condoms given. Three of the companies began offering this service before condoms were available for free from government clinics. The most drastic increase reported was up from 700 per month to a stable 17,000 (a 24 fold increase) following the initiation of prevention and education trainings and workshops. However, in general people do not like to be seen taking condoms, and pervasive stigma still exists regarding the motivations and moral character of individuals, especially women, who use and carry condoms on a regular basis. The prevailing notion is that such people are cheating on their partners, already carry the virus, or regularly sleep with people that are positive. High traffic areas, however, may also be private to some extent (restrooms for example). One site found that people prefer not to take condoms from the dispensers at all but to remove them from storage rooms where the items are kept in large boxes before being transferred to the dispensers.

Another issue in South Africa is the notion that free or government condoms are of lesser quality than those purchased in shops. One woman told me that she conducted tests between store-bought condoms and those available for free, and found that over half of the free condoms contained holes which water passed through freely. I was told by a government employee in Botswana that this could not be because in fact the only difference between free and bought condoms is the packaging, which prevents individuals from taking them and reselling them on the street.
Education and prevention programs seem to have, generally speaking, taken a back seat in South Africa, especially compared to testing and anti-retroviral (ARV) programs. This is due in part to intense prevention education efforts in the past. Many informants claim that much of the public is aware of HIV transmission routes and has been bombarded for years now with pamphlets and media campaigns, which explain myth-busting facts about the virus. Nevertheless, some still do not believe the virus exists. Evidence points to the need to continue with education and continue to expose and refute myths. Traditional healers in some areas continue to claim that they can cure the virus, and some confusion exists in Gauteng province concerning a traditional widows’ disease known as ‘Makoma,’ which finds its way into a woman’s body after a husbands death and poses a threat to any man choosing to sleep with her until six to twelve months have elapsed following the death. Individuals questioned about this had conflicting ideas as to whether or not Makoma is in fact the same as HIV/AIDS. This is where traditional healers, in partnership with biomedical experts, are able to clarify misconceptions among the general public.

All of the companies visited use some type of employee handbook on HIV. Monthly company magazines or newsletters address HIV regularly, often touching on the importance of voluntary counseling and testing as well as education. One company is in the process of developing a resource center devoted to comprehensive disease management including a TV/VCR for employees to watch videos on subjects of interest. In clinics or other appropriate areas, however, each company provided employees access to free pamphlets and information regarding the disease. Tool kits have been and are being developed. The package for Company E includes screen savers for computers,
posters, and games for peer educators to use in education and awareness initiatives. Currently a tool kit for the automotive industry is being developed in South Africa with the help of Companies A, B, and D.

Informants stressed the importance of using PWHA speakers for education, however, this has become big business in South Africa and some of those capitalizing may not be appropriate according to the backgrounds and education levels of employees. Such speakers should, if possible, come from the surrounding communities and look and feel healthy to stress that anyone can get the disease and that one cannot tell another’s status by appearance alone. Religious leaders and speakers are being utilized as well to show that this subject is worthy of discussion even among the ‘holy.’ Such an approach is useful for including HIV awareness among a set of life skills in a framework that is acceptable to South Africans.

An effective education method is to give workers the opportunity to understand issues surrounding HIV in the real world. Some companies allow employees to use company time for volunteer efforts in surrounding communities. One company organizes weekly visits to a hospital giving workers the chance to spend time with AIDS patients. Awareness, sympathy, and compassion may develop as a result and workers may be more motivated to protect themselves from risk, seek answers to their questions, as well as stem their prejudices against those who have contracted the virus.

‘All-hands’ meetings have been used in order to underscore the seriousness of the disease and to allow for thorough targeting of all worker levels. Company D shut down operations for an entire afternoon in order to gather employees and discuss the impacts of HIV on their workplace as well as the local policy and workers’ rights in terms of
discrimination. Skits and plays were used to get the message across that the company supports those living with the disease and will not fire employees or disclose individuals’ status.
Peer Education

Peer educators are used at each of the companies surveyed and are the most powerful component of each of the programs. They “help people see things in a different manner” and are seen as planting sources of knowledge in workplaces and communities. Peer educators are almost always volunteers, although according to one coordinator they are nominated or hand selected in countries or parts of the world where HIV/AIDS infection rates are not as heavy. Peer educators should be representative of the company according to gender, age, worker tier, and income level. It is common to find very religious peer educators in South Africa.

Company A has a 1:46 peer educator ratio and they are selected based on peer nominations. About 75% of the educators actively participate in activities including training during team meetings, informal sessions, promotion of campaigns, and community outreach. Company B has a 1:52 peer educator ratio and they are selected based on sensitivity, empathy, communication skills, and popularity. They organize and conduct meetings and trainings and prepare monthly reports on education and condoms. Company C, in 2002, had 25 peer educators (a 1:36 ratio) who have been externally trained through a certified course and who attend regular workshops to update their capacity. Company C stated that about 15 peer educators are regularly active. Company
D’s peer educators, at a ratio of 1:41, are designated to encourage others to learn their HIV status focusing on the treatment program and the fact that a positive diagnosis is not a death sentence. They are also important in convincing others that learning of a negative diagnosis is very powerful information and efforts can be taken to remain negative. Company E’s peer educators participate regularly in training workshops and facilitate games and activities at corporate events to raise awareness of the disease.

Companies should focus on the quality of peer educators rather than quantity and it is helpful to establish a good core team before attempting to train too many. This facilitates use of a ‘train the trainer’ model and takes some burden off of coordinators themselves and may also limit the need for externally hired trainers. It is helpful to supply appropriate clothing for peer educators to help identify them to others. Peer educators answer questions that others may have in the workplace, however, people do not approach them often in public because stigmatizing assumptions may be made. One company whose employees have access to email noted that this is a good way for people to approach their peer educators confidentially.

There is some distinction between peer educators and peer counselors, the latter being further capacitated to discuss issues of living with HIV and disclosure for affected or infected individuals. Using comprehensive training not only in education and awareness but also in care and support is the recommended path for businesses. Among those diagnosed with HIV/AIDS in the workforce many consider suicide a viable option and do not know how to handle their lives after a positive diagnosis. Understanding that PWHAs can live healthy and productive lives for many years after contracting the virus is
an important message for peer educators to impart to their co-workers, who often have children and families to support.

Businesses try to have peer educators meet and debrief as much as possible. Some meet weekly, others monthly, and still others find it difficult to take all peer educators off of the production line simultaneously and cannot manage to find common times on everyone’s schedule to allow for full meetings. It was noted that motivation for doing the job of peer educator tends to decrease with time. As none of the companies included in this data provide monetary incentives for being a peer educator the primary motivation for doing so must come from personal passion, and it was mentioned that most peer educators try “a number of times before they give up.” This job is very difficult in the face of stigma and it may take some searching to discover rewards, which may be entirely personal and emotional, for a job well done.

Some support is given to peer educators through acknowledgement and recognition. One spoke of himself as a “freedom fighter” capable of motivating and speaking for the people of his company. However, such pride and resounding commitment are rare. Some companies offer incentives such as contests restricted to peer educators to go, for example, to an HIV conference on behalf of the company. Others offer trainings for the peer educators in exotic or exciting places they might otherwise never be able to visit. All of the companies, however, give their peer educators certificates of accomplishment and recognize them as vital components of their HIV/AIDS programs.

