Life and Health Insurance Industry Investments in Fast Food

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Previous research on health and life insurers' financial investments has highlighted the tension between profit maximization and the public good. We ascertained health and life insurance firms' holdings in the fast food industry, an industry that is increasingly understood to negatively impact public health. Insurers own $1.88 billion of stock in the 5 leading fast food companies. We argue that insurers ought to be held to a higher standard of corporate responsibility, and we offer potential solutions. (*Am J Public Health*. 2010;100:1029–1030. doi: 10.2105/AJPH.2009.178020)

Life and health insurance firms profess to support health and wellness, but their choice of financial investments has raised doubts. We recently noted their investments in the tobacco industry,[1] but few data on insurance company investments in other potentially unhealthy products exist. We investigated the insurance industry's investments in fast food.

Unlike tobacco, which is inarguably harmful and addictive, fast food can be consumed responsibly. However, most fast food has high energy density and low nutritional value.[2] Indeed, fast food consumption is linked to obesity and cardiovascular disease, 2 leading causes of preventable death.[3–5] The industry markets heavily to children and often builds restaurants within walking distance of schools.[6,7] Children who live near fast food restaurants consume fewer servings of fruits and vegetables, drink more high-calorie soft drinks, and are more likely to be overweight.[7,8] In addition, fast food restaurants are more prevalent in Black and low-income neighborhoods, likely contributing to the burden of obesity among these groups.[9] And, finally, the fast food industry exacts a heavy environmental toll.[2]

In 2009 Americans were expected to spend $185 billion on fast food, and consumers globally were expected to spend $481 billion.[10] In addition, there has been a greater than 5-fold increase in fast food consumption by children and adolescents aged 2 to 18 years between 1977 and 1995.[7]

In response, many municipalities in the United States have moved to control fast food. In 2008 Los Angeles restricted the construction of new fast food restaurants and several other cities have used zoning restrictions to similar effect. In addition, San Francisco and New York have passed laws that require restaurants to visibly post the nutritional content of foods.[11–14]

Given the potential disconnect between insurers' financial investments and their professed missions, we sought to determine the extent to which insurance companies own stock in the fast food industry.

METHODS

We used shareholder data from the Icarus database, which draws upon Securities and Exchange Commission filings and reports from news agencies, to assess health and life insurance firms' shareholdings in the 5 leading publicly traded fast food companies. Our data reflect the most up-to-date information available. We obtained stock prices and market capitalization data from Yahoo! Finance (http://finance.yahoo.com). All data were accessed June 11, 2009.

RESULTS

Major insurers own $1.88 billion of stock in the 5 leading fast-food companies, representing 2.2% of total market capitalization of these companies on June 11, 2009 (Table 1). United States–based Prudential Financial, an investment firm that also provides life insurance and long-term disability coverage, has fast food holdings of $355.5 million, including $197.2 million in McDonald's, $43.7 million in Burger King, and $34.1 million in Jack in the Box. United Kingdom–based Prudential PLC offers life, health, disability, and long-term care insurance and owns $80.5 million in stock of Yum! Brands, owner of KFC, Pizza Hut, Taco Bell, and others. Standard Life, also based in the United Kingdom, offers both life and health insurance and owns $63 million of Burger King stock.

Canada-based Sun Life and Manulife offer life, health, disability, and long-term care insurance. Sun Life owns almost $27 million of Yum! Brands stock, and Manulife owns $146.1 million in fast food stock, including a $89.1 million stake in McDonald's. Holland-based ING, an investment firm that also offers life and disability insurance, owns $12.3 million in Jack in the Box, $311 million in McDonald's, and $82.1 million in Yum! Brands stock.

Guardian Life, MetLife, New York Life offer life, health, disability, and long-term care insurance. Northwestern Mutual and Massachusetts Mutual Life Insurance Company offer life, disability, and long-term care insurance. All of these companies are invested in the fast food industry to varying degrees. Northwestern Mutual's stake is the biggest, with its total investments in excess of $422 million, including $318.1 million in McDonald's alone. Massachusetts Mutual owns more than $366 million of fast food stock, with its single biggest investment being $267 million in McDonald's.

DISCUSSION

Our data show that life and health insurers are substantial investors in the fast food industry. Although fast food can be consumed responsibly, the marketing and sale of products by fast food companies is done in a manner that undermines the public's health.

