

INDIVIDUAL DISABILITY INCOME INSURANCE LAPSE EXPERIENCE

A JOINT STUDY SPONSORED BY
LIMRA INTERNATIONAL AND THE SOCIETY OF ACTUARIES



Marianne Purushotham, FSA
Product Research
860-285-7794
mpurushotham@limra.com

Sue Fracasso
Editor, Publishing Resources

© 2004, LIMRA International, Inc.®
300 Day Hill Road, Windsor, Connecticut 06095-4761, U.S.A.
350 Bloor Street East, 2nd Floor, Toronto, Ontario M4W 3W8, Canada
St. Martins House, 31–35 Clarendon Road, Watford WD17 1JA, United Kingdom
28 Wattle Valley Road, Canterbury, Melbourne VIC 3126, Australia
China Merchants Tower, Suite 917, 161 Lu Jia Zui East Road, Pudong, Shanghai 200120, China

This publication is a benefit of LIMRA International and Society of Actuaries membership. No part may be shared with other organizations or reproduced in any form without LIMRA's written permission.

CONTENTS

[Click on page
number to connect.](#)

EXECUTIVE SUMMARY	5
DATA USES.....	6
METHODOLOGY AND DATA.....	7
Methodology	7
Data Characteristics	8
INDIVIDUAL DISABILITY INCOME LAPSE EXPERIENCE	9
Lapse Rates by Renewability Condition	9
Lapse Rates by Coverage Type	14
Lapse Rates by Issue Age.....	14
Lapse Rates by Gender.....	16
Lapse Rates by Elimination Period.....	17
Lapse Rates by Benefit Period.....	19
Voluntary Lapse Rates by Definition of Disability	21
Lapse Rates by Occupation Class.....	21
Lapse Rates by Distribution Channel.....	24
Lapse Rates by Underwriting Type	24
Voluntary Lapse Rates by Smoker Status	25
Lapse Rates by Premium Payment Mode and Billing Type.....	26
RELATED LINKS	29
PARTICIPATING COMPANIES.....	30
APPENDIX A: EXPOSURE TABLES.....	31

FIGURES AND TABLES

[Click on page number to connect.](#)

Figure 1 — Individual DI Lapse Rates by Policy Year.....	9
Figure 2 — Individual DI Policy Lapse Rates by Renewability Condition and Policy Year	10
Figure 3 — Noncancelable Individual DI Policy Lapse Rates	10
Figure 4 — Noncancelable Individual DI Lapse Rates	11
Figure 5 — Guaranteed Renewable Individual DI Lapse Rates	11
Figure 6 — Individual DI Lapse Rates Versus Individual Life and Long-Term Care Insurance	12
Figure 7 — Individual DI Lapse and Termination Rates Guaranteed Renewable Plans Only	13
Figure 8 — Individual DI Lapse and Termination Rates Noncancelable Plans Only	13
Figure 9 — Individual DI Lapse Rates by Coverage Type	14
Figure 10 — Noncancelable Individual DI Lapse Rates	15
Figure 11 — Guaranteed Renewable Individual DI Lapse Rates by Issue Age Group and Policy Year.....	15
Figure 12 — Guaranteed Renewable Individual DI Lapse Rates by Gender and Policy Year	16
Figure 13 — Noncancelable Individual DI Lapse Rates	17
Figure 14 — Individual DI Lapse Rates.....	18
Figure 15 — Noncancelable Individual DI Lapse Rates	18
Figure 16 — Guaranteed Renewable Individual DI Lapse Rates	19
Figure 17 — Individual DI Lapse Rates by Benefit Period and Renewability Condition.....	19
Figure 18 — Individual DI Lapse Rates by Benefit Period and Policy Year Noncancelable Plans Only.....	20
Figure 19 — Individual DI Lapse Rates by Benefit Period and Policy Year Guaranteed Renewable Plans Only.....	20
Figure 20 — Lapse Rates by Definition of Disability and Policy Year	21

[Click on page number to connect.](#)

Figure 21 — Guaranteed Renewable Individual DI Lapse Rates
by CIDA Occupation Class 22

Figure 22 — Noncancelable Individual DI Lapse Rates
by CIDA Occupation Class 22

Figure 23 — Noncancelable Individual DI Lapse Rates
by CIDA Occupation Class and Issue Age Group 23

Figure 24 — Guaranteed Renewable Individual DI Lapse Rates
by CIDA Occupation Class and Issue Age Group 23

Figure 25 — Individual DI Lapse Rates by Primary Distribution Channel
and Policy Year 24

Figure 26 — Noncancelable Individual DI Lapse Rates
by Underwriting Type and Policy Year 25

Figure 27 — Guaranteed Renewable Individual DI Lapse Rates
by Underwriting Type and Policy Year 25

Figure 28 — Noncancelable Individual DI Lapse Rates by Smoker Status
and Policy Year 26

Figure 29 — Guaranteed Renewable Individual DI Lapse Rates by Smoker
Status and Policy Year 26

Figure 30 — Individual DI Lapse Rates by Premium Payment Mode
and Policy Year 27

Figure 31 — Individual DI Lapse Rates by Premium Payment Mode
and Bill Type 27

Figure 32 — Noncancelable Individual DI Lapse Rates by Bill Type
and Policy Year 28

Figure 33 — Guaranteed Renewable Lapse Rates by Bill Type and Policy Year 28



Table 1 — Exposure Records by Issue Year and Renewability Condition 8

Table 2 — Individual DI Policy Activity Reported During the Study
Observation Period 8

Table 3 — Individual DI Buyer Results by Gender 16

Table A-1 Exposure by Renewability Condition and Issue Age 31

Table A-2 Exposure by Renewability Condition and Gender 31

Table A-3 Exposure by Renewability Condition and Elimination Period 32

Table A-4 Exposure by Renewability Condition and Benefit Period 32

EXECUTIVE SUMMARY

This report represents the first study of individual disability income (IDI) lapse experience conducted jointly by LIMRA International and the Society of Actuaries. The study examines lapse activity for years 1999 through 2001. Most participating companies submitted data on a policy year basis for years 1999 and 2000; however, three companies provided calendar year data.

Insights

- Overall, lapse rates for noncancelable disability income plans have decreased since LIMRA's 1990–1993 study of individual DI lapse experience.
- Guaranteed renewable plans exhibited higher rates of lapsation than noncancelable plans for the current study observation period.
- During 1999–2001, rates of lapsation for noncancelable IDI products were generally lower than rates of lapsation for individual life products based on LIMRA's most recent study of individual life persistency.
- After policy year 8, for both guaranteed renewable and noncancelable business, lapse rates for issue ages over 45 are significantly higher than those for the younger issue age groups.
- Females exhibited poorer persistency than males with slightly larger differences seen in the guaranteed renewable individual DI plans.
- Noncancelable policies with lifetime benefits exhibited the lowest rates of lapsation while guaranteed renewable policies with short benefit periods (between one and two years) experienced the significantly higher lapse rates.
- In general, the professional occupation classes experienced lower lapse rates than the blue and grey collar occupations. However, after policy year 10, for guaranteed renewable policies, the blue and grey collar occupation classes tended to have lower lapse rates than the professional occupation classes.
- By distribution channel, career agents experienced higher rates of persistency than independent producers.
- Individual disability income policies written on a guaranteed issue basis consistently exhibited higher rates of lapsation than policies issued under traditional underwriting approaches.

DATA USES

This study can be used for industry benchmarking as well as for background information for individual disability income product development, planning, and experience monitoring.

The data contained in this report can help companies to identify factors that impact IDI product persistency. However, it is important to keep in mind that the current study participants do not represent the entire individual DI industry and therefore reported results should be used only as a supplement to the experience of the individual carrier. Companies should carefully consider differences in distribution, product design, product development, and market strategy between their own organization and the current study participants.

METHODOLOGY AND DATA

This report represents results of LIMRA's most recent study of individual disability income lapse experience. Eight organizations submitted data representing experience for the period 1999 to 2001.

METHODOLOGY

For purposes of this report, a policy is considered a lapse if it is in force at the beginning of the policy year of observation, but not all of the premium that comes due during the year is paid, including the premium due on the next policy anniversary.

Lapsed business includes those policies whose premiums come due during the policy year under study, but for which not all premium is paid before the end of the grace period. Lapses also include policies terminated for unknown reasons.

Lapsed business excludes policies on claim payment, expiries, deaths, lapses resulting from internal replacement programs, and lapses during the policy year that are reinstated before or on the next policy anniversary.

Participants provided information on their entire in-force block and, except in cases where a company's volume of business was so large or its experience so different from that of other participants that overall results would be unduly skewed, the lapse rates shown are based on 100 percent of insureds.

Lapse rates are calculated as follows:

$$\text{Annualized Lapse Rate} = 100 \times \frac{\text{Number of Policies Lapsed During the Year}}{\text{Number of Policies Exposed to Lapse During the Year}}$$

Lapses contribute exposure for the full 12 months. Terminations because of other causes are not included in the amount lapsing and contribute exposure for only the fraction of the year they were in force.