There can be a ‘give me’ effect with peer educators, particularly when efforts focus more on quantity rather than quality. Some may join the ranks just to see what they
can get out of it for themselves. There should be more emphasis on life skills education among peer educators so that they are not simply point persons for HIV but also life in general, and consequently less stigmatized. They also should be given more training on opportunistic infections and the side effects of AIDS medication. One peer educator spoke to me of the need to do more education in people’s homes, where there is a higher level of comfort for both parties as well as privacy, and where higher quality relationships can be established.

While the need for more disclosure and greater involvement of PWHAs in the workplace is necessary, peer educators who may be living with the disease should not be singled out and should be given a choice whether or not to disclose. The atmosphere in most workplaces is not at the level where even peer educators feel comfortable to disclose status in spite of the fact that many of them may be motivated primarily by their own positive diagnosis.

The need for labor and trade unions to more actively support peer educators was raised and some dissatisfaction exists regarding trade union backing for HIV/AIDS. All of the companies visited indicated a lack of white peer educators among their core teams. This was attributed to status consciousness and the notion that HIV is a black or gay disease. One coordinator told me, however, that infection rates among whites in one company had tripled in the past year and that the answer to this information had predominately been denial from the white community.

Peer educators do as much or more work in their own communities and on their own time as they do in the workplace on company time. Such efforts are a result of personal connections and working within one’s group of family and friends. Work with
churches is common as well as with youth groups. Company D encourages them to ‘adopt a tavern’ and use time spent socializing and drinking with friends at the local Shabeen or bar to correct misconceptions and answer questions about the disease. People are “relaxed and willing to talk” in taverns and much conversation centers on sexual matters in general. Company E noted that peer educators have been instrumental in helping to translate educational materials and employee handbooks into local languages.
Care, Support, and Treatment

Many of the coordinators with whom I spoke noted that medical schemes must be made more flexible in order to allow PWHAs to adjust work schedules and take time off work for unpredictable illnesses. Employees who test positive should be placed on wellness programs that include intense monitoring of CD4 counts and opportunistic illnesses or infections. Those that require ART often must leave work but should not be fired outright. PWHAs are protected by the policy, and South African law, in that situation. The focus should remain on returning to work in the future which may mean those with physically demanding jobs must decrease time spent on them and increase time doing something less physically intense. Individual case monitoring and personal attention are necessary to ensure that such an approach is viable.

Businesses tend to offer the option of on or off site clinic/health care, but on site care is not always comprehensive and often does not include VCT or HIV/AIDS care. On site care, when it does include HIV/AIDS care and treatment, allows for more direct monitoring and for the building of rapport and trust between medical staff and employees. Employees seek care for a variety of ailments and occupational injuries or illnesses at such clinics, which may allow for anonymity within the workforce but not in the medical setting itself. Confidentiality is guaranteed in an ideal situation.
An informant in Company B noted that having the clinic in a high traffic area, such as next to the cantina or café, contributed considerably to the success of the clinic. Workers can easily access their medications and do so under the guise of routine visits. Seeing the clinic daily helps remind individuals to keep appointments and seek information. The return rate for HIV tests was highest among all the companies surveyed at this particular clinic. Some have commented that testing on site is not good because “my face will give me away,” however if proper counseling is done this is less of a problem. Efforts should focus on identifying these gaps in the company’s own clinics and initiating training to create a knowledgeable staff. On site clinics facilitate direct observation of employees on the part of medical staff. One coordinator and her staff conduct regular ‘walkabouts’ on the factory floor which is particularly effective for identifying TB patients. Presence on the factory floor shows that the company cares and is actively involved in the medical situations of workers.

Off-site care in regard to HIV is a result of the relationship between businesses, employees, and their medical schemes (i.e. insurance coverage). This can help ensure nearly complete anonymity, but according to informants in Company’s B and D health care providers in South Africa often lack knowledge in the area of HIV/AIDS, particularly counseling and medication related issues. Case managers are assigned to positive patients and there may be more serious quality assurance issues associated with this, whereas on-site care allows a company to concentrate efforts on its own clinic staff in terms of training and capacitating them to deal with HIV. Problems with care are more difficult to identify when an employee’s status is unknown to any medical professionals within the company system of care. Off site care may ensure anonymity but this is the
easy way out for companies who should be trying to facilitate an environment where trust
and support for PWHAs is forthcoming, encouraging people to disclose and accept their
virus as simply a disease and not an indication of their personal or moral values or status
in society.

Clinical services must be focused on personal well being in general and
comprehensive disease treatment. STDs, TB, and other opportunistic infections must be
dealt with quickly and properly. When possible the best approach is one that facilitates
trust and builds solid relationships between employees and health service providers.
Employees are more likely to trust the medical staff, and are therefore more likely to seek
treatment, when nurses and doctors are familiar with that employee’s particular personal
and work life. In one company on site care, and the trustful relationships that result,
account for a nearly 70% VCT rate and a 99% TB medication completion rate. Follow-
up and monitoring of HIV positive employees is essential to maintain productivity, much
more so than a simple ARV medication schedule, as well as to ensure that proper
nutrition suggestions are being followed. External case managers take on this burden
when off site care is utilized and company health care staff, who are in a much better
position to see and visit with workers on a more regular basis, are left in the dark.

In South Africa the ‘African potato’ or Modicare (an immune system booster) as
well as E-pop (soybean fortified corn maize meal) are examples of potential quick fix
nutrition options. However, more focus should be placed on the development of
vegetable gardens and maintaining a balanced diet for HIV positive employees and their
families. Making seeds available as well as providing courses in nutrition and simple
gardening techniques may go a long way in helping PWHAs maintain their immune
systems. Company D participates in an initiative with such components. The vegetable
garden is grown next to the community outreach center.

Employees should also be counseled on proper birthing procedures in relation to
HIV/AIDS. Nevirapine, the standard PMTCT medication, is available in government
clinics and should be accessed whenever possible. However, in the country there is little
follow up and monitoring after this treatment is delivered. While it is widely recognized
that an infant may contract the virus through mother's breast milk, according to an
informant in Company D, little is done to make sure that milk powder and safe water are
available for the child during his or her nursing years. Work with traditional birth
attendants is needed to increase and safeguard sound responses to this problem.

While post exposure prophylaxis (PEP) does not seem to be an issue for a
majority of companies, which are often based in urban areas and capable of securing such
medication should the need suddenly arise, on-site needle sticks occur as well as bloody
accidents that may jeopardize observance of universal precautions in the workplace.
While HIV is rarely contracted in the workplace problems can occur which necessitate a
rapid response, and providing PEP for businesses that are too far from urban centers or
state-of–the-art hospital facilities for quick delivery of such drugs should be considered.
Voluntary Counseling and Testing

Company A’s VCT project was launched in 2001 and is available to employees and dependants for free through company clinics and external providers who are reimbursed. Since 2001, Company A has provided VCT services for 1,750 employees, which is about 39% of the workforce. The company attributes this success to clear communication about employee benefits and the promise of treatment, but also offered cash prizes in the form of a raffle.

Company B began VCT in 2002 and provides the service free for employees at on-site clinics, while dependents are compensated through insurance. It is estimated that 77% of employees have been tested. The company has provided counseling to 88% of employees and has an 85% consent rate after counseling and tracks VCT rates by department.