Though investing in companies whose products undermine health while selling life or health insurance may seem inconsistent, there are several potential explanations. The first is that the practice has net profitability: the return on investment in fast food companies more than offsets the potential financial liability associated with their policyholders consuming fast food. A second possible explanation is that insurers are unaware of the social impact of their investments because there has been little attention paid to the issue historically. A third possible explanation is that because insurers tend to be large organizations, one division (e.g., claims and underwriting) may be

TABLE 1—Health and Life Insurance Industry Holdings in the Fast Food Industry, by Fast Food Company: United States, June 11, 2009

Insurance Company	Jack in the Box Holdings, Millions $	McDonald's Holdings, Millions $	Burger King Holdings, Millions $	Yum! Brands[a] Holdings, Millions $	Wendy's/Arby's Group Holdings, Millions $	Total Holdings, Millions $
Prudential PLC				80.5		80.5
Prudential Financial	34.1	197.2	43.7	80.5		355.5
Massachusetts Mutual	23.1	267.2	58.8	17.4		366.5
New York Life	2.4					2.4
Northwestern Mutual	40.9	318.1		63.2		422.2
Sun Life				26.8		26.8
Standard Life			63.0			63.0
ING	12.3	311.7		82.1		406.1
Manulife		89.1		53.7	3.3	146.1
Guardian Life	7.2				9.5	16.7
MetLife					2.2	2.2
Total	120.0	1183.3	165.5	404.2	15.0	1888.0

[a]Owner of KFC, Pizza Hut, Taco Bell, and others.

unaware of the activities in another (e.g., investments). And, finally, some of the larger investment companies have subsidiaries whose investments are made in the name of the parent company, even though the parent company might have little actual oversight of its subsidiaries' investments.

From our perspective, insurance companies have 2 ethical options. The first is to divest themselves of holdings in fast food companies as well as other industries that have a clearly negative public health impact. Socially responsible investment funds have shown that profits are not incompatible with social good.

A second option is that insurers could mitigate the harms of fast food by leveraging their positions as owners of fast food companies to force the adoption of practices consistent with widely accepted public health principles. Such moves could include encouraging companies to improve the nutritional quality of their products, reduce calorie density, serve smaller portions, and change marketing practices. To maximize their impact, insurers might turn over their proxy votes to an independent nonprofit organization that could pool votes in a way that effects meaningful change.

Health reforms being proposed in the United States would likely expand the reach of the insurance industry. Canada and Britain are also considering further privatization of health insurance. Our article highlights the tension between profit maximization and the public good these countries face in expanding the role of private health insurers. If insurers are to play a greater part in the health care delivery system they ought to be held to a higher standard of corporate responsibility. This responsibility includes aligning all of their resources—including financial investments—in ways that improve health or, at the very least, do not harm it. ■

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Contributors

A. V. Mohan originated the study, participated in data collection and analysis, and led the writing. D. McCormick, S. Woolhandler, and D. Himmelstein assisted with data analysis and writing. J. W. Boyd supervised the study, led data collection and analysis, and participated in the writing.

Human Participant Protection

Institutional review board approval was not obtained because human participants were not involved in the research reported in this article.

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Tuberculosis Rates Among HIV-Infected Persons in New York City, 2001–2005

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We calculated population-based tuberculosis (TB) rates among HIV-infected persons in New York City from 2001 through 2005 using data from the city's TB and HIV/AIDS surveillance registries, and we examined those rates using linear trend tests and incidence rate ratios (IRRs). HIV-infected individuals had 16 times the TB rate of a ''non-HIV'' population (HIV status negative or unknown; IRR=16.0; 95% confidence interval=14.9, 17.2). TB rates declined significantly among the US-born HIV-infected population (P_{trend}<.001) but not among the foreign-born HIV-infected population (P_{trend}=.355). Such disparities must be addressed if further declines are to be achieved. (*Am J Public Health.* 2010;100:1031–1034. doi:10.2105/AJPH.2009.177725)

HIV infection is the greatest known risk factor for progression from latent tuberculosis (TB) infection to active TB disease.[1–3] For HIV-infected individuals with latent tuberculosis infection, the risk of progression to active TB ranges from 4% to 16% per year, whereas the risk among HIV-negative individuals is 10% per lifetime.[4,5] Active disease among HIV-infected individuals can occur rapidly after TB infection.[6] Although TB rates have declined 56% in the United States since the early 1990s,[7–9] the estimated 56 300 new HIV infections in 2006[10–13] necessitate evaluation of HIV's impact on current TB epidemiology. We examined TB rates among HIV-infected individuals in New York City from 2001 through 2005.