Industry lapse rates are calculated as a weighted average of the experience of all contributing companies, so companies with larger in-force blocks will impact the overall results more than companies with smaller in-force blocks will.

DATA CHARACTERISTICS

More than 90 percent of the study exposure base is related to noncancelable individual disability income plans. Table 1 shows exposure records by issue year and renewability condition. Table 2 shows policy activity during the observation period.

More detailed characteristics of the exposure data can be found in Appendix A including breakdowns by issue age, gender, elimination period, and benefit period.

The average issue age for IDI business underlying the current study is 37 for noncancelable policies and 38 for guaranteed renewable.

**Table 1 —
Exposure Records by Issue Year and Renewability Condition**

	Noncancelable	Guaranteed renewable
Prior to 1984	14.3%	6.1%
1984–1987	13.5	3.3
1988–1991	20.6	3.1
1992–1995	25.1	12.4
1996–1998	17.5	36.3
1999	6.0	23.7
2000	3.0	15.1
	100%	100%

**Table 2 —
Individual DI Policy Activity Reported During the Study Observation Period**

Percentage of Exposure Records

	Noncancelable	Guaranteed renewable
Lapse for nonpayment of premium	4.3%	7.6%
Expiration of benefits	0.2	0.2
Death	0.1	0.1
Policy in claim status	1.2	0.6
Terminated for reasons unknown	0.3	2.6
Remaining in force	93.9	88.9%
	100%	100%

INDIVIDUAL DISABILITY INCOME LAPSE EXPERIENCE

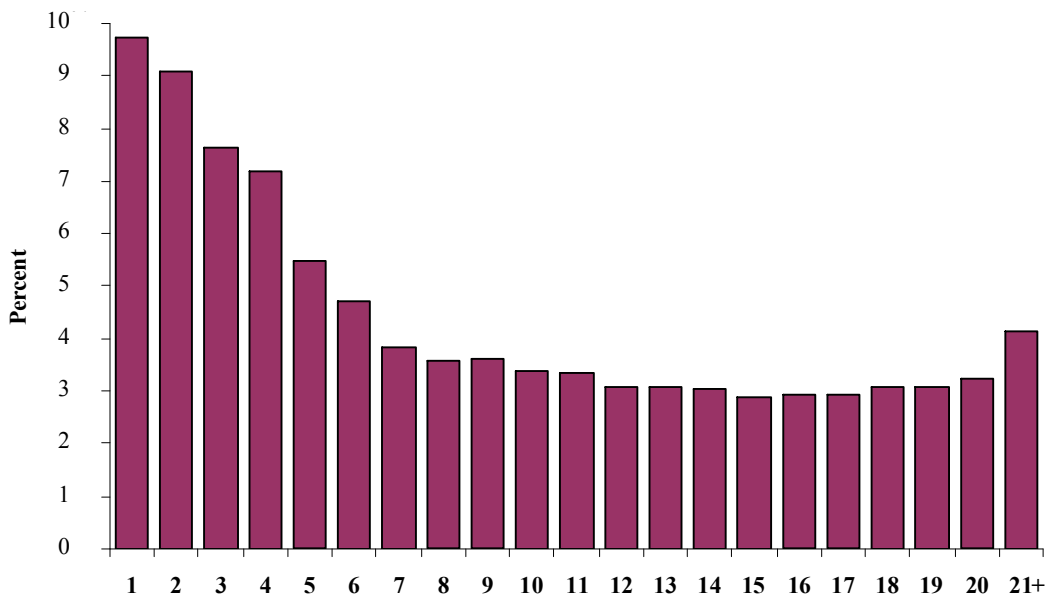
Lapse experience for individual disability income products has increased overall. Lapse rates for all policy years combined averaged 4.7 percent for noncancelable plans, 10.4 percent for guaranteed renewable business, and 5.0 percent for all plans combined during 1999 through 2001.

LAPSE RATES BY RENEWABILITY CONDITION

Figure 1 shows lapse rates for all individual disability income plans combined. The lapse rates for total IDI generally decrease by duration down to an average rate of between 3 percent and 4 percent by policy year 8.

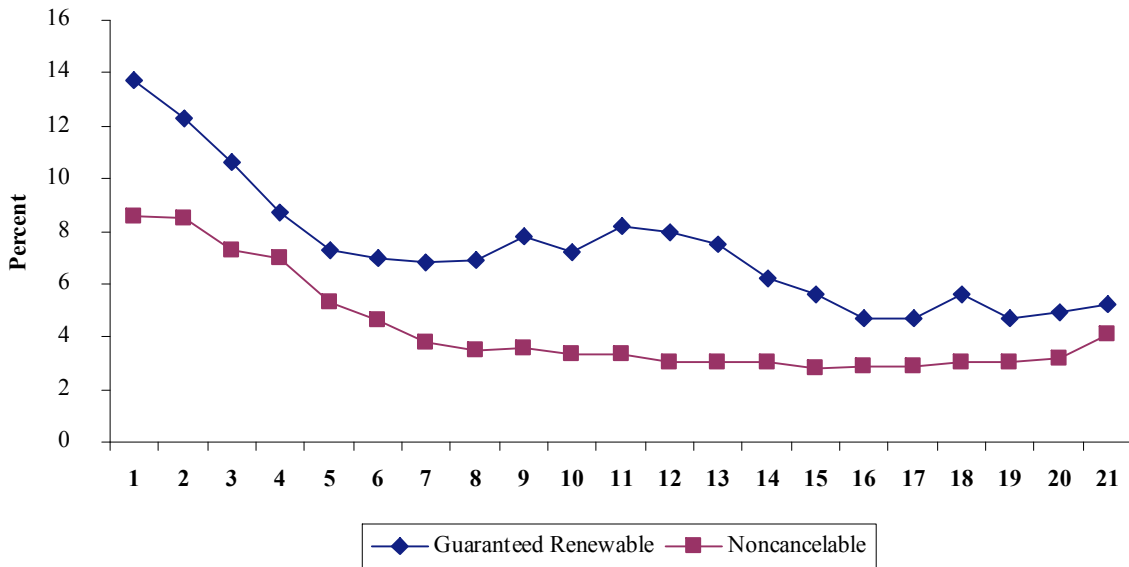
**Figure 1 —
Individual DI Lapse Rates by Policy Year**

All Plans Combined



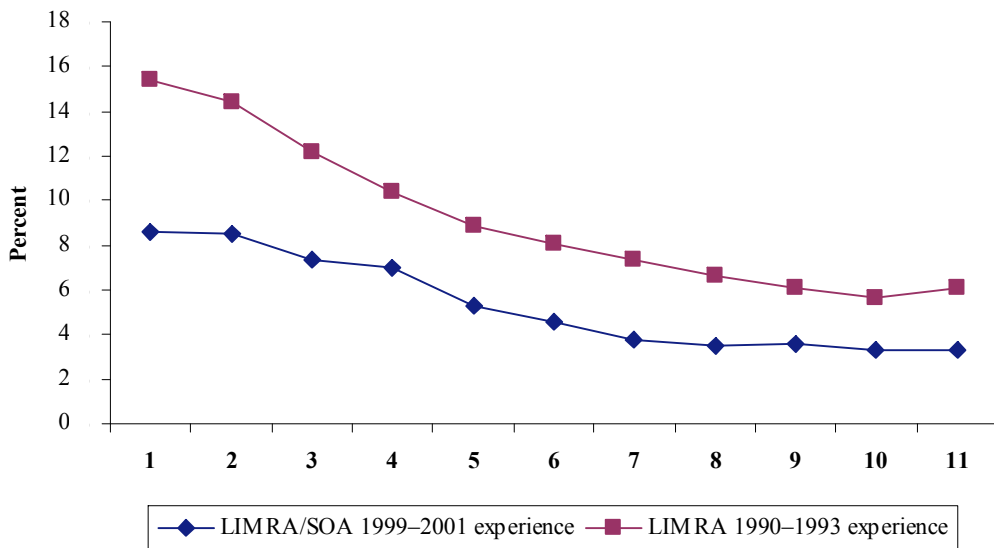
With a larger proportion of policies sold in the lower occupation classes, guaranteed renewable plans have historically experienced higher rates of lapsation than noncancelable business. As the current study results indicate, this pattern appears to be continuing. While noncancelable individual disability income lapse rates tail off at or below the levels of individual life insurance business (in the 3 percent range), guaranteed renewable ultimate lapse rates tend to settle in the 4 to 6 percent range (Figure 2).

