

# Profile of Poor Survivors After Diagnosis with AIDS, Texas, 1997–2005



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## BACKGROUND

- Healthy People 2020 goal of 90.2% of cases diagnosed with AIDS survive at least 3 years after diagnosis
- Texas currently not meeting survival goal; within 2005 AIDS diagnosis cohort, 78% survived at least 3 years
- No significant improvements in Texas survival proportion seen since 1997

## OBJECTIVES

- Describe characteristics of Texas cases diagnosed with AIDS between 1997 and 2006 by year of diagnosis and survival outcome
- Determine whether trends in population composition are similar between poor survivors and good survivors after AIDS diagnosis

## METHODS

### Data Sources:

- Case information gathered from electronic HIV/AIDS reporting system (eHARS).
- Cause of death information gathered from 2006–2008 Texas Vital Statistics Death Records and National Death Index
- Covariates of interest: birth sex, race, birth country, age at AIDS diagnosis, first CD4 test result, facility of AIDS diagnosis, mode of transmission, history of infection with tuberculosis (TB), referred for services

### Eligibility:

- Cases diagnosed with AIDS between 1997–2005 and not infected with HIV prior to age 13 eligible for inclusion
  - 3,894 poor survivors: reported date of death within 3 years of the date of diagnosis and HIV disease listed as a cause of death
  - 20,594 good survivors: cases living as of January 1, 2009 or reported date of death more than 3 years after diagnosis date

### Analysis:

- Conduct two sets, among all cases and by year of AIDS diagnosis, of G-tests for association on covariates of interest comparing poor and good survivors
- Cochran-Armitage test for trend within groups of good and poor survivors analyzing covariates of interest

## RESULTS

Figure 1. Distribution of good and poor survivors, by diagnosis year, 1997–2005.

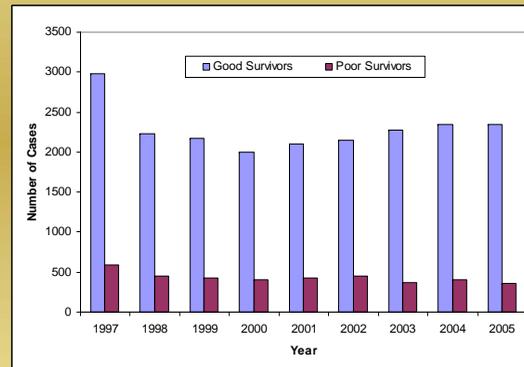


Table 1. Comparisons between poor and good survivors across selected characteristics, 1997–2005

		Poor survivors n=3,894 n (%)	Good survivors n=20,549 n (%)	G	p
Birth Sex	Male	3018 (78)	16233 (79)	3.4	0.07
	Female	876 (23)	4361 (21)		
Race	White	1130 (29)	6581 (32)	33.6	<0.01
	Black	1715 (44)	8024 (39)		
	Hispanic	1019 (26)	5728 (28)		
	Other	27 (1)	167 (1)		
Birth Country	US	3191 (90)	15676 (87)	15.1	<0.01
	Not US	367 (10)	2262 (13)		
Age at AIDS Diagnosis	13-24	168 (4)	1293 (6)	357.7	<0.01
	25-34	937 (24)	6697 (33)		
	35-44	1502 (39)	8320 (40)		
	45-54	854 (22)	330 (16)		
	55+	433 (11)	984 (5)		
First CD4 Result	Stage 1	155 (5)	1195 (6)	84.2	<0.01
	Stage 2	423 (13)	3593 (18)		
	Stage 3 (AIDS)	2814 (83)	15191 (76)		
AIDS Diagnosis Facility	Inpatient	2288 (59)	6424 (31)	1148.1	<0.01
	Outpatient	1275 (33)	11045 (54)		
	SDC**	92 (2)	1350 (7)		
	Correctional	147 (4)	1442 (7)		
Transmission Mode*	MSM**	1785 (46)	10471 (51)	86.0	<0.01
	IDU**	911 (23)	3568 (17)		
	MSM/IDU	300 (8)	1772 (9)		
	Heterosexual	879 (23)	4726 (23)		
Ever Infected with TB	Yes	282 (7)	1035 (5)	29.2	<0.01
	No	3612 (93)	19559 (65)		
Referred for Services	Yes	2839 (73)	17637 (86)	347.0	<0.01
	No	1055 (27)	2957 (14)		

\* Transmission mode counts calculated through imputation, which weights transmission modes in cases reported with more than one mode. Column totals may not add up to 100%  
\*\* SDC = screening/diagnostic/counseling facility; MSM = men who have sex with men; IDU = intravenous drug user

Figure 2. AIDS diagnosis cohorts with significant differences in characteristics, 1997–2005.