Employees in Company C also have access to VCT services if they are on a medical plan through on-site and external providers. Those without insurance may access the service on a fee basis. About 65% of Company C’s employees are on a medical plan, and about 16% of its employees have accessed VCT as of 2003. This number most likely increased when the company carried out a VCT campaign that same year.
Company D provided VCT for a designated period of time following the factory shut down training session. On-site health clinics provide the service on a more consistent basis which includes a pre-test one-on-one private counseling session, the signing of an informed consent form, an ELISA blood sample test, followed by another counseling session. Anyone found to be positive is enrolled in the Aid for AIDS treatment program free of charge. This non-profit organization collects left over medication from developed countries and re-distributes it to needy people in Latin America, the Caribbean, and Africa. The African AIDS Program is currently providing antiretroviral therapy to 83 clients in Burundi, Ethiopia, Mali, Uganda, Kenya, South Africa and Zimbabwe (AFA 2005).

Company E, whose employees represent a different tier and skill level higher than other companies presented here, does not provide VCT services but encourages employees to get tested through their preferred provider. The setting for this workplace is an office building rather than a factory, therefore, no medical facilities exist on site. Located in a premier Johannesburg office park, most employees working here are able to access VCT during non-work hours.

VCT has the potential to bring new life to a company’s prevention programs, but rates remain surprisingly low for most companies in spite of comprehensive medical schemes that make ARVs affordable and within grasp of not only an employee but also families of employees. It seems that education and awareness initiatives are not as successful as they need to be, otherwise workers would not question the company’s motivation for wanting employees to be tested and know their status. Many people do not understand why companies would want employees to be tested, indicating a general
lack of trust. Hesitancy exists regarding testing positive and then becoming reliant on the company and medical scheme for the remainder of one’s life. People are scared to know their status in general because they “don’t want to know they will die.” Some coordinators have toyed with the notion of providing incentives for employees to be tested but, according to informants, this should not be necessary and individual motivation is preferable.

It is helpful to provide VCT centers in every department, particularly in large companies, to facilitate quick access. However this may be unsustainable, as the rooms cannot be staffed for very long without high funding costs. Such an approach may be appropriate following a mass media campaign within the company where all employees are sensitized and VCT centers made widely available for a short and specified amount of time. However, VCT should continue beyond this even if only in one place, such as a room or office, or at or near the company clinic. Combining sensitization and VCT is an viable idea, since many informants noted the increased interest in VCT following large campaigns and particularly leading up to World AIDS Day in December. One suggestion is to require compulsory attendance at sensitization meetings and then using an opt-out form of VCT as a general company policy so that all employees will be tested unless they make a conscious decision otherwise.

One problem in South Africa is that companies are not required to offer benefits to seasonal or temporary employees. This decision is up to the company and some division may occur in upper management over whether or not this is cost-feasible. Also, employees on medical schemes must pay extra for dependents and coverage of the family is not consistent and often limits the number of children allowed to participate.
The use of rapid versus ELISA tests within companies, as well as in general, is an issue of debate. Among the sample in this research Company C solely suggests using rapid tests and claim that many choose not to return for their ELISA results. When they do there is denial on the part of an individual as to whether or not he or she received the correct results. The idea that some mix up may have occurred is common. However, it should be noted that one may go on to verify with a rapid test after this occurs. An ATTIC employee told me that this happens often, and that she has never seen a case where an ELISA and a rapid test produced discordant results. Some confusion exists and more myths developed about rapid tests because they are saliva based and so many prevention programs stress that saliva is not a transmission route. One informant stated that “people don’t take rapid tests seriously,” and that retention rates for posttest counseling with rapid tests are much lower than with ELISAs. An informant in Company D mentioned that suicides due to results would increase drastically if the company used rapid tests and that he “would not want to be responsible for those tragedies.”

Some people commit to behavior change while waiting for, and consequently thinking about, results from ELISA tests. An informant in Company E stated that one must have their “head space” correct before hearing results. Company B puts more than one indicator on ELISA results including first and last name and company number to limit denial on the part of workers. The same company has a 98% return rate for ELISA testing at its on-site clinic.
**Anti-Retroviral Therapy (ART)**

Company A allows employees and dependants to confidentially join a treatment program called Aids for AIDS (AFA). Since 1999 this program has enrolled 150 members on Company A’s insurance scheme of whom 130 are currently participants representing about 26% of the estimated HIV+ employees in the company. Many are on ARVs. Many participants (62%) are already experiencing signs and symptoms of AIDS by the time they join the plan.

Company B’s ARV program is also provided through AFA. Company B’s wellness program provides antibiotics for OIs, as well as counseling and nutritional supplements for PWHAs. Of employees who have learned their status through VCT 90% participate in the wellness program and 40% are enrolled in the treatment program AFA. Dependents may also join the treatment plan.

Company C employees living with HIV have regular check-ups at an on-site clinic and are offered antibiotic treatment for OIs. Counseling is provided as well as nutritional supplements and advice. If an employee has insurance then more specifically appropriate benefits may be conferred depending on the plan chosen. A financial cap exists on ARVs for employees in this situation ranging from US $1,500 to $4,000.

Company D enrolls HIV positive employees in Aid for AIDS free of charge.
Support for treatment with ARVs is also provided to a community outreach and income generation project for PWHAs from the surrounding township. Company E’s employees are supported by their insurance schemes for any life threatening illness.

Program coordinators agree that ART should be the last line of defense against the virus and that ‘wellness’ and ‘disease management’ are much more important. According to informants in Company’s B and D this is particularly true in the South African context where medical providers have limited knowledge of the side effects of ARVs and often switch patients’ medications upon request and for the wrong reasons. Resistance is occurring as a result and patients need to understand that the drugs will not make them feel 100% better. Side effects differ based on the individual but can involve nausea, bone marrow pain, gastrointestinal discomfort, and a host of other problems.

ART requires adherence to diets and regular eating schedules and many South Africans do not have choices in food variety and often experience a lack of food altogether. Nausea may encourage someone to skip breakfast and subsequently skip medications. Disease management should be the priority and this requires close monitoring of HIV positive individuals. The lack of VCT participation among South Africans means that HIV is often not discovered until it reaches late stages, at which point drugs are not helpful and are so toxic as to cause potentially even worse complications.

Many companies do offer ART through medical schemes and often the cap on spending is higher for people needing these drugs. Still, VCT rates are low and people are not learning their status. Apparently the “ARV incentive” is not enough to motivate
people to make significant changes in behavior or get tested. Some informants went as far as saying that a majority of their workers are scared of ART. Employees in situations where trust is not high should have several delivery options made available to them. One company noted that employees may receive their medications on site, at another clinic, or through the mail.
Community Involvement

For Company A, cost benefit analysis was important to help determine whether or not to implement an HBC component to its program. It was decided that the company’s best interests would not be served by providing continuous supportive provisions.

Company B provides trainings for external medical providers in HIV clinical issues for both biomedical professionals and traditional healers. “B” also works with religious groups to capacitate members on stigma reduction and will in the future establish a community center with VCT, programs for youth, and income generation projects.

Employees in Company C are encouraged to participate in HIV/AIDS outreach providing support to the community. Many have been allowed to adjust their shift schedules in order to visit an AIDS hospice or orphanage. Also the company sponsors support for several orphan homes in surrounding communities in partnership with other companies and organizations.