METHODS

Our analysis used data from the New York City TB registry and included all TB cases verified in New York City from January 1, 2001, through December 31, 2005. Any TB case reported more than 1 year after that patient completed treatment of active TB or was lost to follow-up was considered a new incident case. TB patients were considered HIV-infected if they had a positive HIV test result via enzyme-linked immunosorbent assay (ELISA) or rapid HIV antibody testing at TB diagnosis, confirmed by western blot, or if a history of positive HIV test was self-reported or was recorded in their medical record.

We used New York City HIV/AIDS surveillance registry data to calculate annual population estimates of HIV-infected individuals by adding the number of known persons living with HIV/AIDS at the end of each year to the number of deaths among those with HIV/AIDS during that year. Annual TB rates per 100 000 persons were calculated and stratified by birth in the United States, sex, age, and race/ethnicity. Trends in rates were evaluated using the Cochran-Armitage test for trend. To enable us to compare TB rates among HIV-infected US-born and foreign-born populations, we calculated incidence rate ratios (IRRs). Analyses were performed using Microsoft Excel 2003 (Microsoft Corp, Redmond, WA) and SAS version 8.2 (SAS Institute, Cary, NC).

RESULTS

From 2001 through 2005, 16% of all patients with TB disease in New York City were HIV-infected (n=872). The TB rate among HIV-infected persons decreased 26%, from 205.2 per 100 000 persons in 2001 to 151.4 per 100 000 persons in 2005 (P_{trend}=.001; Table 1). The HIV-infected population had 16 times the TB rate of a "non-HIV" population comprising HIV-negative individuals or those with unknown HIV status (IRR=16.0; 95% confidence interval [CI]=14.9, 17.2). Significant declines in TB rates were seen among HIV-infected non-Hispanic Blacks, Asians, and females (P_{trend}<.05).

US-born persons, accounting for 62% of HIV-infected TB patients, experienced significant decreases in TB rates, from 205.8 per 100 000 persons to 137.7 per 100 000 persons (P_{trend}<.001; Table 1). The most pronounced declines were among Blacks (–38%), females (–51%), and individuals aged 20 to 29 years (–64%).

No significant declines occurred among the HIV-infected foreign-born population overall or among any foreign-born subgroup (Table 1). Foreign-born subgroups with the highest case numbers and annual rates included those aged 30 to 39 years (41% of cases; rates 661.7–836.5 per 100 000 persons), males (77%; rates 508.7–598.7 per 100 000 persons), and Blacks (58%; rates 613.8–783.2 per 100 000 persons). Foreign-born Blacks experienced nonsignificant increases of 38% in TB case numbers and 4% in TB rates. Foreign-born TB rates were consistently higher than US-born TB rates for most subgroups, with an overall IRR of 2.9 (95% CI=2.5, 3.5; Table 2).

DISCUSSION

Our analysis reemphasizes the elevated risk of TB disease among HIV-infected individuals. Unlike the significant declines in TB rates observed among the US-born HIV-infected population, there were no significant declines among the foreign-born. This issue is not only a concern in New York City, where the population is approximately 36% foreign-born,[14] but to the United States as a whole, as immigrants from high-TB-burden countries continue to settle in areas other than large cities.[15,16]

The observed rise in TB cases among HIV-infected foreign-born Blacks is also troubling. One possible explanation for this finding could be the nationalities of recent immigrants to New York City. As of 2000, 24% of the foreign-born population in New York City was from the Caribbean or Africa,[14] areas with high TB incidence; in 2006, 56% of new HIV diagnoses among New York City's foreign-born were among those of Caribbean origin.[17] Further evaluation is needed to determine if there is a true increase in TB rates among HIV-infected foreign-born Blacks and to provide focused interventions if warranted.