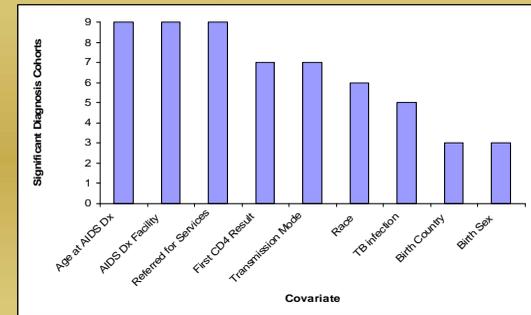


Table 2. Trends in characteristics among poor and good survivors, 1997–2005.

		Poor Survivors			Good Survivors		
		Direction of Change	% Points Change, 1997 to 2005	p	Direction of Change	% Points Change, 1997 to 2005	p
Birth Sex	Male	↔	6.2	0.01	↔	6.1	<0.01
	Race						
	White	↔	3.1	0.05	↔	8.2	<0.01
	Black	↔	2.3	0.15	↔	0.0	0.54
	Hispanic	↔	5.5	<0.01	↔	8.0	<0.01
	Other	↔	0.7	0.05	↔	0.3	<0.01
Birth Country	Foreign-born	↔	6.1	<0.01	↔	6.8	<0.01
Age at AIDS Diagnosis	13-24	↔	1.7	0.24	↔	1.3	<0.01
	25-34	↔	11.2	<0.01	↔	10.6	<0.01
	35-44	↔	0.4	0.78	↔	0.8	0.20
	45-54	↔	7.6	<0.01	↔	7.0	<0.01
	55+	↔	4.7	<0.01	↔	2.5	<0.01
First CD4 Result	Stage 1	↔	5.4	<0.01	↔	5.1	<0.01
	Stage 2	↔	3.1	0.24	↔	0.2	0.83
	Stage 3 (AIDS)	↔	8.5	<0.01	↔	4.9	<0.01
AIDS Diagnosis Facility	Inpatient	↔	1.7	0.26	↔	3.5	<0.01
	Outpatient	↔	2.9	0.07	↔	1.4	<0.01
	SDC	↔	0.2	0.41	↔	5.8	<0.01
	Correctional	↔	0.3	0.91	↔	1.8	<0.01
Transmission Mode	Other	↔	2.1	<0.01	↔	2.8	<0.01
	MSM	↔	0.9	0.52	↔	1.2	0.41
	IDU	↔	4.2	0.06	↔	4.7	<0.01
	MSM/IDU	↔	2.6	0.15	↔	3.3	<0.01
	Heterosexual	↔	7.7	<0.01	↔	9.4	<0.01
Other		↔	0.1	0.32	↔	0.3	0.07
	Ever Infected with TB	↔	2.4	<0.01	↔	3.9	<0.01
Referred for Services	Yes	↔	55.5	<0.01	↔	41.1	<0.01

## CONCLUSIONS

- The overall number of poor survivors decreased during the study period, but the proportion did not decrease to overall decreases in AIDS diagnoses.
- Although significant differences are seen between poor and good survivors in nearly every covariate, differences within each diagnostic cohort were only observed with age at AIDS diagnosis, facility of AIDS diagnosis, and whether a case had been referred for services.
- Covariate trends across the survivor classifications are generally retained. Differences in trend directions were observed within multiple categories of AIDS diagnosis facilities and mode of transmission as well as among those age 13–24 at AIDS diagnosis.
- Future studies should examine whether certain covariates increase the likelihood of cases not surviving beyond three years.

Information revised from original abstract submission.