Company D has increased levels of HIV/AIDS awareness and knowledge amongst the families of employees by focusing on the youth and sports. Interventions have also been undertaken to raise awareness in the automobile industry in the country through partnerships and providing assistance to suppliers and dealers as well as trade unions. Also, an income generation project was launched that provides treatment and
support for PWHAs in the surrounding community whether or not they are otherwise affiliated with the company.

Evidence points to the need to address the entire package of issues associated with HIV/AIDS. People in South Africa are scared of being tested not only because they are afraid of dying but also because they lose status and respect within their communities. The portrait of an AIDS patient thus far in southern Africa supports the view that these people are at the end of their lives, sick and vulnerable, lacking in morals and being punished by a greater power. ART is misunderstood because it does not cure and many people in Africa believe that western medication is a one-time quick fix, one step above the traditional cures which are cheaper yet less effective. AIDS is so stigmatized that products bearing the HIV/AIDS red ribbon anywhere on the box will most likely be left on the shelf by consumers. Company C had to pull items off the shelf because they had printed red ribbons on them and consequently were not selling.

Much of what workplaces are fighting against is encapsulated in such stereotypes. HIV is often perceived as a disease of the ‘other’ and many do not feel vulnerable. Ways to get around this involve addressing why people place themselves at risk to begin with, and mitigating the circumstances that allow for vulnerability. As such some companies have begun classes and trainings addressing the wider scope of problems associated with HIV. Offering information to employees and their families about how to increase income within the household, for example, helps further economic independence and limits the attraction of commercial sex work. How to cope in an increasingly industrialized world should be a topic of special consideration, helping South African society adapt traditional realities and values to what may appear to be new situations and perspectives.
Discussion over sexual issues, for example, may no longer remain taboo. Conflict resolution in marriage is an increasingly necessary skill in order to limit infidelity and to maintain love and devotion between husbands and wives. Empowerment broadens the options available to workers and their families and helps offer people choices so that they do not place themselves at risk, giving them the pride and negotiation skills necessary to increase self-efficacy regarding condom use.

Particular attention should be paid to the vulnerability of women in South Africa. An informant in Company B completed a study showing that on average 3 out of 10 women in the country are victims of sexual violence. There is a prevailing attitude among women that it will happen to them at some time or another. In many cases dowry is still paid to the family of a woman, supporting the ‘woman as property and domestic servant’ value so common in the traditional past. Women in the country are not likely to report sexual violence to the police in spite of the fact that two-thirds of such perpetrators are known personally to women. Young girls, left home with uncles and relatives who are often unemployed and drinking, are molested due to unsupervised situations. According to Company B’s program coordinator women are taught to garner the favor of men and are led to believe that most men will run away from intimacy should the subject of condoms be broached.

There is an acceptance of violence against women that goes as far as to incapacitate health workers themselves. One informant in Company B discussed the fact that nurses working there are often so emotionally scarred by sexual violence in their own lives that to properly counsel another woman on how to deal with it is a difficult, intimidating, and frightening situation.
Capacitating health service providers in this area is necessary. Talking with men and exposing their prejudices and prevailing ‘blame the victim’ mentalities are necessary as well. Married adult women need to hone skills related to ‘raising a non-rapist’ male child as well as a proud and strong female child, capable of defending her rights and values. One trainer uses newspaper articles from around South Africa during workshops to facilitate discussion and she noted that such articles are available and printed every single day. Companies have begun to use female rape survivors as public speakers to raise awareness on some of these issues. Financial independence and self-defense classes for women were recommended as one path of action.

Community involvement activities tend to focus on the communities where a majority of the company’s workers and their families reside. None of the companies visited by the author utilized significant numbers of migrants within their labor force and it should be noted that this set of workers brings other community involvement issues to the forefront. Namely, the lack of stability and residential responsibility for these workers coupled with disposable income and no immediate family obligations results in more drug use, drinking, and visiting commercial sex workers.

Still, many stable communities are places of little hope focused on day-to-day survival. As such, what communities want from companies may not always be possible. One community was interested in a company providing home based care for patients but the company couldn’t manage because of program costs. Nevertheless positive feedback and successful programs are more possible if the community is involved in planning from the start when and if companies choose to become involved.
Companies are unable to provide treatment to all family members, primary health related or otherwise, at on-site facilities because of security and the sheer numbers of people that would come seeking care. However, in most cases family members are encouraged to become involved in counseling should a worker or spouse be diagnosed as positive. This stems from the fact that stigma is pervasive enough that workers feel uncomfortable, in general, discussing HIV/AIDS at home because it suggests to family members that he or she may have the virus. Family members are also, in many cases, encouraged to participate in classes or trainings on HIV/AIDS. One company in particular focuses on children and attempts to “impart upstanding values and morals” to the children of workers, as this is the next generation of worker and will help build a stronger South Africa for the future.

Companies A, B, and C are working with doctors and nurses at health clinics in surrounding communities to help fill the knowledge and training gap for government employees in HIV/AIDS. HIV is a fairly new disease and many professionals received little to no information during their school tenure on the disease and its complications. Such efforts to work with service providers are legitimized in most cases by the awarding of ‘points’, which are necessary for professionals to maintain their licenses to practice within the country. Many companies are also working with traditional healers to train and support them in HIV/AIDS knowledge. South Africans often seek treatment from traditional healers and businesses recognize that this can directly benefit or harm their workforce.

Other community involvement efforts include developing multi-purpose community care centers, where information is available not just on HIV but on life skills
and job or education opportunities. Work with community organizations and non-
governmental organizations (NGOs) is going on as well with some businesses offering
small grants for projects that benefit surrounding communities. Businesses have also
become involved in sports activities and in setting up areas for sports games and
entertainment. One company regularly grates the soccer field and keeps netball courts in
proper shape. Another has its own soccer league and does HIV education and awareness
during matches, at which family and community members are present. Such gatherings
can provide excellent forums for public health education.

Companies B and D are helping to provide income generation opportunities for
PWHAs from the community who are not necessarily related to employees. Such effort
helps people regain or hold onto their dignity and according to an informant in Company
D “gives them a reason to wake up in the morning,” as well as provides money for food
and other necessities. In Company D this has been coupled with financial support for
travel to hospitals, which can be quite far, for purposes of monitoring disease progression
and CD4 cell counts. Web sites are being developed to market PWA crafts as well.
Company C sponsored the construction of homes for orphaned children in surrounding
communities and went into partnerships with other companies for the window glass and
paint. An NGO provides the staff and house parents for the children. Such houses will
not include advertisements for the company and are intended to be a natural part of the
community in an attempt to limit the potential for discrimination against its occupants.
DISCUSSION

Implementation and Success

Company A’s partnership with a governmental agency provided that business with project management, technical expertise, and financial support. Trade union partners contributed to the design and helped provide the input necessary to stimulate workforce participation. Implementation of assessments concurrently with the project allowed objectives to be more rapidly met than if project implementation occurred after assessments. Peer education allowed for greater access to workers. Company A is required to conduct regular monitoring and evaluation of the project’s interventions twice per year specifically as it relates to outcomes and activity goals. The company’s HIV/AIDS committee meets every two months to discuss the project and includes members from management, human resources, medical, labor, and non-unionized staff.