**Figure 2 —
Individual DI Policy Lapse Rates by Renewability Condition and Policy Year**



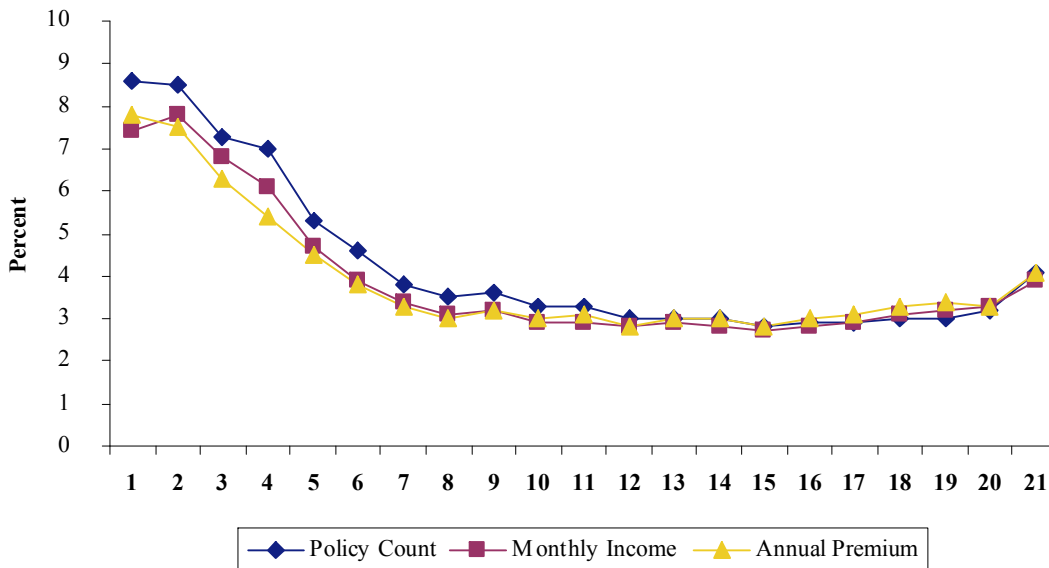
In comparison with data underlying the LIMRA 1990–1993 study of individual noncancelable DI experience, persistency has continued to improve (Figure 3). Note that early duration lapse rates have decreased from more than 15 percent to less than 9 percent.

**Figure 3 —
Noncancelable Individual DI Policy Lapse Rates**



An examination of noncancelable lapse rates by policy count, benefit amount (monthly income provided) and annualized premium level indicates that although smaller policies have slightly poorer persistency, there is little variation in lapse experience by the three measures (Figure 4). For guaranteed renewable plans, smaller policies exhibit higher rates of lapsation in the early years; however, after policy year 8, larger policies have poorer persistency (Figure 5). Since guaranteed renewable plans have historically been used more often with the blue collar and gray collar occupation classes, the deterioration in experience on larger policies may be the result of policyholders encountering problems with affordability.

**Figure 4 —
Noncancelable Individual DI Lapse Rates**



**Figure 5 —
Guaranteed Renewable Individual DI Lapse Rates**

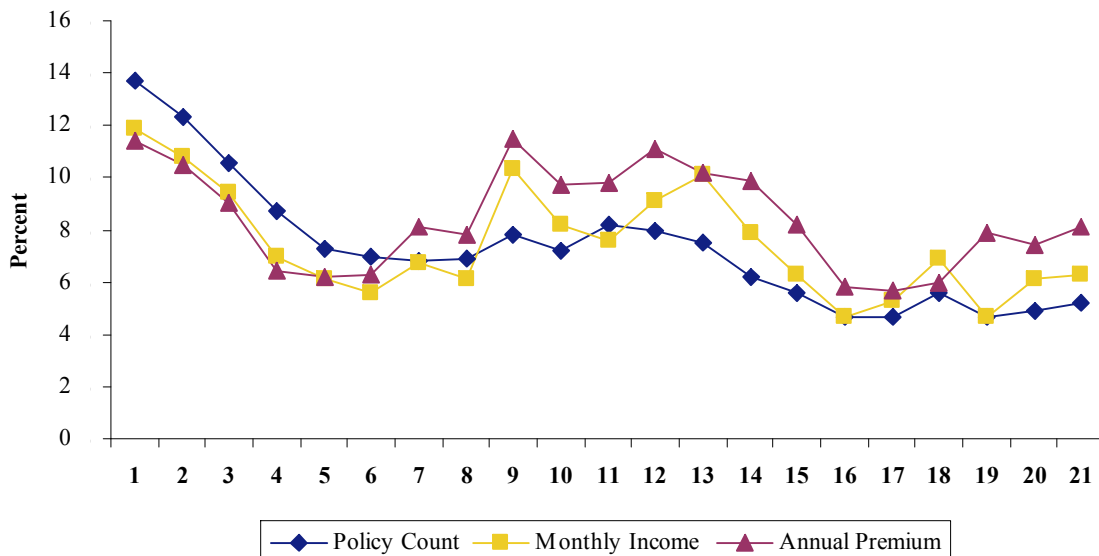
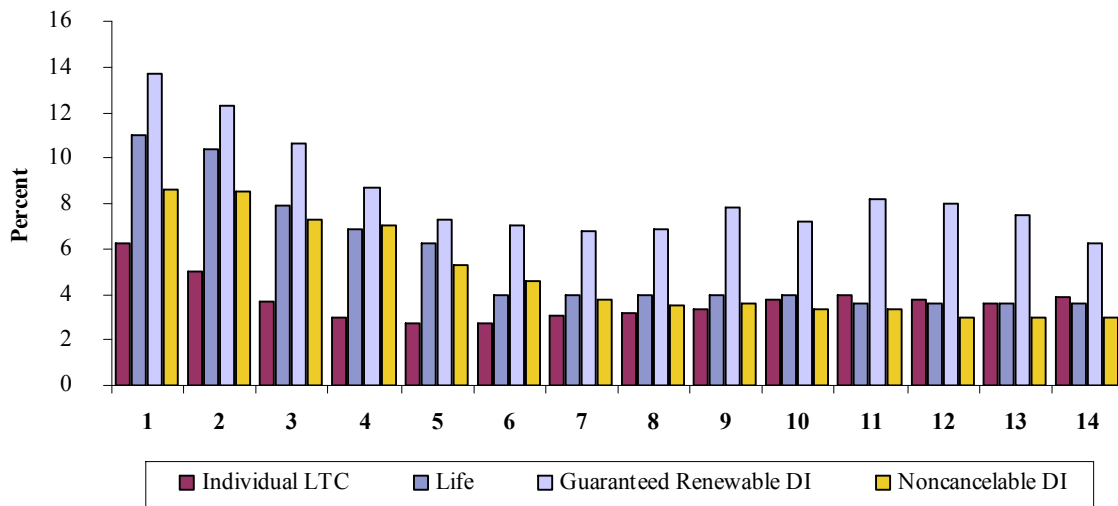


Figure 6 compares lapse experience by policy year for both noncancelable and guaranteed renewable IDI plans with the experience for individual life and long-term care insurance (LTCI) products. With the exception of the first two policy years, lapse rates for noncancelable individual disability income business are very comparable to those of individual life insurance products. Guaranteed renewable IDI products generally exhibit a poorer persistency pattern than other individual plans of insurance.

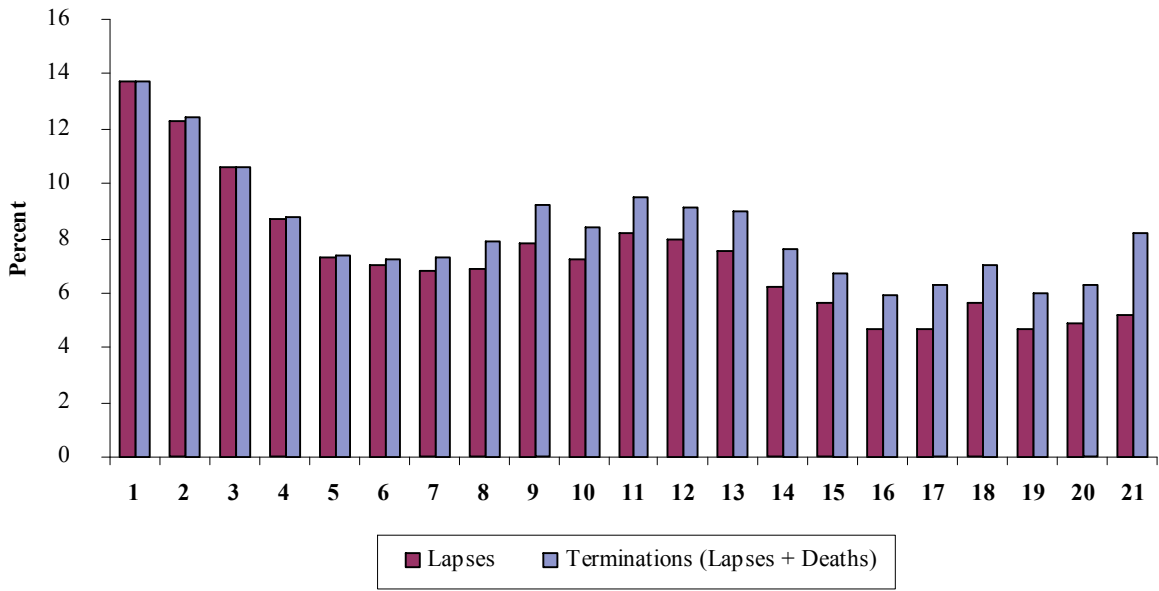
**Figure 6 —
Individual DI Lapse Rates Versus Individual Life and Long-Term Care Insurance***



* Lapse rates for individual life are based on the most recent comprehensive study conducted by LIMRA International. The observation period for that study was the mid-1990s. Individual DI and long-term care insurance results are based on recent data.

