

Update on SOA Group Life and LTD Experience Studies

Actuaries' Clubs of Boston and Hartford/Springfield
Joint Meeting

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Group Life Experience Studies

Group Life Experience Committee Members

Sue Sames, Chair	Tillinghast
Jack Luff	SOA
Jay Barriss	MassMutual
John Bettano	Prudential
Charlie DeWeese	DeWeese Consulting
Marissa Limjoco	MetLife
Marty Loughlin	MJL Associates
Rocco Mariano	Prudential
Gary Piccolo	UnumProvident
Kari Powell	Guardian
John Schwegel	Fort Dearborn
Chris Svedin	Beneficial Life
Reg Yoder	Principal

Special thanks to Karen Edgerton and Ray Biondi as prior members of the Committee
Independent Vendor: Solucient

Group Life Experience Committee has been working on two studies simultaneously

- Mortality Study
 - Incidence study to support pricing (and possible update to IRS Table I rates)
 - Measures death, waiver and accidental death and dismemberment (“AD&D”) claims vs. insurance exposure for group life plans
- Waiver Reserve Study; a.k.a, Update to Krieger
 - Claim termination study to support valuation (and pricing)
 - Measures deaths and recoveries vs. exposed group life waiver claims

Timeline for both experience studies

- 2002
 - Design study and issue call for data
- 2003
 - Receive and review submissions
- 2004:
 - Audit data
 - Some down time while IDI and LTD were worked on
- Next Steps
 - Resolve remaining data issues (2004)
 - Distribute detailed results of initial review to participating companies (through early 2005)
 - Release study results (early to mid 2005)
 - Consider waiver valuation table implications (late 2005 - 2006)

Mortality Study is at data audit stage

- Identifying and resolving data issues
- Complex structure due to linking multiple files; e.g., group data, individual exposure, self-administered exposure, and claims for basic, optional, and accidental death and dismemberment
- Nearly 20 companies submitted data
- Key issues include:
 - Few companies submitted self-administered data
 - Many companies had difficulty providing waiver provision data
 - Relatively little data on AD&D
 - Dampening factors will be applied to largest contributor

Data structure for mortality study

- Lives and volume information was collected for
 - Claims (death, waiver, AD&D) and
 - Exposure (individual versus self-administered)
- ...across the following parameters:
 - gender
 - age
 - waiver provision (e.g., lifetime, no waiver)
 - type of coverage (e.g., basic, supplemental, optional)
 - group size
 - group effective date
 - SIC code

Sample pivot table for Mortality Study

- The mortality study will have the following views for various combinations of those parameters:

REPORT LAYOUT

Exposure	Deaths			Waiver		
	Claims	Rate	A/E	Claims	Rate	A/E
Central Age						
17						
22						
27						
32						
37						
42						
47						
52						
57						
62						
Subtotal 17-62						
67						
72						
77						
82						
87						
92						
Subtotal 67 and Above						
Total						

Waiver Study is also at data audit stage

- Waiver study was less complex, only one file per participating company
- 23 companies submitted data
- Two separate databases, following Krieger's format:
 - 1. Select period — claim durations through ten years
—by age at disability and length of disability
 - 2. Ultimate period — claim durations beyond ten years
—by attained age
- Key issues include:
 - Truncating exposure period appropriately, e.g., company may have submitted data with exposed claims for 10 years but actually has death claim and recovery data for only the past five years.
 - Addressing impact of systems changes and clean-up efforts

Data structure for Waiver Study

- Lives and volume information was collected for each claim
- ...for the following parameters:
 - gender
 - age at disability
 - duration of disability
 - attained age
 - termination reason, e.g., death, recovery, expiration of benefits

Sample pivot table format for select period

REPORT LAYOUT

By Age at Disablement

<20 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75 +

Exposure	Rate of				<u>Expected (Krieger) Rate of</u>			<u>Actual/Expected</u>	
	Recovery	Death	Expiry	Total	Recovery	Death	Total	Recovery	Death

Length of Disability

8
 9
 11
 12
 8
 9
 11
 12
 2 Annual
 3
 4
 5
 6
 7
 8
 9
 10

Sample pivot table format for ultimate period

REPORT LAYOUT

	Exposure	Rate of			Expected (Krieger) Rate of			Actual/Expected	
		Recovery	Death	Expiry	Total	Recovery	Death	Total	Recovery
Central Age									
	17								
	22								
	27								
	32								
	37								
	42								
	47								
	52								
	57								
	62								
	67								
	72								
	77								
	82								
	87								
	92								

What have we learned?

- Our initial strategy was to allow for more flexibility in the structure of the submission to increase participation
 - Having a tighter structure would have made the linking much easier
- Data audit process has been time consuming
- Increasingly difficult for companies to commit resources; however, the industry is very interested in the results.

LTD Experience Study

Participating companies

AIG / American General

American United Life Insurance Co.

Anthem Life Insurance Co.

Assurant

CIGNA Group Insurance

CNA Insurance Co.

Florida Combined Life

Genworth

Guardian Life Insurance Co.

Hartford Life Insurance Co.

Jefferson Pilot Financial

Lafayette Life

Liberty Mutual

MetLife Insurance Co.

Mutual of Omaha Insurance Co.

Principal Financial Group

Prudential Financial

Reliance Standard Life Insurance Co.

Safeco Insurance Co.

Standard Insurance Co.