Company B’s rapid VCT uptake was facilitated by a culture of trust between labor and management. The company recommends KAP surveys as a means to develop company specific programs. Company B regularly evaluates program performance by tracking VCT uptake, wellness program enrollment, peer educator responses, condom distribution, and STI cases. Their HIV/AIDS committee is staffed by multi-stakeholders and monitors the budget as well as evaluates program components. Company C has
developed assessment tools to measure program performance, which is reviewed on a quarterly basis by the company’s board. The company recently conducted an economic impact assessment as well.

Company D has seen its situation improve in numerous ways: HIV/AIDS knowledge has increased to the point that every worker has been exposed to education and training, people speak more openly about the disease and are seeking advice more often, condom distribution has increased ten times, community organizations are seeking technical assistance, and benefits have been restructured to better protect PWHAs in the workforce. The HIV/AIDS steering committee meets monthly to monitor and evaluate the program.

In Company E, the advice of HIV/AIDS organizations at the early stage was helpful, such as presentations about the program to convince senior management to act. Country-specific offices were essential in the development of the awareness program, and sharing of information was and is critical to widespread relief from the disease and is not an issue to be used for business competition.

In South Africa, much like the rest of the world, society does not support HIV status disclosure. People do not want to be identified as positive. Several informants stated that many people are sick of hearing about HIV/AIDS and that people don’t think of this disease constantly in their daily lives in spite of the high infection rates in the country. Employees of multinational companies are privileged to receive knowledge and information about the disease that is reliable and consistent, but many still follow outside information and there are notable negative influences and people within companies that prohibit establishment of trust and acceptance of anti-discrimination policies. Some
employees believe that their companies are lying and that by disclosing their status they will be fired or laid off.

In terms of cost-efficiency anything addressing health in the workplace should be considered and costs must be measured over the long term. This includes educating and working with children of employees to secure their place in the future. Many companies have spent funds over initial budget estimates to continue to fight the disease and this is not due to ARV costs but to cost-subsidies related to medical schemes.

Corporate Social Responsibility (CSR) was the most frequently mentioned motivator for companies in their fight against HIV and this is related to having a good name in the community, noting that the workplace cannot escape the influences of the communities in which businesses are situated and from which workers come. The traditional indicators such as lost productivity, absenteeism, and staff turnover are no longer huge concerns and many businesses have implemented programs without conducting economic impact assessments. Emphasis is placed on doing the right thing for employees, bearing in mind that HIV/AIDS is causing severe trauma for employees, if not directly then indirectly through family members or friends infected with the disease. Many must spend significant amounts of time away from work caring for or contributing to care for others. Some businesses, however, focus more on waiting for those infected to die and make way for new workforces. Others still are afraid of being attacked by the negative media press, which unfortunately tends to focus less on what companies are doing well and more on what they are not doing.
Implementation and success of programs is facilitated by a number of factors including high levels of trust between employees and medical staff. HIV is a personal disease and should be addressed on a personal level. One on one discussion, counseling, and treatment should be a focus as much as possible. Relationships are important for developing trust and consequently maintaining effective monitoring of positive individuals as well as safe practices for uninfected people. It helps whenever possible to help people realize that the company cares about its employees and this is furthered by including family members as much as possible. While mining companies often utilize free clinics many of the companies surveyed here rely on medical schemes that offer more comprehensive and exhaustive services helping to solve problems associated with opportunistic infections as well as the usual range of occupational health concerns.

Effort must be put into understanding the demographics and needs of employees. For example, one company surveyed employees and found that sexual partners were very limited contradictory to previous assumptions. Based on this evidence the company knew not to focus their prevention efforts on monogamy lest they risk providing irrelevant education. However, shifts in partners tend to occur every few years, suggesting that education should be focused on knowing partners’ previous histories and potential past risk behaviors as well as HIV status. Understanding and communicating with workers, who will be the beneficiaries of programs, helps ensure that local branches of multinational companies are capable of designing their own relevant interventions based on local need.

Identification of proper communication channels from the very beginning is necessary to help programs unfold successfully. Designing interventions from the top
down will almost inevitably lead to program failure. In South Africa, trade unions are especially helpful here as they give workers voices and negotiating power with companies and businesses. This helps to ensure a multi-sectoral response as trade union contacts are manifold and multi-tiered. However, trade unions themselves need continual motivation to help maintain involvement.

Government involvement is necessary as well and if businesses can align goals with government programs some help and support from this sector will be more likely. The Automotive Industrial Development Center (AIDC), which is a government agency, helps fund projects and is currently developing a tool kit within that industry. Should governments or trade unions seem uncooperative one informant suggested taking the approach down one level to work with regional or local representatives. Trade union representatives are chosen for each company and they can broach subjects with larger committees or task forces within their own organization. Governmental contacts can be developed nationally, regionally, or by city.

Apart from KAP surveys, which may be regarded as interventions in and of themselves due to increasing awareness and causing people to question their own knowledge, large-scale campaigns within companies can help to sensitize and prepare workers and staff for more intensive future interventions. This can include posters and public gatherings as well as distribution of employee handbooks or other literature. Collaboration with radio, TV, or other media to promote AIDS education and awareness is helpful as well and can include billboards or other public advertisements. All of the companies sampled had developed posters and internal documents for education and
awareness, however, none had partnered in collaboration with media or advertising companies.

KAP surveys and prevalence assessments “should be done well or not at all.” Several informants mentioned that quality assurance with surveys is difficult to guarantee and resulting data is difficult to compare and often not fully reliable. Program coordinators varied drastically on whether or not KAP and prevalence surveys are necessary at all. Some relied on prevalence assessments from their own VCT programs, others did blind assessments with blood supplies, and others used rates from surrounding clinics and antenatal samples in communities. One informant found prevalence rates necessary to measure impact, but the majority felt that this was a waste of time and money. Some companies are able to hide behind such data and use it as an excuse not to implement programs at all. A business may justify inaction as a result, when knowledge of HIV transmission routes is not necessarily indicative of employee risk and/or vulnerability to the disease.

The involvement of top level staff for support and initial design of HIV/AIDS programs is necessary. An understanding of worker perspectives facilitates receptivity of programs, but they will not take off without support from upper management. Many companies note a serious lack of involvement from upper level management and white employees. While there is no problem getting whites and supervisors to attend trainings having them talk about HIV openly and admit it as a problem within their communities is a different matter. Businesses recognize this as a problem and one common response has been to get the Chief Executive Officer (CEO) and other higher-ups tested in the same facilities available to workers and publicize this clinic visit in an attempt to lead by
example. An overarching concern is that peer educators need more support from their
direct supervisors in order to become more effective.

According to one informant the white community in South Africa is isolated and
many are “too busy” to bother with testing and attending trainings or workshops. Within
all of the companies visited white peer educators are rare and often non-existent, other
than program coordinators themselves. Whites in South Africa, in general, feel that this
disease is a black disease. One woman remarked to me that “apartheid is in their genes”
and with its end in 1994 and a long history of institutionalized discrimination it will take
South Africa time to heal from these wounds. White trade unions are not very active in
general and should be more involved with encouraging members to participate in the
struggle against HIV and AIDS in the country.
Ways Forward-Lessons Learned from Stigma

Stigma comes from both how one perceives oneself as well as how others perceive them. To combat this requires addressing individuals’ own personal concerns with HIV as well as society’s perceptions and assumptions. Stigma remains the main factor as to why workplace programs are not going smoothly. The workplace cannot escape community and societal influences. Issues and concerns within the community are the same in the workplace and it is impossible to divide the two. Currently in South Africa there is little incentive for people to present themselves as HIV positive. According to several informants from Company’s A and D, ARVs are not enough and most people would rather die than risk losing status in the community. Thus, companies must attempt to bolden and empower people to resist the outside negative perceptions of HIV/AIDS and to realize that this virus does not mean that a positive individual is a bad person.