To our knowledge, this is the first population-based analysis of TB rates among HIV-infected persons. Limitations include the potential underestimation of the HIV-infected population in New York City; thus, misestimates of TB rates in

TABLE 1—Linear Trends of Tuberculosis (TB) Rates Among US-Born and Foreign-Born HIV-Infected Individuals: New York City, NY, 2001–2005

	2001		2002		2003		2004		2005	2001–2005	
	No. of TB Cases	TB Rate Per 100 000 Persons	No. of TB Cases	TB Rate Per 100 000 Persons	No. of TB Cases	TB Rate Per 100 000 Persons	No. of TB Cases	TB Rate Per 100 000 Persons	No. of TB Cases	TB Rate Per 100 000 Persons	P_{trend}[a]
All cases											
Total	181	205.2	195	211.5	177	186.1	169	174.0	150	151.4	.001
Age, y											
0–12	0	0.0	1	65.5	0	0.0	1	87.5	1	101.8	.245
13–19	0	0.0	1	84.5	1	75.6	0	0.0	2	132.5	.408
20–29	15	269.5	13	227.2	11	187.5	9	152.3	5	82.7	.011
30–39	72	268.3	60	230.3	56	227.8	53	231.7	52	246.0	.622
40–49	59	174.5	67	187.4	75	200.8	62	161.7	48	122.8	.047
50–59	23	153.3	40	234.8	31	163.0	33	157.1	32	139.2	.204
≥60	12	283.4	13	263.7	3	53.1	11	171.6	10	137.2	.051
Race/ethnicity											
Non-Hispanic Black	109	277.3	126	304.3	117	272.8	111	252.6	94	209.2	.015
Hispanic	49	170.7	53	178.1	47	153.9	46	148.4	38	120.7	.067
Non-Hispanic White	13	70.3	10	52.0	4	20.2	10	49.6	11	53.6	.509
Asian	10	1210.7	6	650.1	9	892.9	2	180.8	6	500.0	.025
Sex											
Male	117	191.2	137	214.6	130	197.3	117	173.9	112	162.8	.062
Female	64	236.9	58	204.6	47	160.7	52	174.2	38	125.6	.001
US-born											
Total	120	205.8	132	218.2	106	172.4	99	160.8	85	137.7	<.001
Age, y											
0–12	0	0.0	1	72.7	0	0.0	1	97.7	1	113.3	.244
13–19	0	0.0	0	0.0	0	0.0	0	0.0	2	158.6	. . .
20–29	8	220.9	7	187.3	3	79.1	3	80.0	3	79.4	.037
30–39	45	257.9	31	184.1	32	205.2	28	198.4	21	164.6	.134
40–49	38	171.6	54	232.6	46	192.0	36	148.8	26	107.0	.01
50–59	20	199.8	32	284.7	24	194.7	22	164.6	27	187.8	.246
≥60	9	335.4	7	226.1	1	28.6	9	229.6	5	114.2	.084
Race/ethnicity											
Non-Hispanic Black	80	290.9	92	320.1	74	252.2	67	227.8	53	179.6	.001
Hispanic	26	145.4	30	163.4	29	156.5	24	130.3	23	125.6	.409
Non-Hispanic White	12	95.8	10	77.2	3	22.8	8	60.3	9	67.1	.307
Asian	2	1030.9	0	0.0	0	0.0	0	0.0	0	0.0	. . .
Sex											
Male	69	173.4	92	223.1	71	169.2	69	164.1	59	139.4	.046
Female	51	275.4	40	207.8	35	179.1	30	153.6	26	134.0	.001
Foreign-born											
Total	61	549.4	61	511.4	71	561.7	70	523.7	64	453.8	.355
Age, y											
0–12	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	. . .
13–19	0	0.0	1	1250.0	1	1234.6	0	0.0	0	0.0	. . .
20–29	7	682.3	6	558.1	8	716.8	6	539.1	2	174.5	.129
30–39	27	769.9	28	776.1	24	661.7	25	677.5	31	836.5	.93
40–49	21	524.7	12	278.0	29	626.3	26	531.0	21	407.1	.984

Continued

TABLE 1—*Continued*

50–59	3	170.6	8	397.6	7	310.7	11	432.7	5	175.9	.898
≥60	3	424.9	6	747.2	2	221.2	2	198.0	5	439.0	.475
Race/ethnicity											
Non-Hispanic Black	29	613.8	33	641.6	43	783.2	44	746.6	40	635.4	.744
Hispanic	23	501.1	22	449.5	18	347.4	22	406.4	15	264.6	.06
Non-Hispanic White	1	79.7	0	0.0	1	74.0	2	144.9	2	143.2	.285
Asian	8	1687.8	6	1156.1	9	1633.4	2	325.7	6	894.2	.087
Sex											
Male	48	598.7	44	515.9	59	657.5	48	508.7	53	534.0	.575
Female	13	421.3	17	500.0	12	327.2	22	559.7	11	263.3	.403

Note. Ellipses indicate that the *P* value could not be calculated.
[a]Cochrane-Armitage test for trend.