States West

UnumProvident Corporation

Experience Committee Members

Edd Bailey – Assurant

Rick Leavitt – Smith Group

Warren Cohen – Reliance Standard

Allen Livingood – UnumProvident

Tom Corcoran – Tillinghast

Jack Luff – SOA

Peter Doucette – Hartford

Roger Martin – UnumProvident (Chairman)

Pat Fay – MassMutual

Chuck Meintel – JHA

Deb Fredericks – MetLife

Eric Poirier - UnumProvident

Steve Garfield – Standard

Ray Siwek - Prudential

Paul Hitchcox – ULR

Special thanks to Todd Fuhs and Steve Atkins as prior committee members

Independent Vendor: Solucient

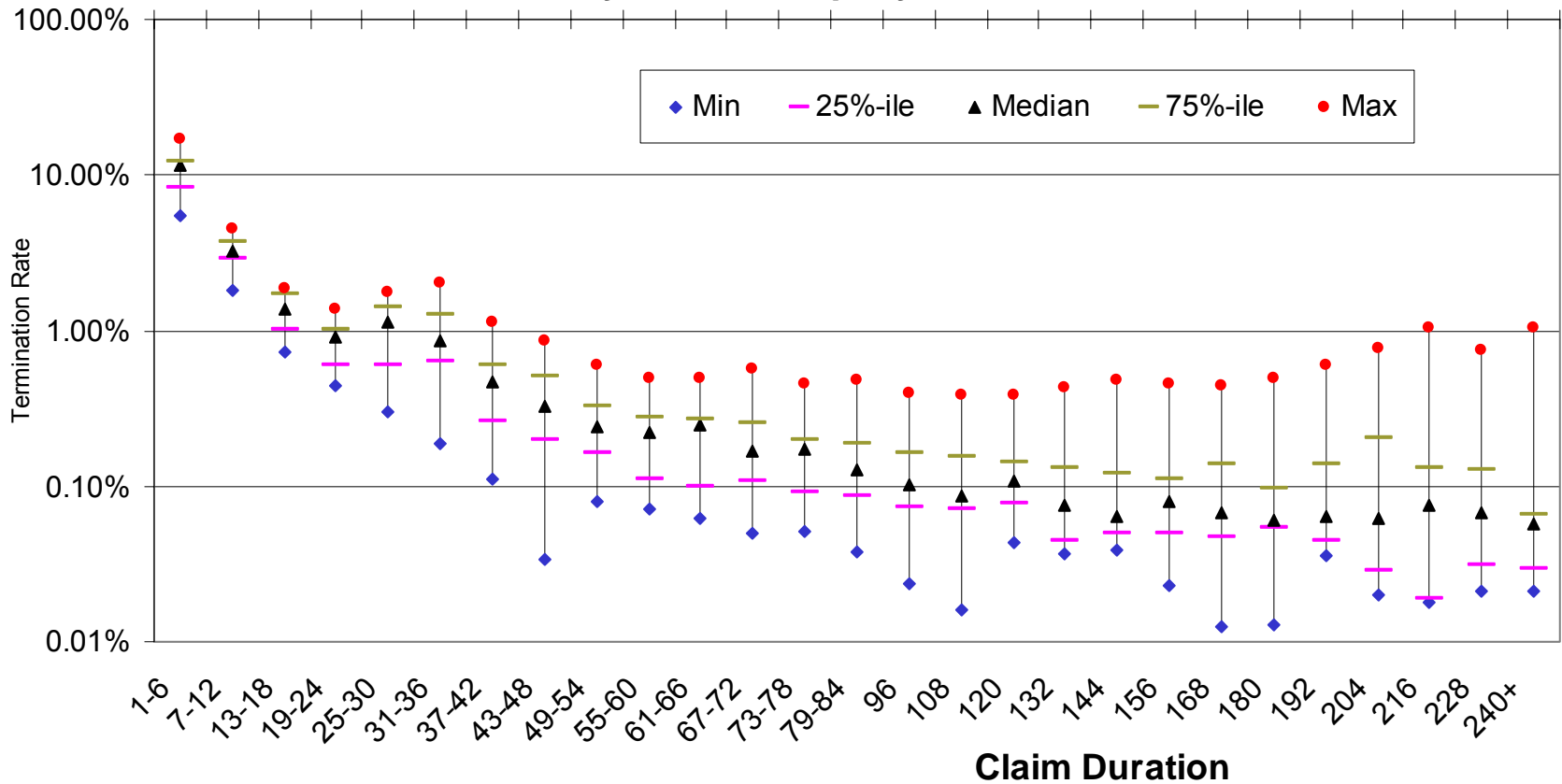
Committee focus and timeline

- Focus
 - Paid claim termination study with separate analysis of recoveries, mortality, benefit maximums, and settlements
- Timeline
 - Initial data request sent out summer of 2003. Initial data analysis, mapping and validation during the winter and spring of 2004. Resubmission for several companies in Spring of 2004
 - Present initial review – 2004 SOA annual meeting
 - Distribute detailed results of initial review to participating companies (Fall 2004)
 - Develop Experience Report and Experience table – 2005
 - Consider valuation table implications – 2006

Profile of initial review

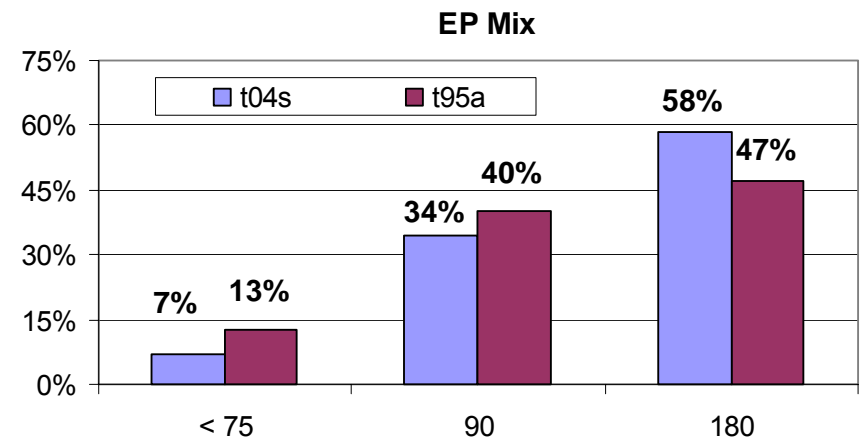
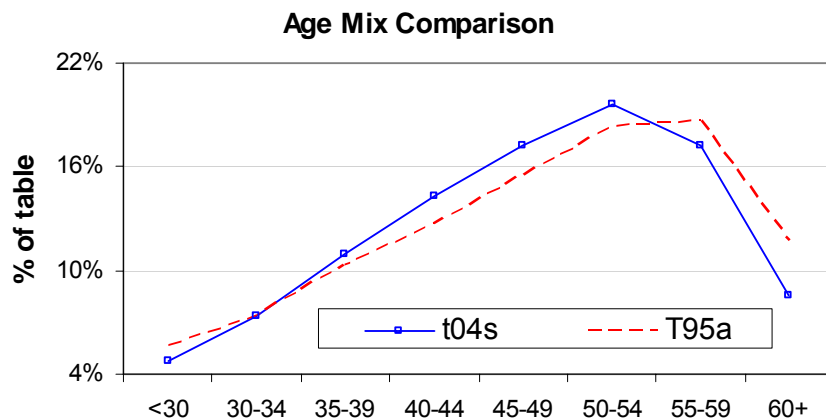
- Nineteen companies participating
- More than 1.7 million claims submitted with more than 1.0 million currently in experience study
- Not all data submitted by each company was in sufficient detail to be included in this initial review – most notable exclusion was by calendar year
- 25 million months of claim exposure over 10+ calendar years
- Dampening factors will be applied to reduce the influence of those companies supplying the largest exposures
- Initial variables reviewed include age, gender, elimination period, duration, diagnosis of claim, definition of disability, and gross benefit amount
- Analysis of raw recovery and death rates along with actual to expected ratios relative to Table95A (t95a)