Like long-term care insurance plans, most individual disability income policies currently in force do not provide for nonforfeiture benefits. Therefore as is the case with long-term care insurance, some deaths are likely being coded incorrectly as lapses by individual DI carriers. However, since disability income products are typically sold to individuals under age 65, as one might expect, mortality has significantly less impact on termination results until the later durations (Figures 7 and 8). In addition, the difference by duration between lapses only and all terminations (lapses plus deaths) appears to be larger for guaranteed renewable business than noncancelable. This is likely due to the fact that guaranteed renewable products are more commonly offered to the blue and grey collar occupation classes.

**Figure 7 —
Individual DI Lapse and Termination Rates
Guaranteed Renewable Plans Only**



**Figure 8 —
Individual DI Lapse and Termination Rates
Noncancelable Plans Only**

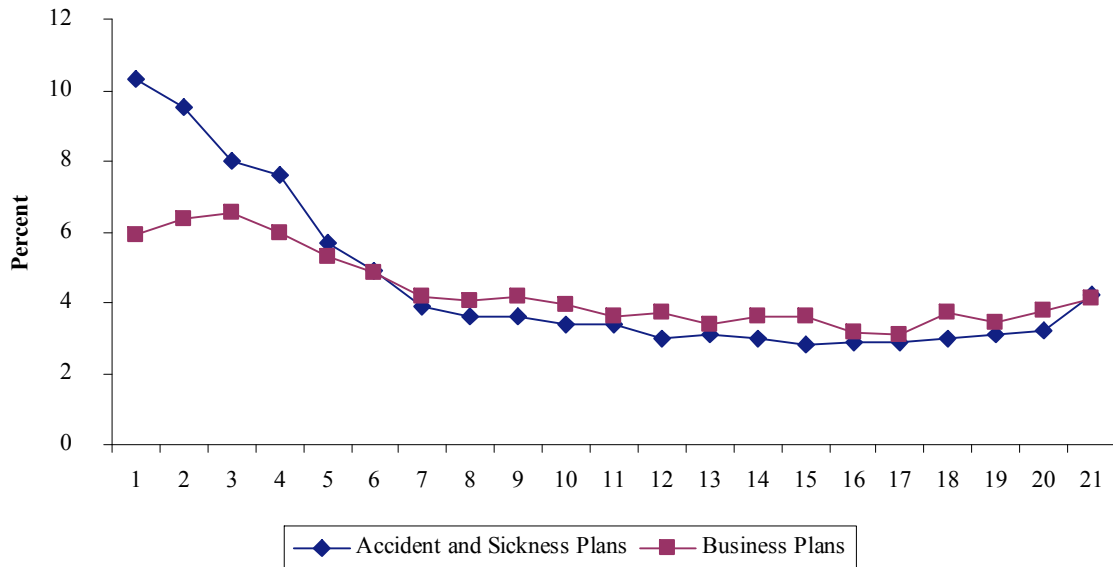


LAPSE RATES BY COVERAGE TYPE

Individual disability income insurance business products, including business overhead expense, key person, and business buyout plans, represent less than 10 percent of the exposure related to the current study. These products continue to represent a small percentage of current sales as well. Based on the results of LIMRA's continuing studies of individual disability income insurance sales and in force, DI business plans make up approximately 6 percent of sales and 6 percent of in force based on annualized premium.

As Figure 9 indicates, business plans exhibit lower rates of lapsation than traditional accident and sickness plans in the early years. However, after policy year 5, business policy experience is comparable to that of the typical accident and sickness policies.

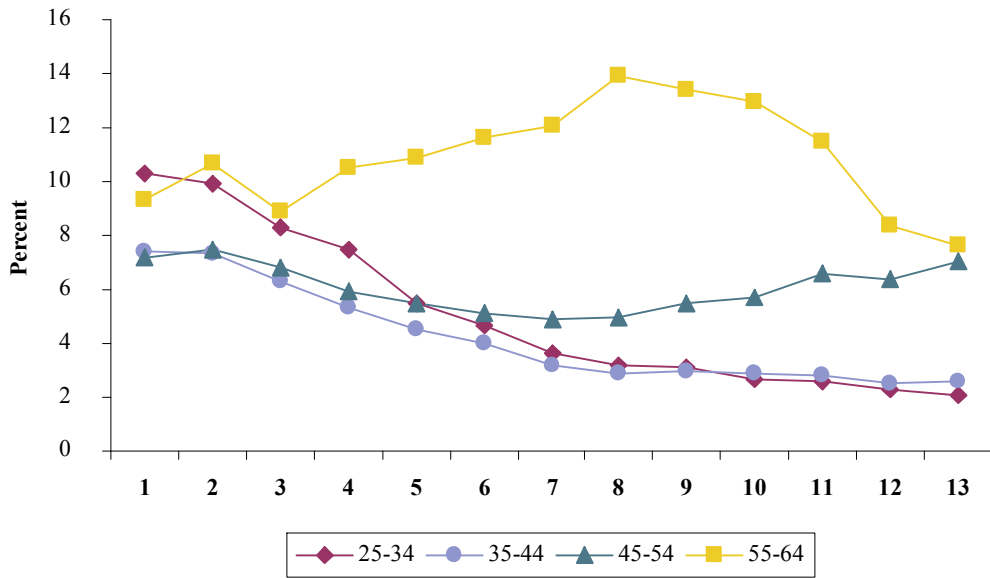
**Figure 9 —
Individual DI Lapse Rates by Coverage Type**



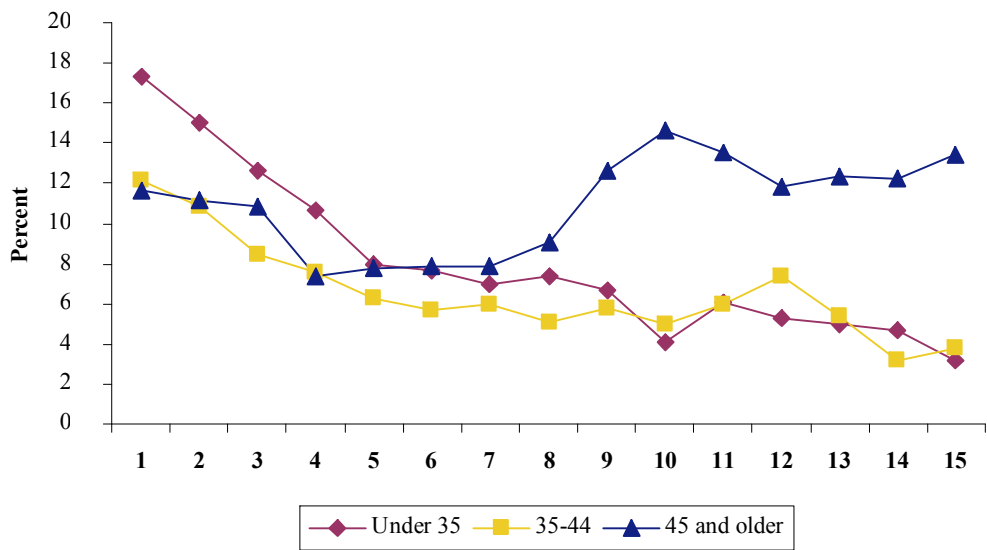
LAPSE RATES BY ISSUE AGE

More than 80 percent of the exposure for the current study falls between issue ages 25 and 44. And, with the exception of the early policy years, there appears to be little difference in rates of lapsation for the younger issue age groups (Figures 10 and 11). However, not surprisingly, for older issue ages, reported lapse rates increase substantially in the later policy years. These increases are likely the result of policyholders deciding that they no longer require substantial income replacement protection as they approach their retirement years. In addition, there may also be some deaths or expirations of coverage being incorrectly reported as lapses, especially at the oldest ages.