Informants overall felt that stigma is beginning to decrease but the process is very slow. An informant in Company B brought up the fact that 15 or so years ago TB was equally stigmatized in society but is no longer considered the fault of the victim. Stigma surrounding HIV effectively displaced stigma around TB. HIV may go through a similar process, hopefully not through displacement by a greater health threat, but as myths are
destroyed and as the process of time allows for acceptance of the fact that everyone is vulnerable to this disease regardless of their sex lives, religion, and status in the community.
Involving people with AIDS and other unique initiatives

In terms of advising the implementation process of workplace programs in other companies, and learning lessons from their own programs, coordinators overwhelmingly shared the desire to see more disclosure among their staff. People are beginning to do so but this is a recent trend. VCT rates are not yet as high as most coordinators and as one informant from Company D put it “to know one’s status is one thing, to disclose is a different kettle of fish.” The workplace should be a warm environment that is conducive to disclosure and free of stigma. Once again, the connection between community values and workplace settings is undeniable.

Greater involvement of people with AIDS (GIPA) is one way to potentially increase disclosure within workplaces. This model places PWHAs in workplaces with a variety of duties ranging from the typical jobs or duties of that workplace or industry to acting as peer educators and HIV/AIDS coordinators for companies (UNAIDS 2002). The idea behind such an initiative is to show the workforce that people can live with the disease and maintain productive and satisfying lives. They act as emblems of consistent activity surrounding HIV/AIDS in the workplace and are typically on-site and actively paid members of the company. There are drawbacks, however, and presenting oneself as an HIV positive role model can be challenging and isolating for many individuals.
Other suggestions given by informants for new and unique initiatives include increasing one-on-one or small group education, placing more of a focus on children, and following cohorts throughout their lives to ensure that education and information is appropriate and useful depending on life stages. All of this would help show that the company cares about employees and is willing to offer the personal and consistent attention necessary to increase and maintain trust. These initiatives also reveal a desire to tailor interventions to particular age groups and to keep education appropriate throughout a lifetime.

Several coordinators found that programs, literature, and counseling need to offer more in terms of issues surrounding death and dying, the writing of wills, and what happens to one’s family when an HIV positive breadwinner comes to the end of his or her life. An informant in Company E (a financial services company) noted that many employees who have died from AIDS in the past failed to utilize company benefits at the end of their lives and consequently wives and children were left without the money and services that would have otherwise been available.
CONCLUSION

This research is not intended to generalize to a majority of businesses or locations around the world but to offer a brief snapshot of what is working for some businesses in South Africa. It offers suggestions for the direction of workplace programs in the future by pointing out some issues and concerns of individuals currently involved. While this thesis offers few solid conclusions the data collected point to the need for more directed and focused research in this subject area as well as more comparative case studies within workplaces. The need for consistent and reliable monitoring and evaluation of HIV/AIDS workplace programs would help ensure that future efforts are appropriate, realistic, result in fewer infections and better treatment, and are cost effective as well.

Some of the most important issues raised by this study include how to keep peer educators motivated and supported within workplaces, the importance of stigma and why it cannot be ignored, the undeniable relationships between workplaces and communities, the use of rapid versus ELISA testing, and the need for more disclosure and involvement of PWHAs in the workplace.

It is clear from the ILO estimates without treatment, by the year 2015 we will have lost 74 million workers globally since the start of the pandemic (see appendix I-D). That is 46 million more than we lost up to this year, but, it assumes that PWHAs in the
workforce have no access to treatment. While workers in the US have had access to ARVs since the drugs’ debut (Newberger-Lowenstein 2001) workers in Africa not covered under medical schemes await a government rollout (IRIN PlusNews 2005b). It is true that more people have access to ARVs in the US but an issue not commonly discussed is the social classes of those with access. A higher tier worker in South Africa has more opportunity for HIV/AIDS education and treatment than a lower tier worker in the US. I have already mentioned that the US and the RSA have HIV/AIDS rates which are thirteen times higher in blacks than whites (Basyurt 2005; KFF 2005a). Both countries also are the only two industrialized nations not to record mortality rates by socioeconomic status (Farmer 2003; Navarro 1990). There are more parallels between the two countries than commonly assumed. The legacy of apartheid is akin to the legacy of slavery in the US and both societies continue to struggle with racial integration and tolerance. States in the US and provinces in South Africa have local laws subsumed under wider government legislation. There are concentrated areas of immense overdevelopment (Miami or Cape Town for instance) surrounded by vast expanses of undeveloped rural areas (the Everglades in southern Florida and the Western Cape). Inequalities extend past social class to include the urban/rural divide (FAO 2005; Stephens 1996).

Arguments against the use of ARVs in Africa assume the worst in terms of infrastructure and drug delivery on the continent and subsequent multi-drug resistance. If we assume that half of the 46 million workers expected to die without treatment will never have a medical plan or support for treatment, massive efforts to expand treatment to workforces could still add years to the working lives of 23 million people.
Shareholders must hold businesses accountable and boards should act to provide treatment to workers regardless of social class or skin color. Governments, schools, NGOs, and organizations should more actively seek partnerships with philanthropic multinational corporations regardless of workplace HIV prevalence or lack of obvious economic impacts.

Involving people living with AIDS more in the workplace is a necessary step toward reducing stigma and proving to employees that the reality of this disease is much more than a stereotype. However, open disclosure is not to be taken lightly. One presentation by a former GIPA participant in a recent research symposium highlights the fact that claiming the illness openly to peers may lead to isolation and dissatisfaction at the job. If done well, however, it is this researcher’s assessment that GIPA-type models will greatly help facilitate the more open disclosure within workforces that program coordinators in large South African companies would like to see happen. This is one way in which businesses can obtain the critical mass necessary to combat discrimination and stigma within their own labor force, hopefully setting a standard that the rest of society can follow as well.

Workplaces differ widely based on a variety of factors and all have their own cultures and contexts, which must be considered in the design and implementation of any health related program. The involvement of all levels of affected parties is necessary for success. This means using not only a bottom-up approach which takes into account the perspectives of workers on all levels but also requires “ceiling work” among the top decision makers within workplaces. Implementing programs to combat HIV and AIDS in the workplace takes time and effort and no cookie-cutter formula exists that can be
applied universally. Component based approaches are more easily adaptable. The differences in approaches toward peer education and VCT efforts between workplace settings show us that even these common responses, often the staples of commendable workplace interventions in Africa, require more thought and effort than what might be assumed in order to apply them effectively. Companies, NGOs, governments, and donors must consider the diversity in the workforce, as well as local resources and constraints, which can affect the program on the ground. Again, local context is the key.