Recovery rate – Company distribution

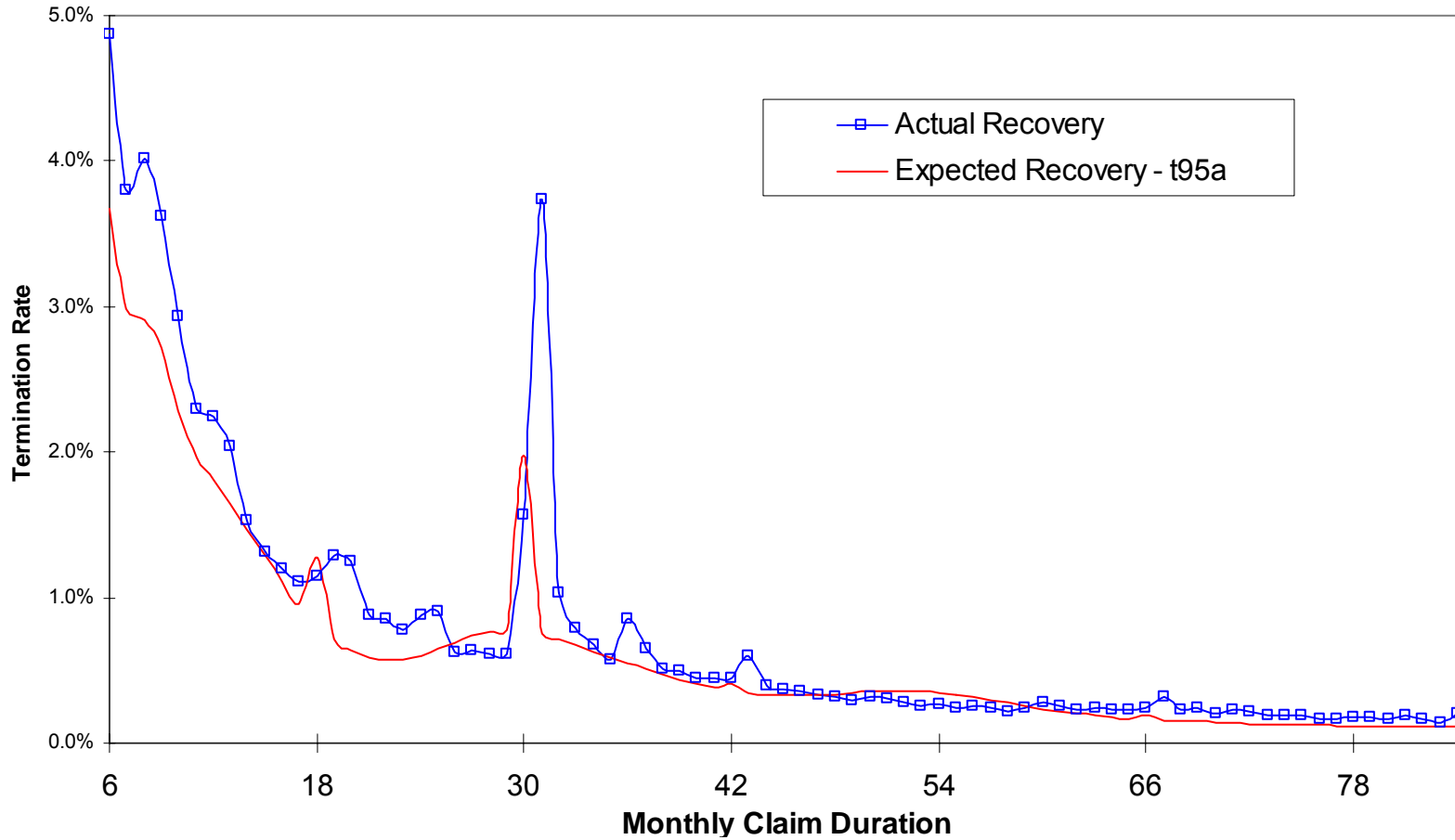


Mix comparison to Table 95a

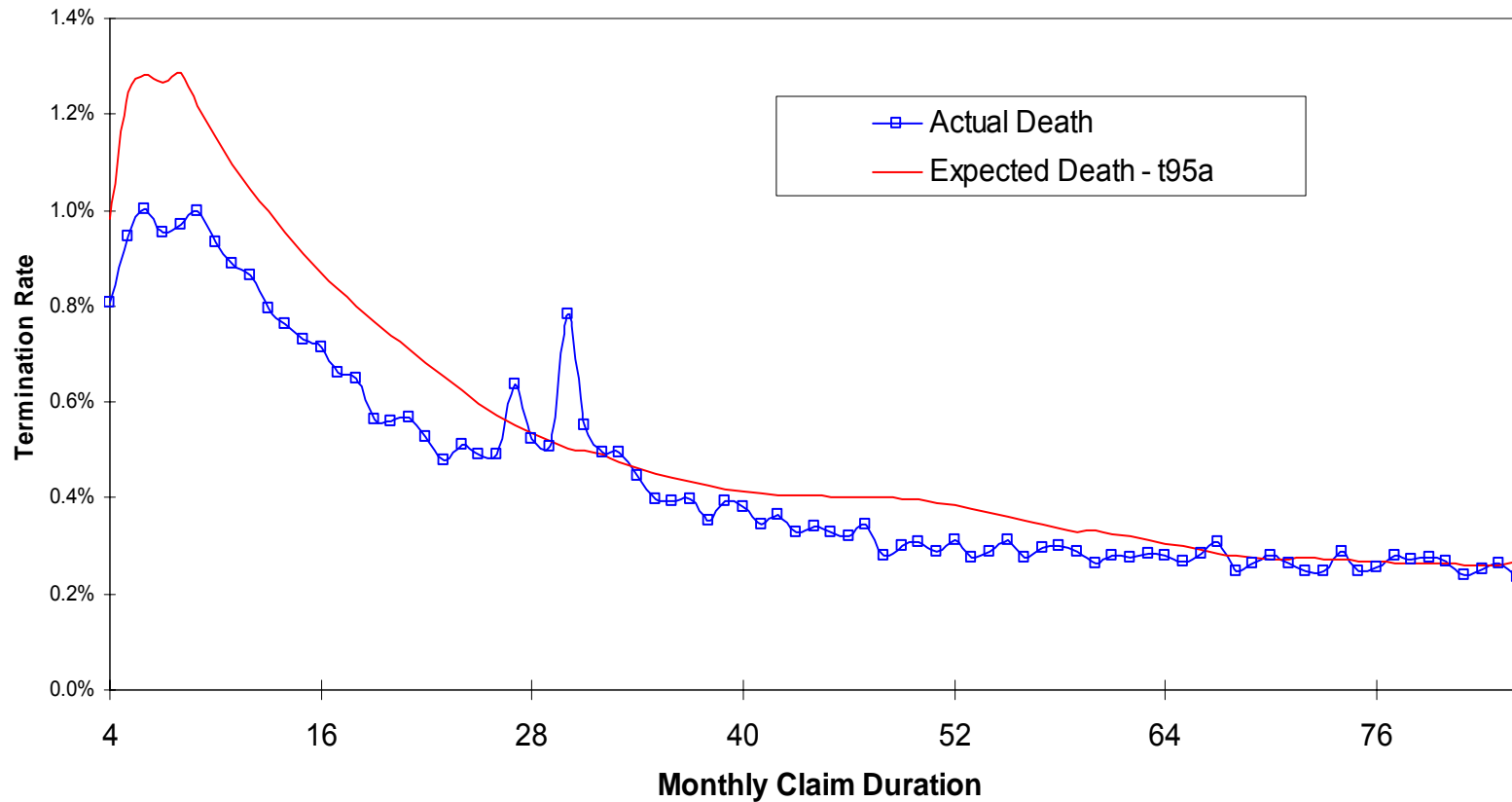
- Current study is about 5 times the size of t95a study
- The mix of claims by EP is skewed more toward longer EP
- Current table is about 1% more female
- Current table is also skewed toward younger age mix and the age shift holds true for both genders
- t95a exposure is from 1986 – 1996 with 80% from 1990 – 1996
 - Current table has at least 15% more exposure at each overlapping calendar year and up to six times more in 1996
 - Overall, in overlapping CY's, the current table has twice the exposure.