**Figure 10 —
Noncancelable Individual DI Lapse Rates
By Issue Age Group and Policy Year**



**Figure 11 —
Guaranteed Renewable Individual DI Lapse Rates
by Issue Age Group and Policy Year**



LAPSE RATES BY GENDER

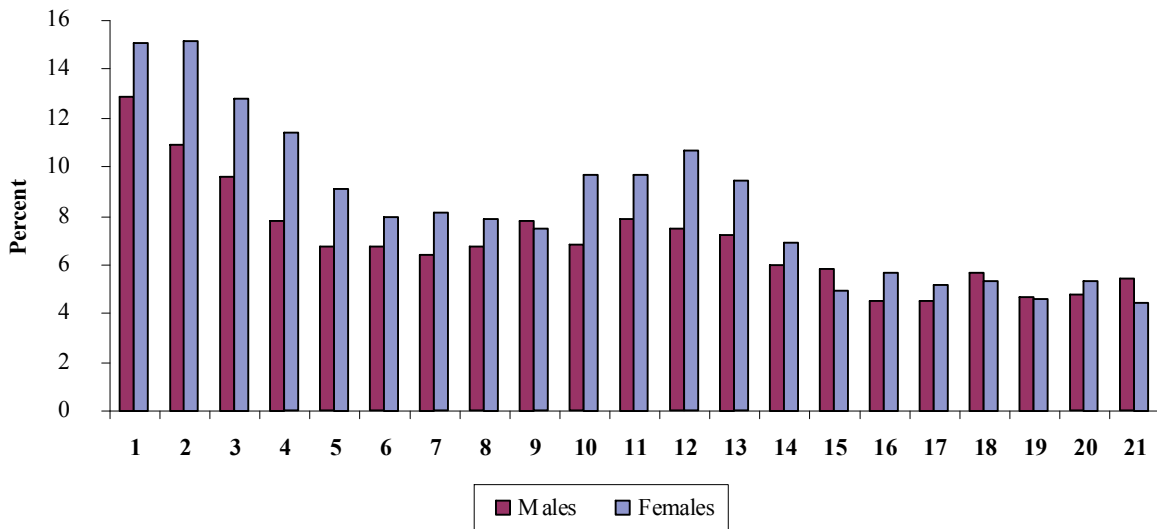
The exposure base for the current study is approximately 80 percent male and 20 percent female. With a traditional market focus on males in the professional occupation classes, both individual disability income in force and new sales continue to involve predominantly male policyholders. Preliminary results from LIMRA's 2004 Individual Disability Income Buyer study indicate that despite plans by several of the top IDI writers to begin targeting professional men and women equally, unlike individual life insurance, individual DI has not yet penetrated the female market in a substantial way (Table 3).

**Table 3 —
Individual DI Buyer Results by Gender**

Gender	1986 DI buyers	2002 DI buyers	2001 life buyers
Male	78%	70%	52%
Female	22	30	48
Total	100%	100%	100%

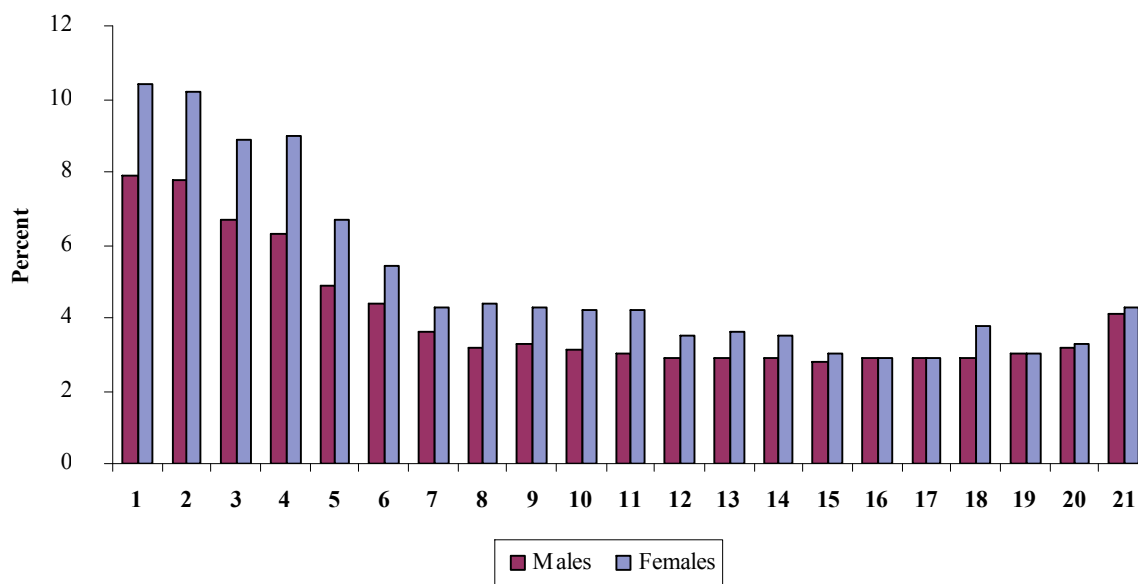
Figures 12 and 13 show rates of lapsation by gender for guaranteed renewable and noncancelable plans. Overall, females have clearly exhibited poorer persistency than males. These results are not too surprising, since women are still more likely than men to go in and out of the workforce over their lifetimes. However, there appears to be a slightly larger difference in experience between males and females for guaranteed renewable business than for noncancelable plans.

**Figure 12 —
Guaranteed Renewable Individual DI Lapse Rates
by Gender and Policy Year**



**Figure 13 —
Noncancelable Individual DI Lapse Rates**

By Gender and Policy Year



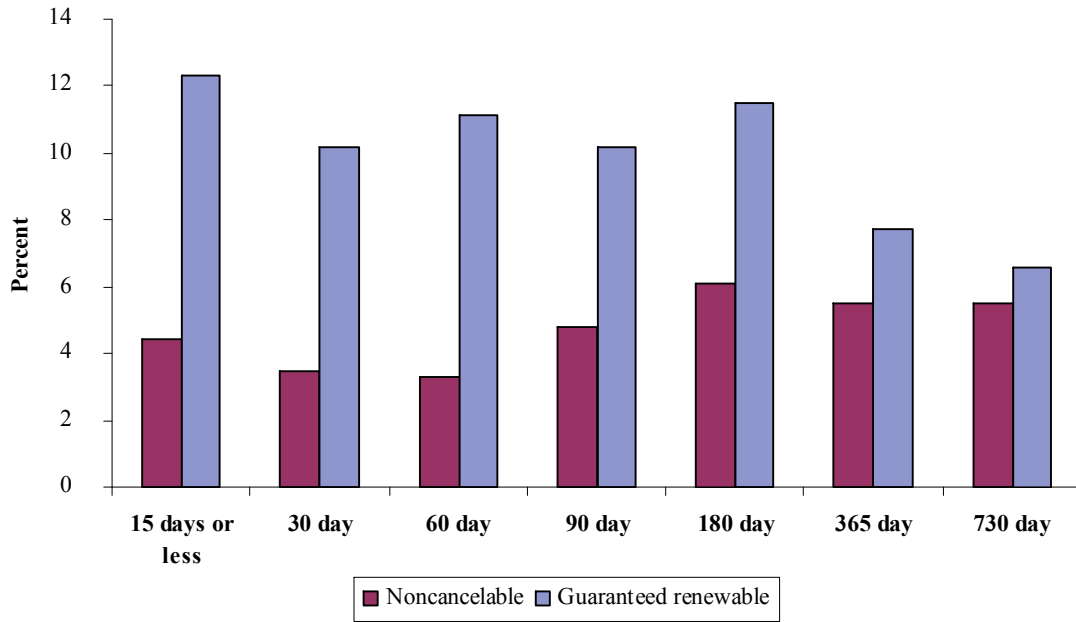
LAPSE RATES BY ELIMINATION PERIOD

For both guaranteed renewable and noncancelable policies in the current study, the 90-day and 180-day elimination periods represent more than 70 percent of the exposure base. Overall rates of lapsation (all policy years combined) increased slightly with the length of the elimination period for noncancelable plans (Figure 14). However, guaranteed renewable policies exhibited no significant difference in overall experience — except at the longest elimination periods where the exposure base is small.

Examining lapses by both elimination period and policy year yields similar results for the non-cancelable plans — lapse rates are slightly lower for the shorter elimination period elections. However, for the guaranteed renewable business the 30-day period appears to have higher rates of lapsation than the 90-day and longer elimination period policies (Figures 15 and 16).