Ethnography and participant-observation are examples of research methods that can be utilized effectively. This author’s suggestion is for researcher’s to conduct long term ethnography by participating in worker trainings, assisting with projects, and possibly even living and working in townships to get a community perspective as well. This would facilitate intervention development or modification to include concerns or issues of which decision makers may not be aware.

Some of the biggest challenges for workplace HIV/AIDS programs lie in maintaining the momentum of concern among employees and the motivation for investment by decision makers. In the wake of the tsunami in Southeast Asia, HIV/AIDS activists watched as billions of dollars were donated to the cause during a short period of time. It appears that responses to immediate devastating crises strike more sympathy in the hearts of donors than the slow, hidden, and complex killer known as HIV/AIDS (IRIN News 2005a). In this author’s opinion the biggest obvious difference, however, is the stigma attached to HIV versus conceptions of the tsunami as a natural disaster. A re-evaluation of risk groups, due to the diverse ways in which people construct their social identity, is necessary.
In light of the resources in the private sector and the lack of funds for health care in developing countries multinational businesses and corporations will be called upon more and more often to partner with the public sector to support health prevention efforts and disease surveillance. While social responsibility is not a new consideration on the part of corporations the far-reaching impact of HIV has raised red flags in the developing world. The response has been impressive from some and depressing from others, but one of the biggest obstacles has been overcome. Businesses are beginning to wake up and take action, others are noting how this can benefit society, and the potential for collaboration has emerged.
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Appendix I

*Appendix I-A: PWHAs in the labor force*

<table>
<thead>
<tr>
<th>Country</th>
<th>2003 Prevalence Rate</th>
<th>PWHAs (15-64 years) in the labor force in 2003</th>
<th>Total Population 2005 (X 1000)</th>
<th>Life Expectancy at Birth 2000-2005</th>
<th>Dependency Ratio (dependents per 100 non-dependent persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>21.5%</td>
<td>3,698,827</td>
<td>45,323</td>
<td>48</td>
<td>57</td>
</tr>
<tr>
<td>United States</td>
<td>0.6%</td>
<td>928,800</td>
<td>300,038</td>
<td>77</td>
<td>50</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>1.5</td>
<td>26,084,517</td>
<td>3,866,468</td>
<td>n/a</td>
<td>55</td>
</tr>
</tbody>
</table>

Source: ILO, 2004
### Appendix I-B: GDPs and losses due to AIDS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>392,380</td>
<td>8,923</td>
<td>7,230</td>
<td>115</td>
</tr>
<tr>
<td>United States</td>
<td>9,221,212</td>
<td>31,660</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>20,150,840</td>
<td>5,641</td>
<td>25,092</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: ILO, 2004; x=no impact
### Appendix I-C: PWHAs unable to work because of HIV/AIDS

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of PWHAs unable to work-1995</th>
<th>Number of PWHAs unable to work-2005</th>
<th>Number of PWHAs unable to work-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>8,090</td>
<td>298,280</td>
<td>481,740</td>
</tr>
<tr>
<td>United States</td>
<td>58,610</td>
<td>14,880</td>
<td>20,740</td>
</tr>
<tr>
<td><strong>Total (all countries)</strong></td>
<td><strong>546,380</strong></td>
<td><strong>2,352,650</strong></td>
<td><strong>4,195,530</strong></td>
</tr>
</tbody>
</table>

Source: ILO, 2004
Appendix I, continued

Appendix I-D: Cumulative mortality losses in workforces due to HIV/AIDS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>64,900</td>
<td>499,900</td>
<td>2,070,000</td>
<td>4,423,300</td>
<td>6,634,500</td>
</tr>
<tr>
<td>United States</td>
<td>506,000</td>
<td>922,000</td>
<td>1,316,200</td>
<td>1,714,800</td>
<td>2,143,900</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>4,458,900</td>
<td>12,779,600</td>
<td>27,654,100</td>
<td>48,174,900</td>
<td>74,210,400</td>
</tr>
</tbody>
</table>

Source: ILO, 2004
Appendix I, continued

*Appendix I-E: Orphans and annual working age deaths due to HIV/AIDS*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>1,100,000</td>
<td>10,880</td>
<td>401,330</td>
<td>648,160</td>
</tr>
<tr>
<td>United States</td>
<td>x</td>
<td>78,860</td>
<td>20,020</td>
<td>27,920</td>
</tr>
<tr>
<td>Total (all</td>
<td>14,668,800</td>
<td>733,966</td>
<td>3,165,470</td>
<td>5,623,750</td>
</tr>
<tr>
<td>countries)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ILO, 2004
### Appendix I-F: Economic and Social Burden increases due to HIV/AIDS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>3.50%</td>
<td>7.20%</td>
<td>12.50%</td>
<td>18.30%</td>
</tr>
<tr>
<td>United States</td>
<td>0.20%</td>
<td>0.60%</td>
<td>0.70%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>0.40%</td>
<td>0.30%</td>
<td>0.90%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: ILO, 2004
Appendix I, continued

**Appendix I-G: Current impact of HIV/AIDS on businesses**

<table>
<thead>
<tr>
<th>Country</th>
<th>Expect serious impact</th>
<th>Expect some impact</th>
<th>Expect no impact</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>41%</td>
<td>88%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>United States</td>
<td>6%</td>
<td>39%</td>
<td>61%</td>
<td>0%</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>12%</td>
<td>30%</td>
<td>67%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: GHI, 2005a
## Appendix I-H: Future Impact of HIV/AIDS on businesses

<table>
<thead>
<tr>
<th>Country</th>
<th>Expect serious impact</th>
<th>Expect some impact</th>
<th>Expect no impact</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>51%</td>
<td>84%</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>United States</td>
<td>6%</td>
<td>38%</td>
<td>61%</td>
<td>1%</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>14%</td>
<td>37%</td>
<td>58%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: GHI, 2005a
Appendix I, continued

*Appendix I-I: Businesses with and without HIV/AIDS policies*

<table>
<thead>
<tr>
<th>Country</th>
<th>No policy</th>
<th>Informal policy</th>
<th>Written HIV specific policy</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>7%</td>
<td>14%</td>
<td>77%</td>
<td>3%</td>
</tr>
<tr>
<td>United States</td>
<td>45%</td>
<td>24%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>71%</td>
<td>12%</td>
<td>7%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: GHI, 2005
Appendix I, continued