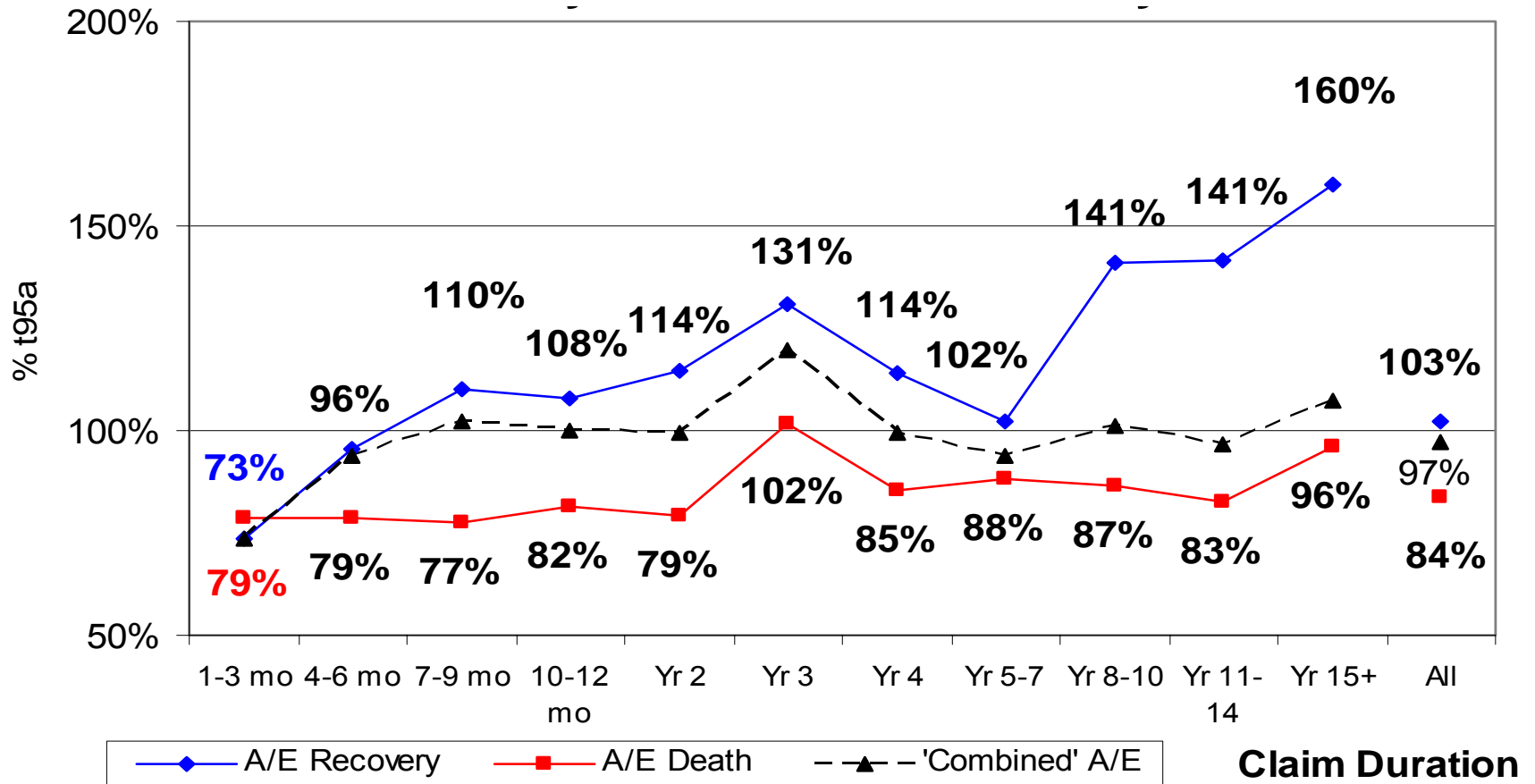
Recovery rate – EP 180



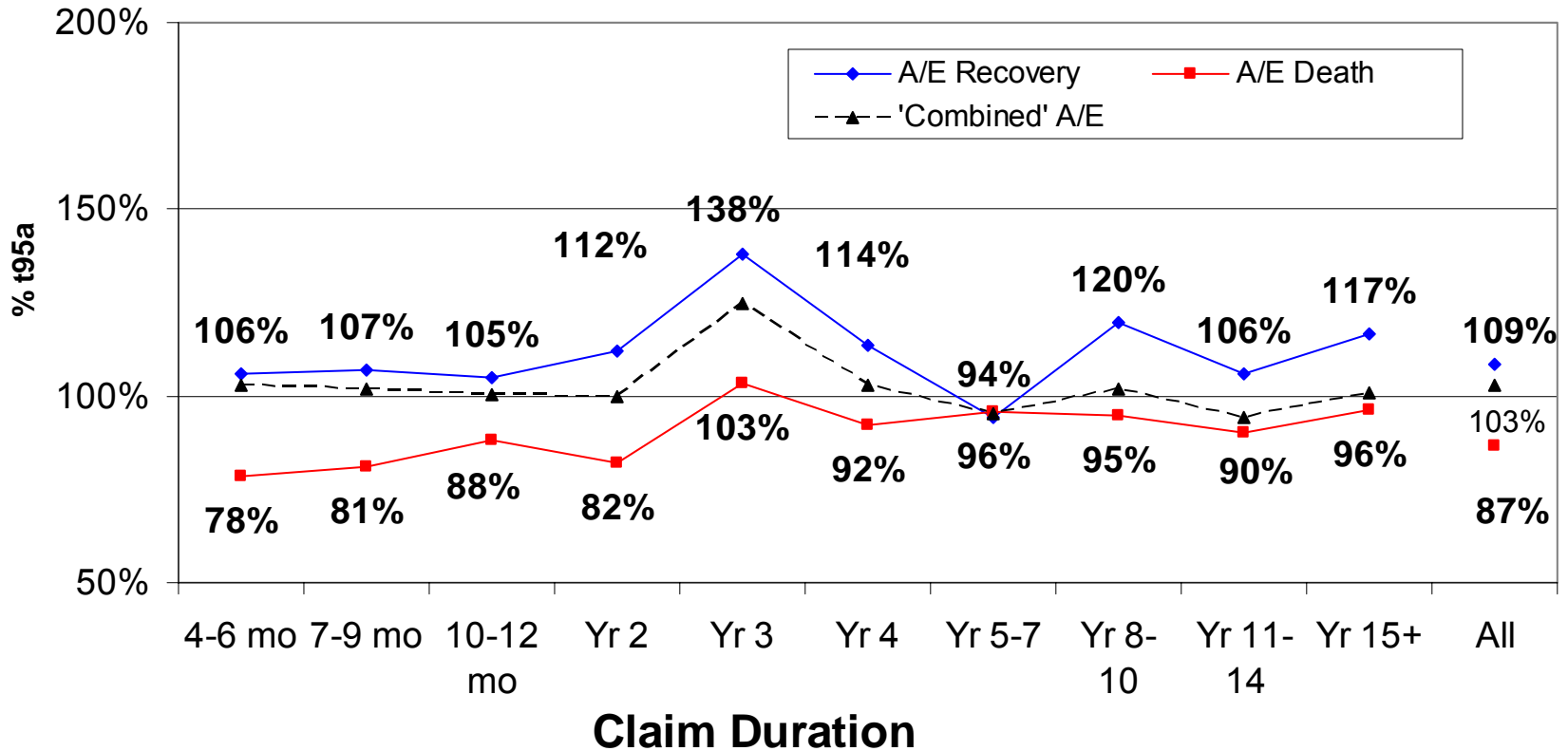
Death rate



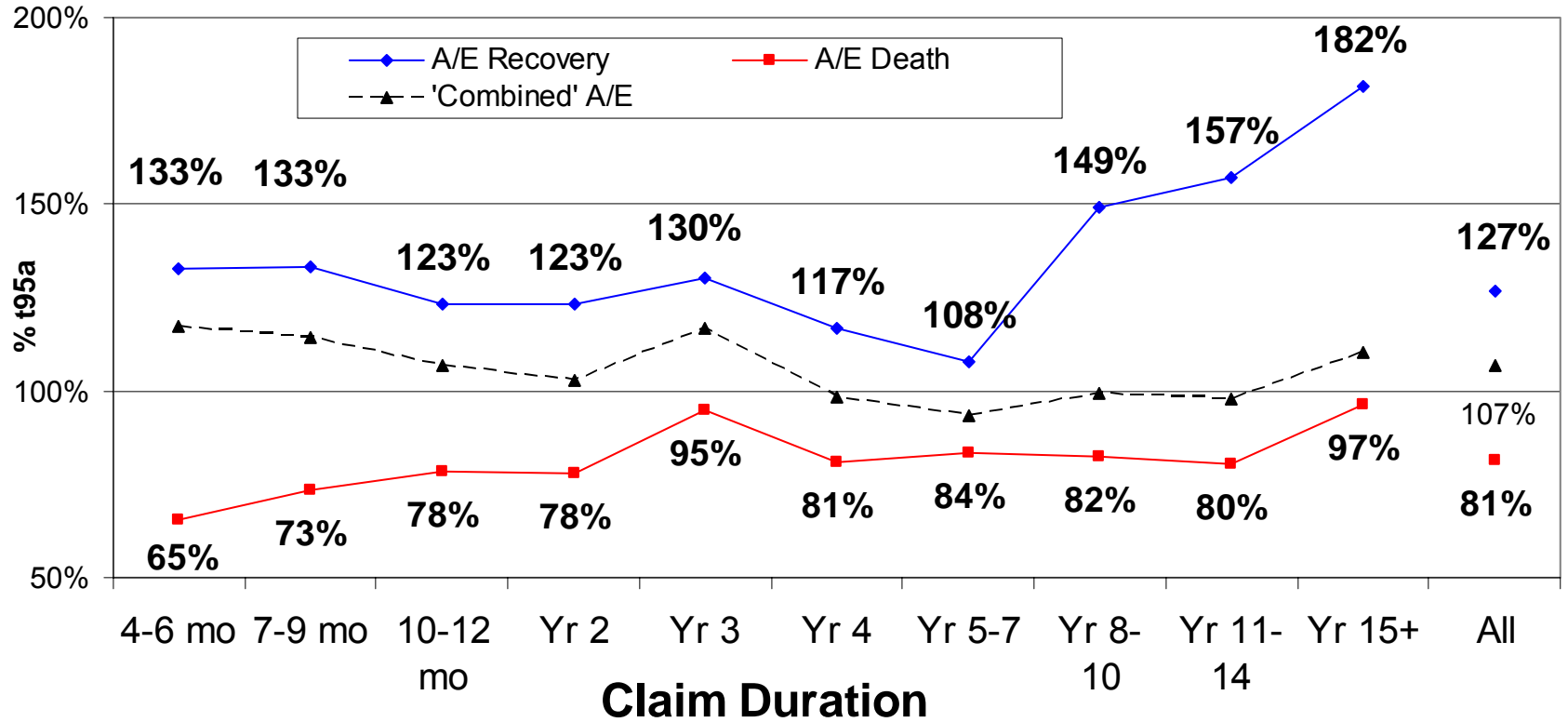
Industry termination summary



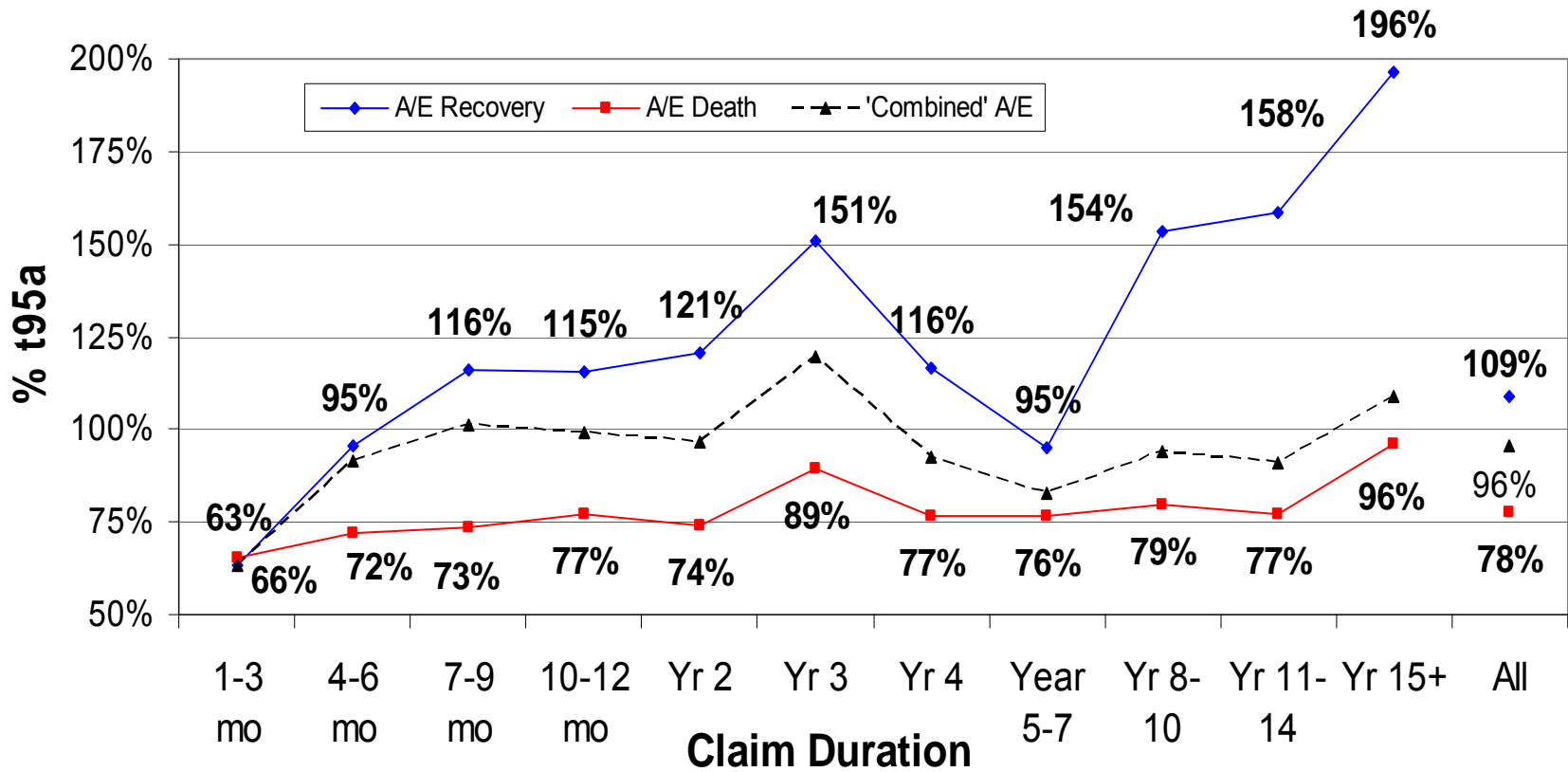