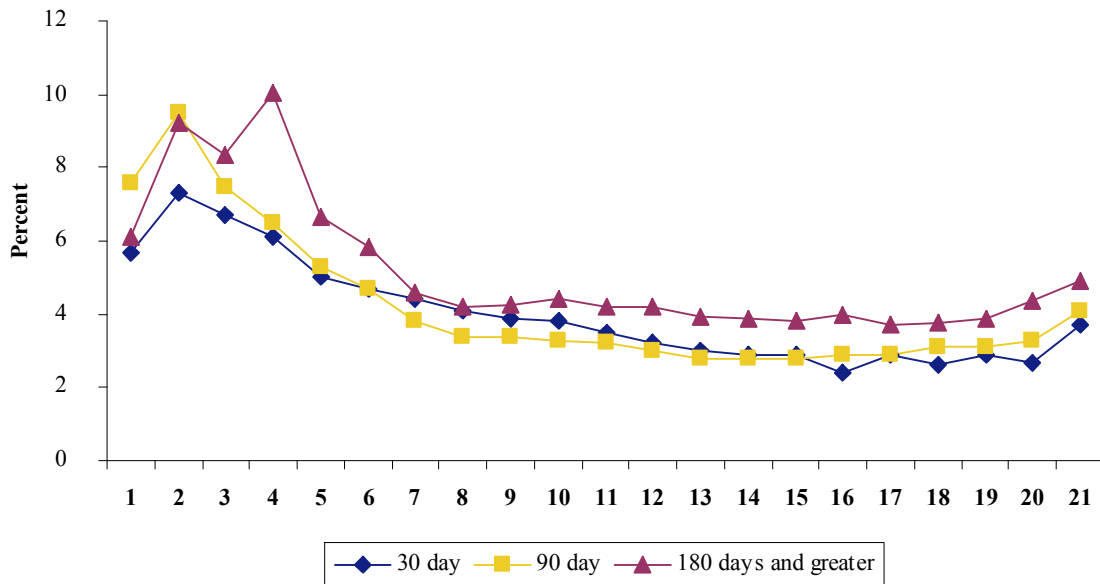
**Figure 14 —
Individual DI Lapse Rates**

By Elimination Period and Renewability Condition

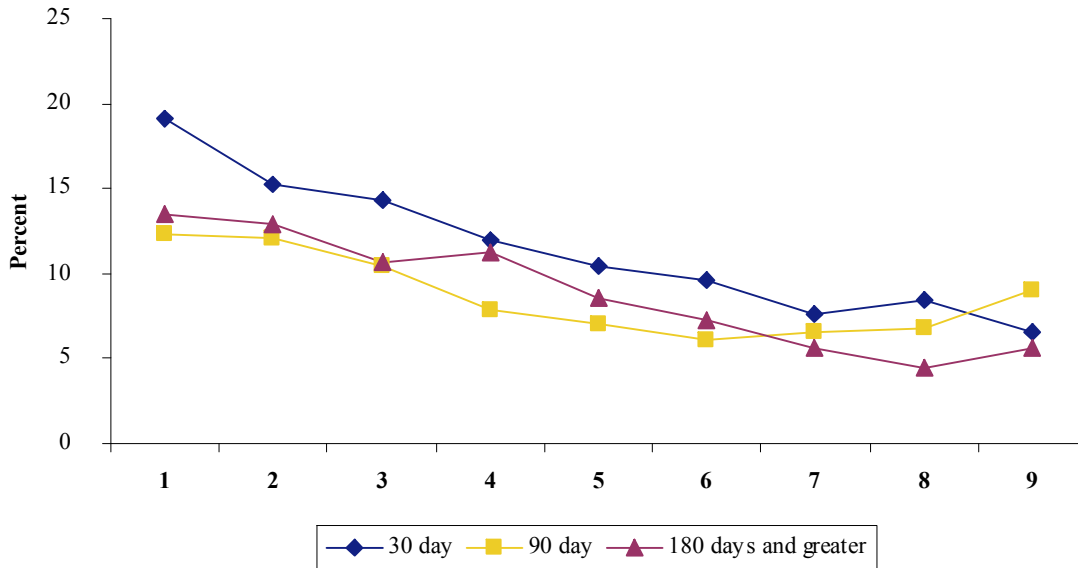


**Figure 15 —
Noncancelable Individual DI Lapse Rates**

By Elimination Period and Policy Year



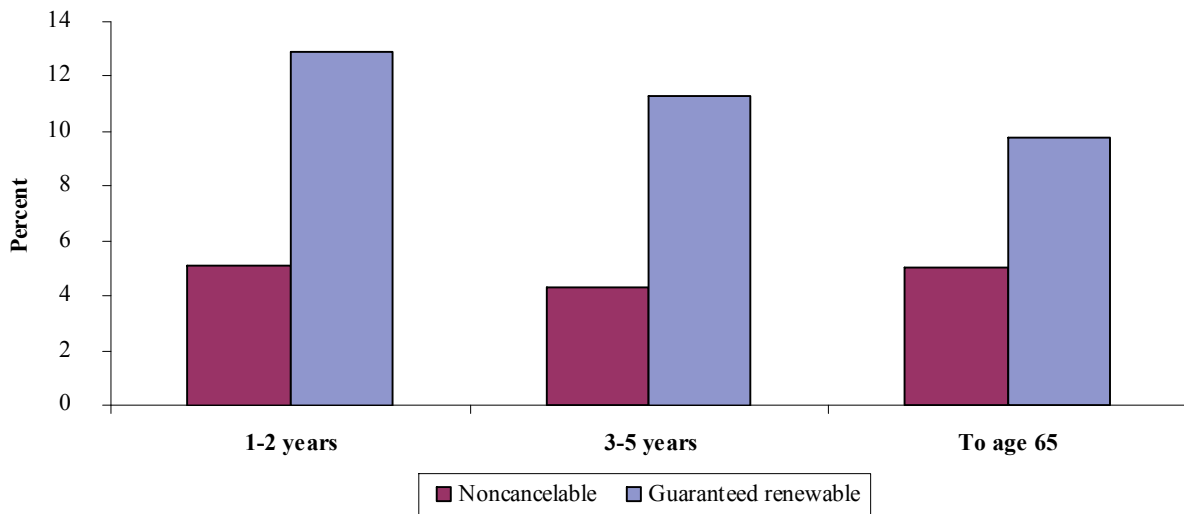
**Figure 16 —
Guaranteed Renewable Individual DI Lapse Rates**
By Elimination Period and Policy Year



LAPSE RATES BY BENEFIT PERIOD

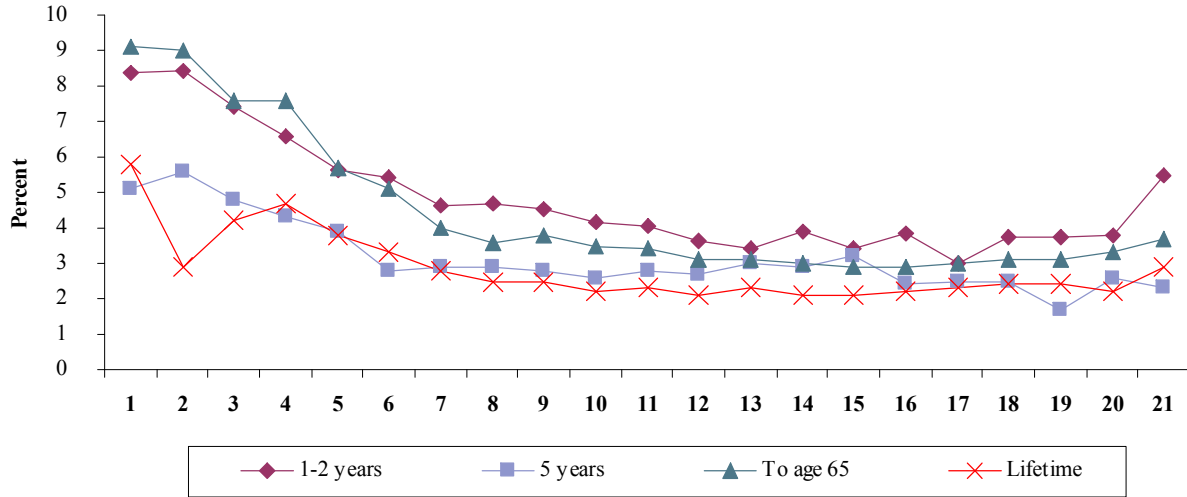
Looking at lapse experience by benefit period, for guaranteed renewable products, overall lapse rates decrease as the benefit period increases. However, for noncancelable plans, there appears to be no significant difference in overall experience by the length of the benefit payment period — with the exception of policies with lifetime benefits. These policies tend to have substantially lower rates of lapsation (2.6 percent overall) (Figures 17).

**Figure 17 —
Individual DI Lapse Rates by Benefit Period and Renewability Condition**

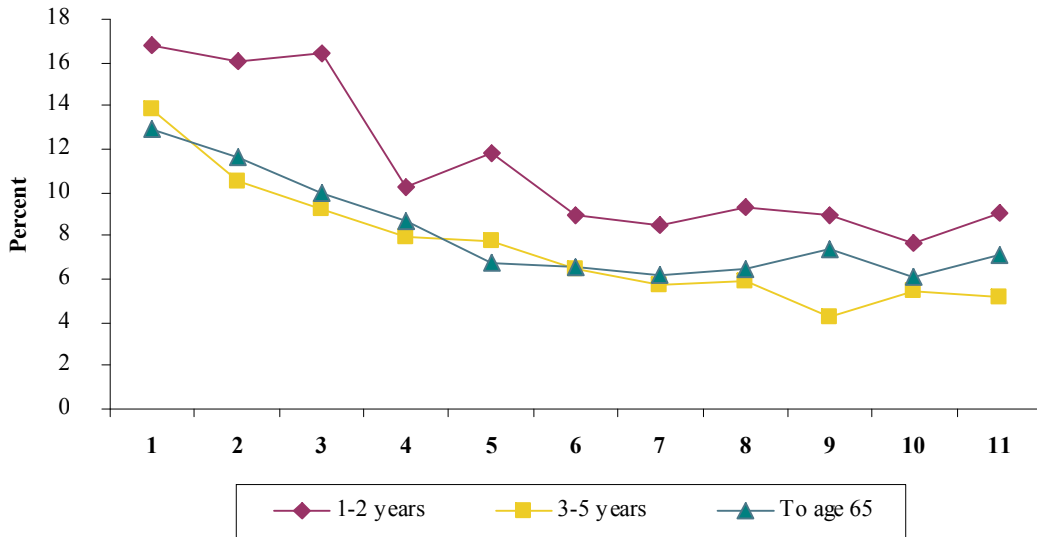


Looking at rates of lapsation by benefit period and policy year, a similar pattern emerges with five-year and lifetime plans exhibiting lower lapse rates by policy year than 1–2 year or to age 65 plans for noncancelable business (Figure 18). For guaranteed renewable business, the longer benefit period policies have better persistency than those with shorter benefit periods (Figure 19).