**Appendix I-J: Urban households with piped water, LDCs by region, 1990s**

<table>
<thead>
<tr>
<th>Country, year of survey</th>
<th>Percent with piped water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-Saharan Africa</strong></td>
<td></td>
</tr>
<tr>
<td>Namibia, 1992</td>
<td>82</td>
</tr>
<tr>
<td>Senegal, 1997</td>
<td>64</td>
</tr>
<tr>
<td>Kenya, 1998</td>
<td>58</td>
</tr>
<tr>
<td>Côte d'Ivoire, 1998-99</td>
<td>51</td>
</tr>
<tr>
<td>Zambia, 1995-96</td>
<td>47</td>
</tr>
<tr>
<td>Eritrea, 1995</td>
<td>41</td>
</tr>
<tr>
<td>Ghana, 1998</td>
<td>41</td>
</tr>
<tr>
<td>Tanzania, 1996</td>
<td>32</td>
</tr>
<tr>
<td>Niger, 1998</td>
<td>27</td>
</tr>
<tr>
<td>Burkina Faso, 1993</td>
<td>26</td>
</tr>
<tr>
<td>Rwanda, 1992</td>
<td>26</td>
</tr>
<tr>
<td>Mozambique, 1997</td>
<td>23</td>
</tr>
<tr>
<td>Cameroon, 1998</td>
<td>20</td>
</tr>
<tr>
<td>Benin, 1996</td>
<td>19</td>
</tr>
<tr>
<td>Madagascar, 1997</td>
<td>18</td>
</tr>
<tr>
<td>Nigeria, 1990</td>
<td>17</td>
</tr>
<tr>
<td>Uganda, 1995</td>
<td>13</td>
</tr>
<tr>
<td>Malawi, 1996</td>
<td>12</td>
</tr>
<tr>
<td>Togo, 1998</td>
<td>12</td>
</tr>
<tr>
<td>Guinea, 1999</td>
<td>10</td>
</tr>
<tr>
<td>Central African Republic, 1994-95</td>
<td>5</td>
</tr>
<tr>
<td><strong>Near East/North Africa</strong></td>
<td></td>
</tr>
<tr>
<td>Jordan, 1997</td>
<td>97</td>
</tr>
<tr>
<td>Egypt, 1995</td>
<td>92</td>
</tr>
<tr>
<td>Morocco, 1995</td>
<td>86</td>
</tr>
<tr>
<td>Yemen, 1997</td>
<td>66</td>
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<td><strong>Asia</strong></td>
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<tr>
<td>Kazakhstan, 1995</td>
<td>91</td>
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<tr>
<td>Kyrgyz Republic, 1997</td>
<td>87</td>
</tr>
<tr>
<td>Uzbekistan, 1996</td>
<td>87</td>
</tr>
<tr>
<td>Pakistan, 1990-91</td>
<td>48</td>
</tr>
<tr>
<td>Philippines, 1998</td>
<td>47</td>
</tr>
<tr>
<td>Nepal, 1996</td>
<td>46</td>
</tr>
</tbody>
</table>
Appendix I, continued

Appendix I-J: Urban households with piped water,
LDCs by region, 1990s, continued

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Piped Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>1996-97</td>
<td>32</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1997</td>
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</table>

Latin America/Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Piped Water</th>
</tr>
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<tbody>
<tr>
<td>Brazil</td>
<td>1996</td>
<td>81</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1998</td>
<td>75</td>
</tr>
<tr>
<td>Peru</td>
<td>1996</td>
<td>72</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>1998</td>
<td>70</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>1996</td>
<td>50</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1998</td>
<td>47</td>
</tr>
<tr>
<td>Haiti</td>
<td>1998</td>
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</tr>
</tbody>
</table>

Source: Brocherhoff, 2000
# APPENDIX II

**Appendix A: Abbreviations used in this document**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHAP</td>
<td>African Comprehensive HIV/AIDS Partnership</td>
</tr>
<tr>
<td>ADA</td>
<td>The Americans with Disabilities Act</td>
</tr>
<tr>
<td>AIDC</td>
<td>Automotive Industrial Development Center</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>AFA</td>
<td>Aid for AIDS</td>
</tr>
<tr>
<td>ALP</td>
<td>AIDS Law Project</td>
</tr>
<tr>
<td>ALRP</td>
<td>AIDS Law Referral Panel</td>
</tr>
<tr>
<td>ART</td>
<td>Anti-Retroviral Therapy</td>
</tr>
<tr>
<td>ARV</td>
<td>Anti-Retroviral Drug</td>
</tr>
<tr>
<td>ASPH</td>
<td>Association of Schools of Public Health</td>
</tr>
<tr>
<td>ATTIC</td>
<td>AIDS Training, Treatment, and Information Center</td>
</tr>
<tr>
<td>BET</td>
<td>Black Entertainment Television</td>
</tr>
<tr>
<td>BRTA</td>
<td>Business Responds to AIDS Program</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>COBRA</td>
<td>Consolidated Omnibus Budget Reconciliation Act</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DHAP</td>
<td>Division of HIV/AIDS Prevention</td>
</tr>
<tr>
<td>EAP</td>
<td>Employee Assistance Plan</td>
</tr>
<tr>
<td>EEA</td>
<td>Employment Equity Act</td>
</tr>
<tr>
<td>EEOC</td>
<td>Equal Employment Opportunity Commission</td>
</tr>
<tr>
<td>ELISA</td>
<td>Enzyme-Linked Immunosorbent Assay</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FHI</td>
<td>Family Health International</td>
</tr>
<tr>
<td>FIBA</td>
<td>Fédération Internationale de Basketball</td>
</tr>
<tr>
<td>GAP</td>
<td>Global AIDS Program</td>
</tr>
<tr>
<td>GBC</td>
<td>Global Business Coalition on HIV/AIDS</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHI</td>
<td>Global Health Initiative</td>
</tr>
<tr>
<td>GRI</td>
<td>Global Reporting Initiative</td>
</tr>
<tr>
<td>HBC</td>
<td>Home Based Care</td>
</tr>
<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HRSA</td>
<td>Health Resources Services Administration</td>
</tr>
<tr>
<td>IDU</td>
<td>Injecting Drug User</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labor Organization</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
</tr>
<tr>
<td>KABP</td>
<td>Knowledges, Attitudes, Behaviors, and Practices</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledges, Attitudes, and Practices</td>
</tr>
<tr>
<td>KFF</td>
<td>Kaiser Family Foundation</td>
</tr>
<tr>
<td>LDC</td>
<td>Less Developed Country</td>
</tr>
<tr>
<td>LRTA</td>
<td>Labor Responds to AIDS Program</td>
</tr>
<tr>
<td>PEP</td>
<td>Post Exposure Prophylaxis</td>
</tr>
<tr>
<td>PSA</td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td>PWHA</td>
<td>Person with HIV/AIDS</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MDC</td>
<td>More Developed Country</td>
</tr>
<tr>
<td>MSM</td>
<td>Men who have Sex with Men</td>
</tr>
<tr>
<td>MTV</td>
<td>Music Television’s</td>
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</table>
**APPENDIX II, Continued**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>NBA</td>
<td>National Basketball Association</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NLRA</td>
<td>National Labor Relations Act</td>
</tr>
<tr>
<td>OI</td>
<td>Opportunistic Infection</td>
</tr>
<tr>
<td>PAR</td>
<td>Participatory Action Research</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>the President’s Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission</td>
</tr>
<tr>
<td>RSA</td>
<td>Republic of South Africa</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SAPs</td>
<td>Structural Adjustment Programs</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium Sized Enterprises</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmitted Disease</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
</tr>
<tr>
<td>TAC</td>
<td>Treatment Action Campaign</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>The Joint United Nations Program on HIV/AIDS</td>
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</table>
**APPENDIX II, Continued**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Program</td>
</tr>
<tr>
<td>UNGASS</td>
<td>United Nations General Assembly Special Session</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nation’s Children’s Fund</td>
</tr>
<tr>
<td>US</td>
<td>United States of America</td>
</tr>
<tr>
<td>USAID</td>
<td>US Agency for International Development</td>
</tr>
<tr>
<td>USF</td>
<td>University of South Florida</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing Programs</td>
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<tr>
<td>WEF</td>
<td>World Economic Forum</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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