Claim termination trends by EP 90



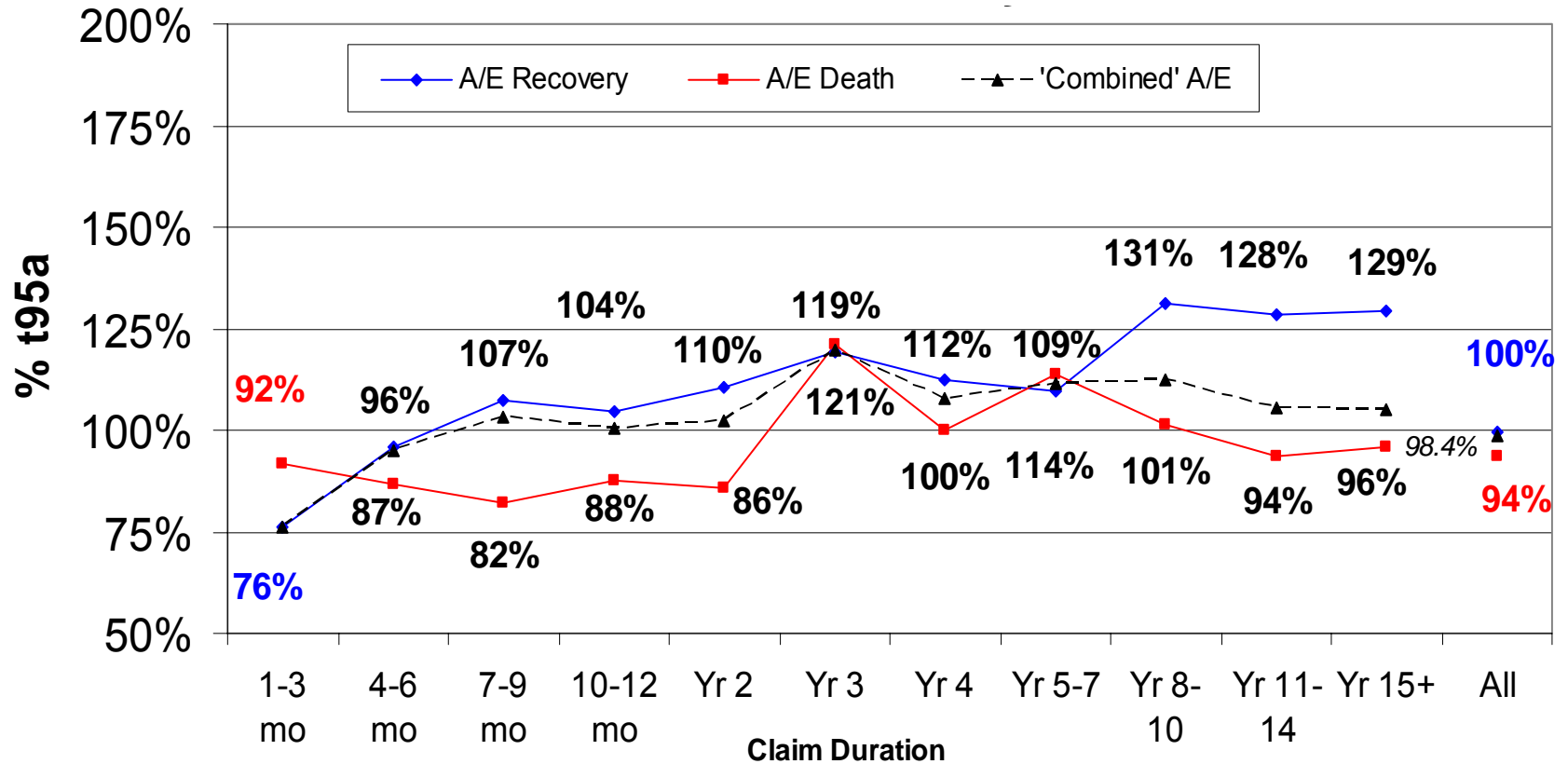
Claim termination trends by EP 180



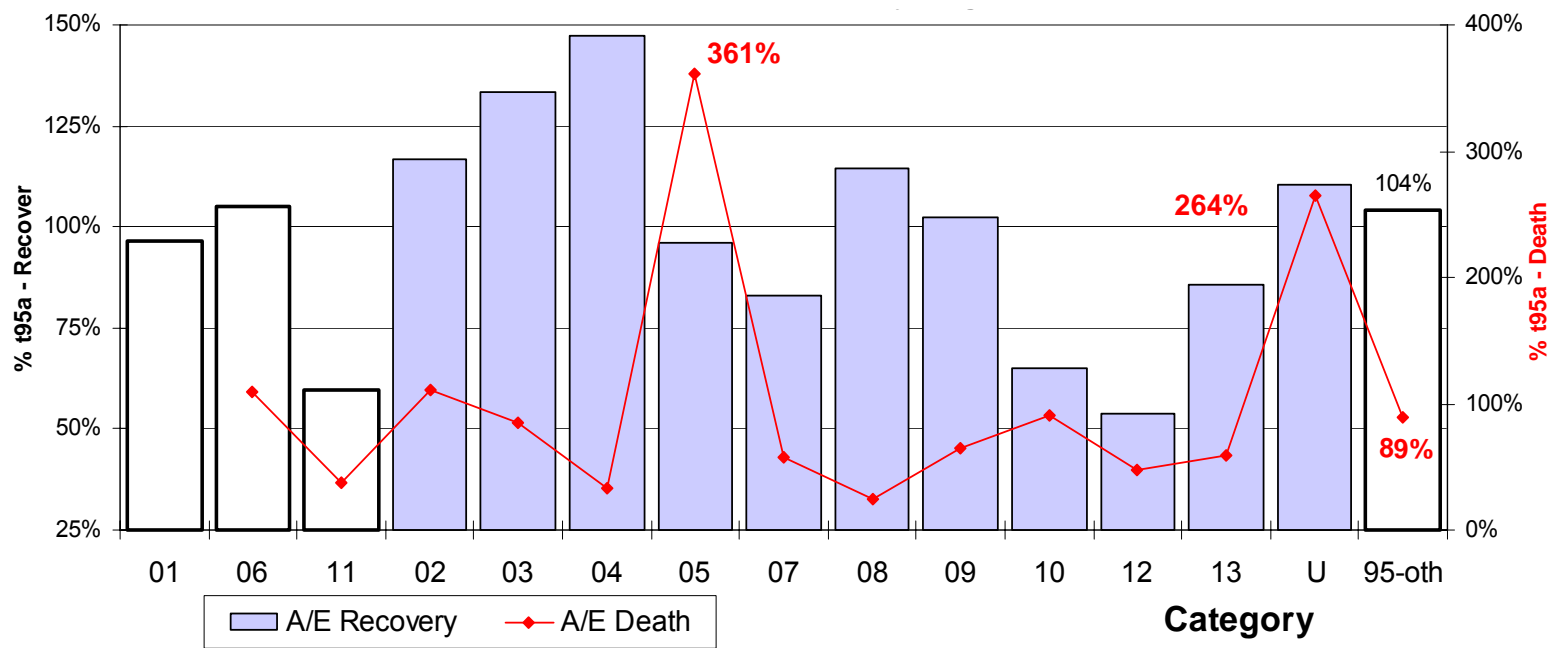
Male claim termination by duration



Female claim termination by duration