**Figure 18 —
Individual DI Lapse Rates by Benefit Period and Policy Year
Noncancelable Plans Only**



**Figure 19 —
Individual DI Lapse Rates by Benefit Period and Policy Year
Guaranteed Renewable Plans Only**

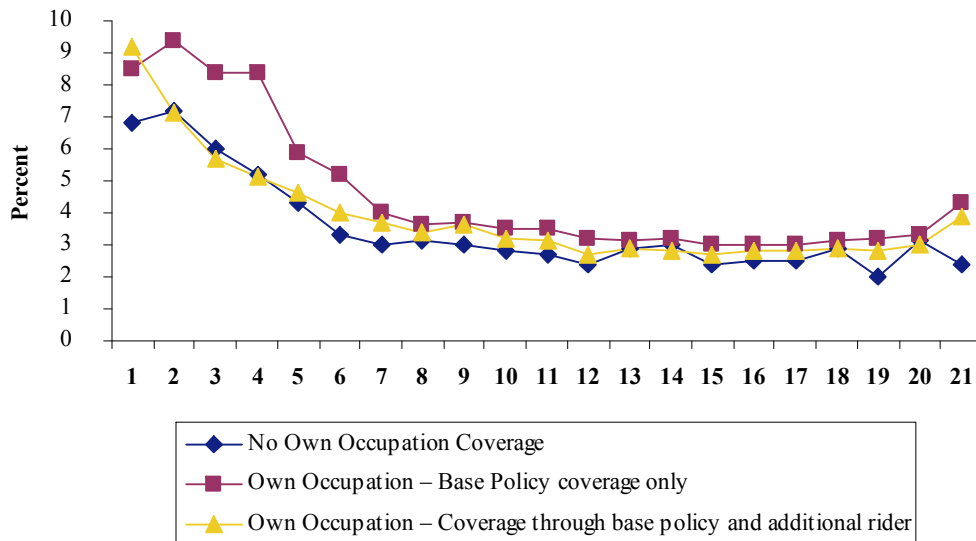


VOLUNTARY LAPSE RATES BY DEFINITION OF DISABILITY

Almost 100 percent of the guaranteed renewable business submitted for the current study was written with some period of own-occupation protection offered through the base policy coverage. On the noncancelable side, approximately 85 percent of the exposure base includes own-occupation protection either in the form of base policy coverage only or base policy coverage plus an extension of the base period through the election of an own-occupation rider.

Interestingly, results from the current study indicate that for noncancelable plans, policies with base only own-occupation protection actually exhibited slightly higher rates of lapsation than policies without own-occupation protection during the study observation period (Figure 20).

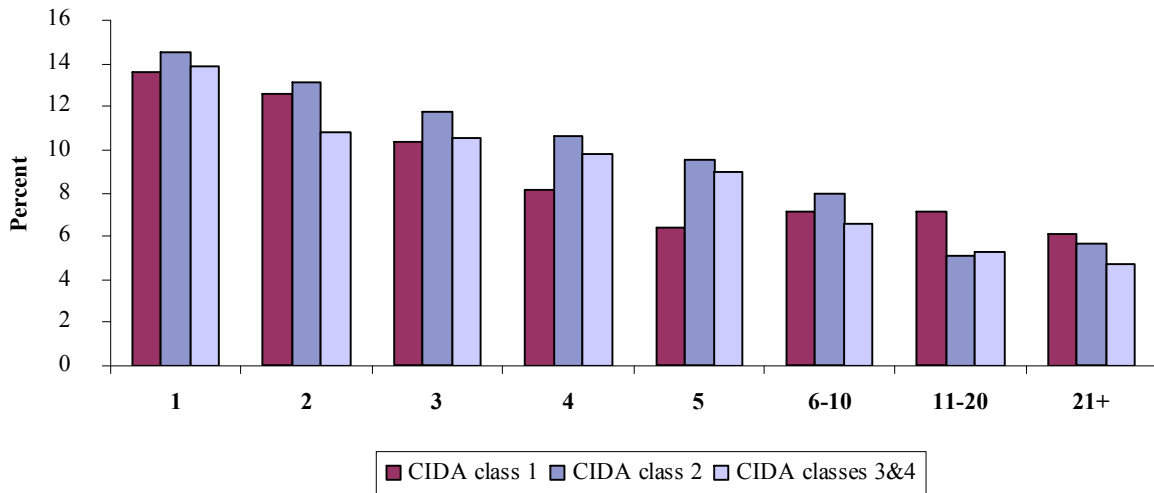
Figure 20 —
Lapse Rates by Definition of Disability and Policy Year
 Noncancelable Plans Only



LAPSE RATES BY OCCUPATION CLASS

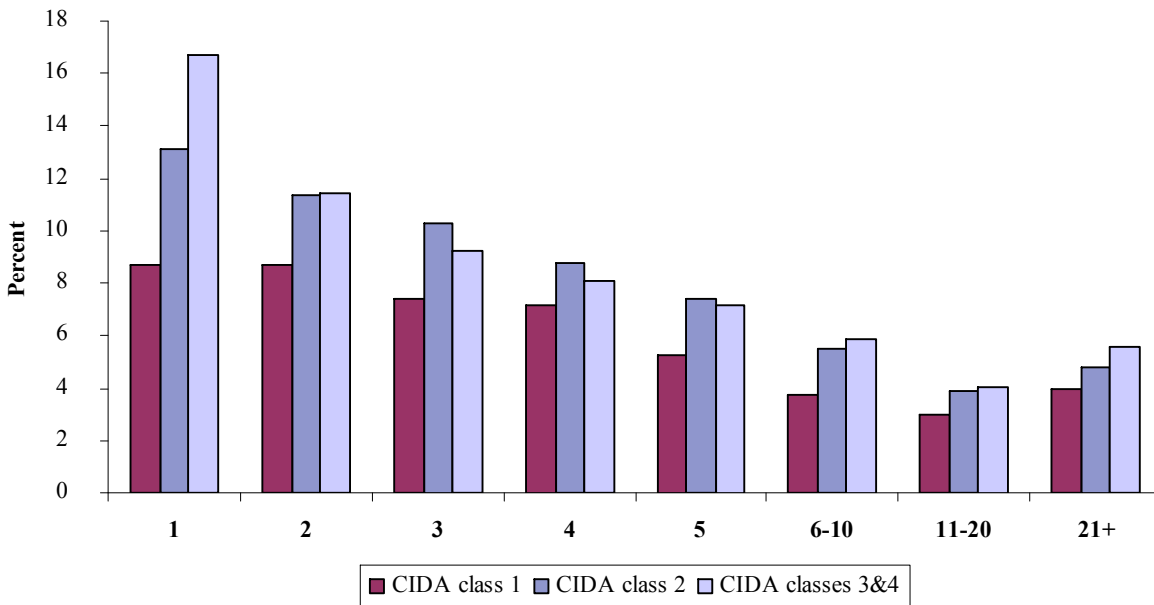
Although few companies were able to provide data by specific occupation, most participants were able to determine the insured’s assigned Commissioner’s Individual Disability Table A (CIDA) occupation class. For both noncancelable and guaranteed renewable products, the professional occupation classes exhibit the lowest rates of lapsation overall.