TABLE 2—Incidence Rate Ratios (IRRs) Comparing Foreign-Born to US-Born HIV-Infected Individuals by Year of Tuberculosis (TB) Case Verification: New York City, NY, 2001–2005

	2001, IRR (95% CI)	2002, IRR (95% CI)	2003, IRR (95% CI)	2004, IRR (95% CI)	2005, IRR (95% CI)	2001–2005, IRR (95% CI)
Total	2.7 (2.0, 3.6)	2.3 (1.7, 3.2)	3.3 (2.4, 4.4)	3.3 (2.4, 4.4)	3.3 (2.4, 4.6)	2.9 (2.5, 3.3)
Age, y						
20–29	3.1 (1.1, 8.5)	3.0 (1.0, 8.9)	9.1 (2.4, 34.2)	6.7 (1.7, 27.0)	2.2 (0.4, 13.2)	4.1 (2.4, 7.1)
30–39	3.0 (1.9, 4.8)	4.2 (2.5, 7.0)	3.2 (1.9, 5.5)	3.4 (2.0, 5.9)	5.1 (2.9, 8.8)	3.7 (2.9, 4.6)
40–49	3.1 (1.8, 5.2)	1.2 (0.6, 2.2)	3.3 (2.1, 5.2)	3.6 (2.2, 5.9)	3.8 (2.1, 6.8)	2.8 (2.2, 3.5)
50–59	0.9 (0.3, 2.9)	1.4 (0.6, 3.0)	1.6 (0.7, 3.7)	2.6 (1.3, 5.4)	0.9 (0.4, 2.4)	1.5 (1.0, 2.1)
≥60	1.3 (0.3, 4.7)	3.3 (1.1, 9.8)	7.7 (0.7, 85.2)	0.9 (0.2, 4.0)	3.8 (1.1, 13.3)	2.2 (1.3, 4.0)
Race/ethnicity						
Non-Hispanic Black	2.1 (1.4, 3.2)	2.0 (1.3, 3.0)	3.1 (2.1, 4.5)	3.3 (2.2, 4.8)	3.5 (2.3, 5.3)	2.7 (2.3, 3.2)
Hispanic	3.4 (2.0, 6.0)	2.8 (1.6, 4.8)	2.2 (1.2, 4.0)	3.1 (1.7, 5.6)	2.1 (1.1, 4.0)	2.7 (2.1, 3.5)
Non-Hispanic White	0.8 (0.1, 6.4)	NA	3.2 (0.3, 31.1)	2.4 (0.5, 11.3)	2.1 (0.5, 9.9)	1.4 (0.6, 3.3)
Asian	1.6 (0.3, 7.7)	NA	NA	NA	NA	6.7 (1.6, 28.0)
Sex						
Male	3.5 (2.4, 5.0)	2.3 (1.6, 3.3)	3.9 (2.8, 5.5)	3.1 (2.1, 4.5)	3.8 (2.6, 5.6)	3.2 (2.8, 3.8)
Female	1.5 (0.8, 2.8)	2.4 (1.4, 4.2)	1.8 (0.9, 3.5)	3.6 (2.1, 6.3)	2.0 (1.0, 4.0)	2.2 (1.7, 2.8)

Note. CI = confidence interval; NA = not applicable (IRR could not be computed).

this population are possible. Also, approximately 22% of the HIV-infected population had an unknown country of birth, potentially causing overestimates of rates by country of origin. However, because misclassification would be consistent throughout the study period, observed trends would be unlikely to change importantly. Finally, we could not examine HIV disease severity because of lack of data on antiretroviral use, other opportunistic infections, CD4 cell count, and viral load. Despite these limitations, we observed disparities in the decline of TB rates in US-born and foreign-born HIV-infected groups.

HIV/AIDS poses a considerable challenge to TB control. Within New York City and the United States, overall TB rates have declined; however, in New York City this decrease has not been as significant among foreign-born HIV-infected populations. Such disparities must be addressed if further declines in TB rates are to be achieved. ■

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Contributors

L. Trieu conducted statistical analyses, interpreted the data, and led the writing of the article. J. Li and T.G. Harris conceptualized and designed the study, supervised the analyses, and provided critical review of the article. D.B. Hanna assisted with data acquisition and data analyses, and provided critical review of the article.

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Human Participant Protection

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