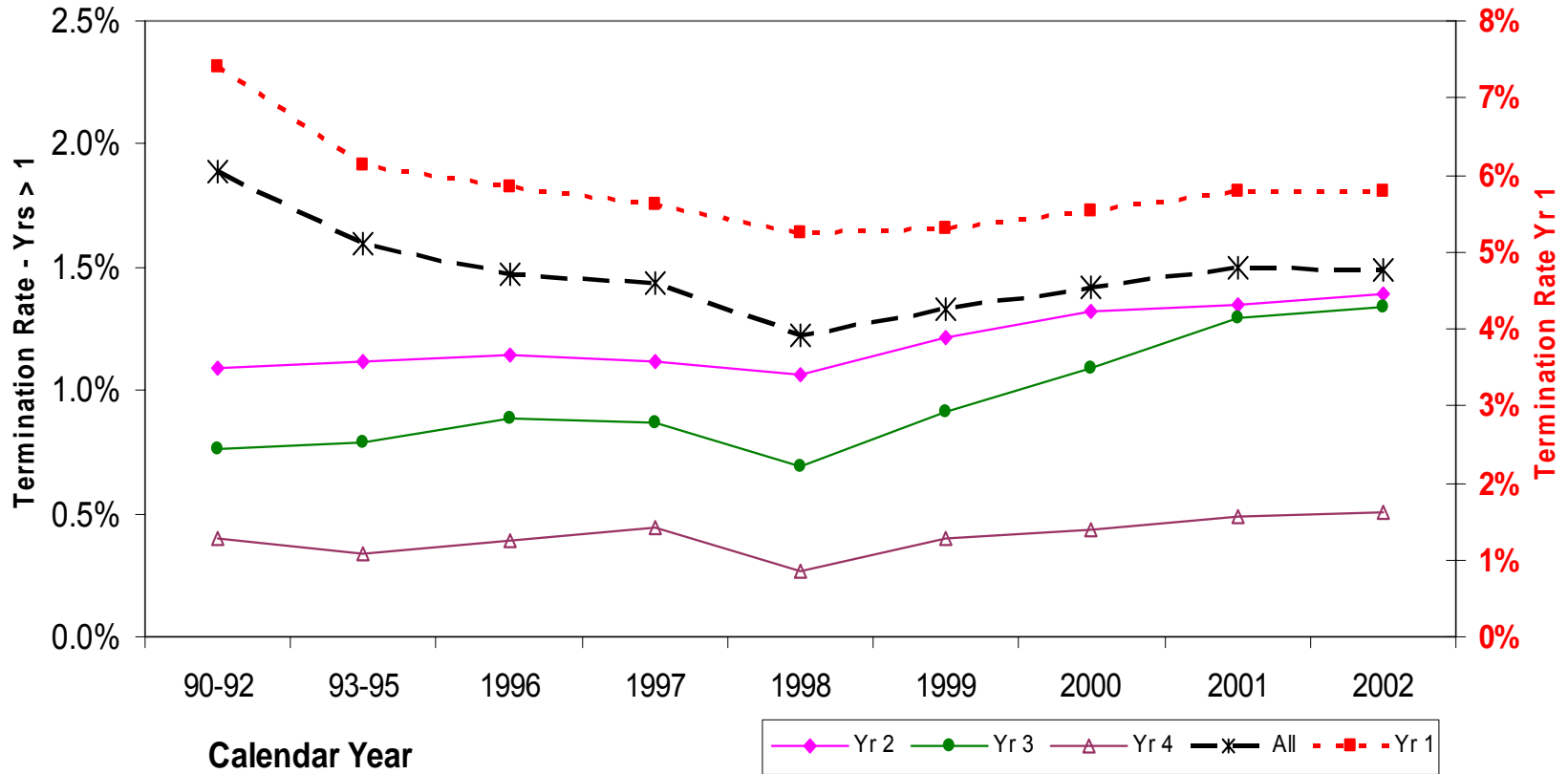


Claim terminations by diagnosis



Diagnosis Category					
%	Cat #	Description	%	Cat #	Description
0.9%	1	Maternity or Pregnancy/Childbirth			
7.0%	6	Mental Nervous	25.1%	8	Musculoskeletal/Connective Tissue
1.9%	11	Aids/HIV	3.6%	9	Other
1.6%	2	Reproductive/Urinary Disease	3.4%	10	Respiratory
2.0%	3	Digestive	12.8%	12	Nervous System & Sense Organ, Infectious/Parasitic
9.4%	4	Injury/Poisoning	17.4%	13	Circulatory
7.2%	5	Neoplasms	3.0%	U	Unknown
4.8%	7	Emergent Disabling Conditions	90.2%	95-oth	All categories except 1, 6, & 11 are mapped to t95a all-oth diagnosis cat

Recovery rates by calendar year and duration



Death rates by calendar year and duration