**Figure 21 —
Guaranteed Renewable Individual DI Lapse Rates by CIDA Occupation Class**



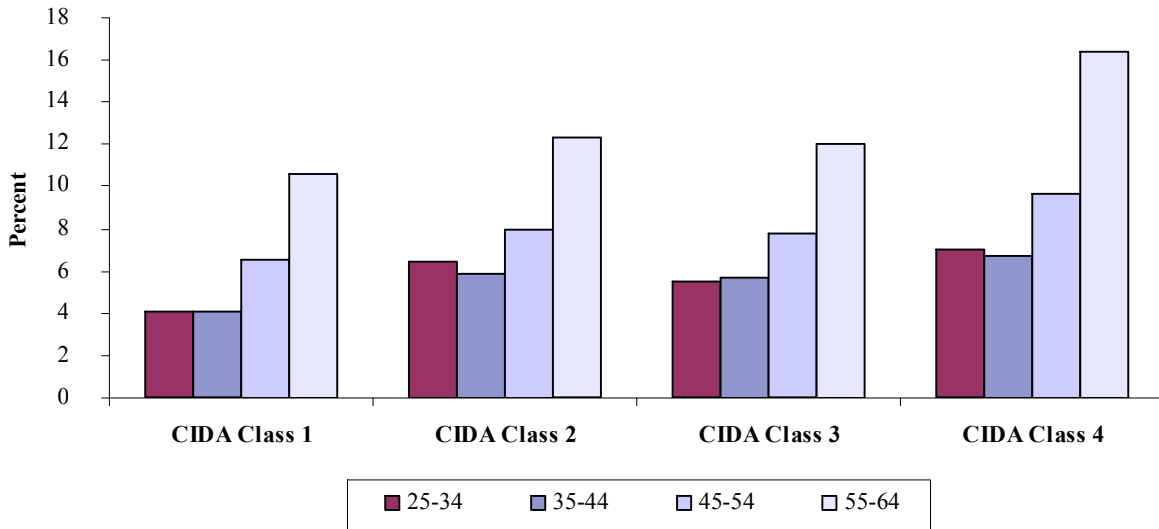
Noncancelable policies exhibit significant differences in lapse rates by CIDA OCC class in the early policy years. Guaranteed renewable products, on the other hand, show smaller differences by occupation class in the early years with the blue collar and gray collar insureds actually experiencing lower rates of lapsation than the white collar insureds after policy year 10 (Figures 21 and 22).

**Figure 22 —
Noncancelable Individual DI Lapse Rates by CIDA Occupation Class**

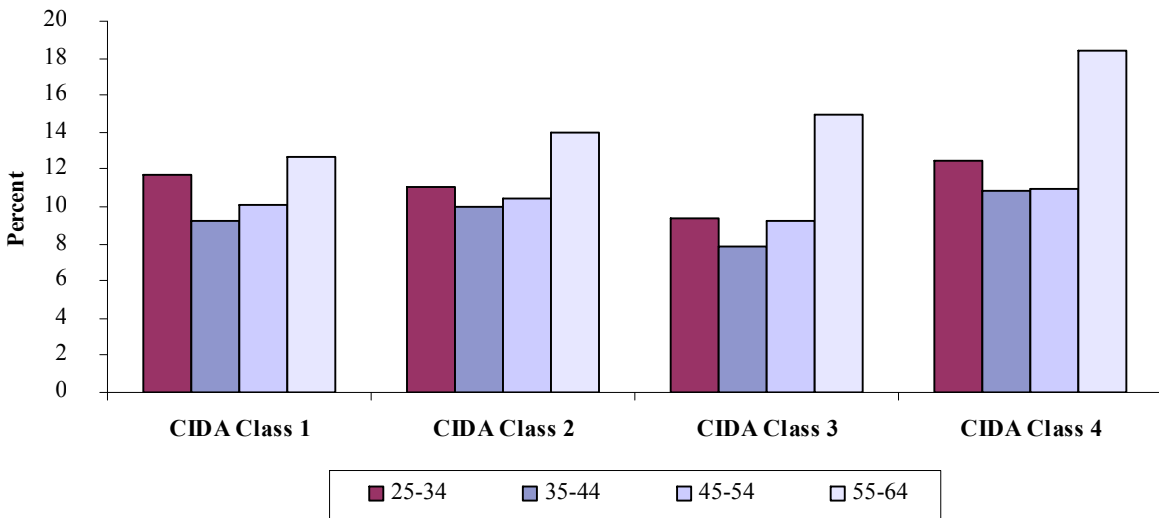


Overall, differences in experience by occupation class appear to be larger for the older issue age groups (Figures 23 and 24). In fact, on the guaranteed renewable side, only the-55-and-over group indicates a clear pattern of increasing lapses for the less favorable occupation classes.

**Figure 23 —
Noncancelable Individual DI Lapse Rates by CIDA
Occupation Class and Issue Age Group**



**Figure 24 —
Guaranteed Renewable Individual DI Lapse Rates by CIDA
Occupation Class and Issue Age Group**

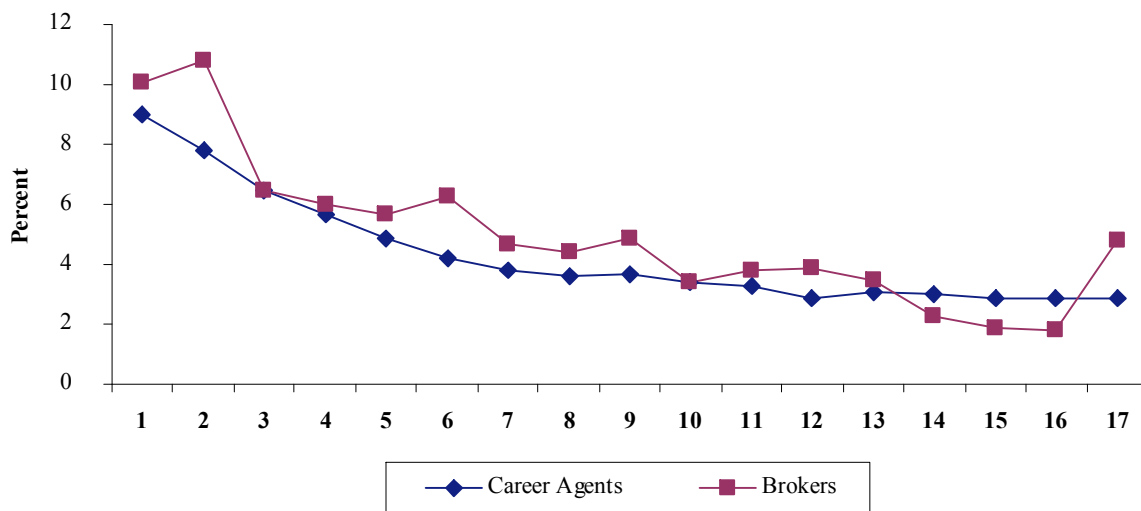


LAPSE RATES BY DISTRIBUTION CHANNEL

Five participating organizations provided data by distribution channel. Based on the current study exposure base, the career agency system exhibited slightly higher rates of persistency than the independent brokerage channel in all policy years for which there was sufficient data both by company and by policy count (Figure 25).

Possible explanations for this result include differences between the career and independent channels in terms of compensation structure, level of service, and amount of product information and advice provided during the initial sales process.

Figure 25 —
Individual DI Lapse Rates by Primary Distribution Channel and Policy Year
All Plans Combined

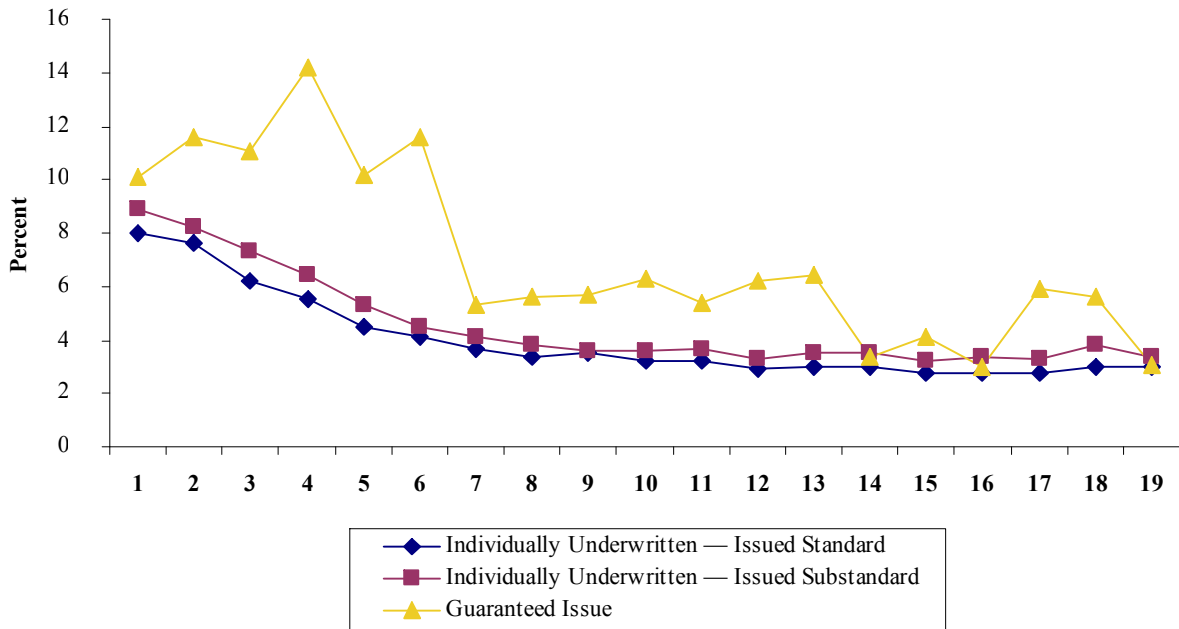


LAPSE RATES BY UNDERWRITING TYPE

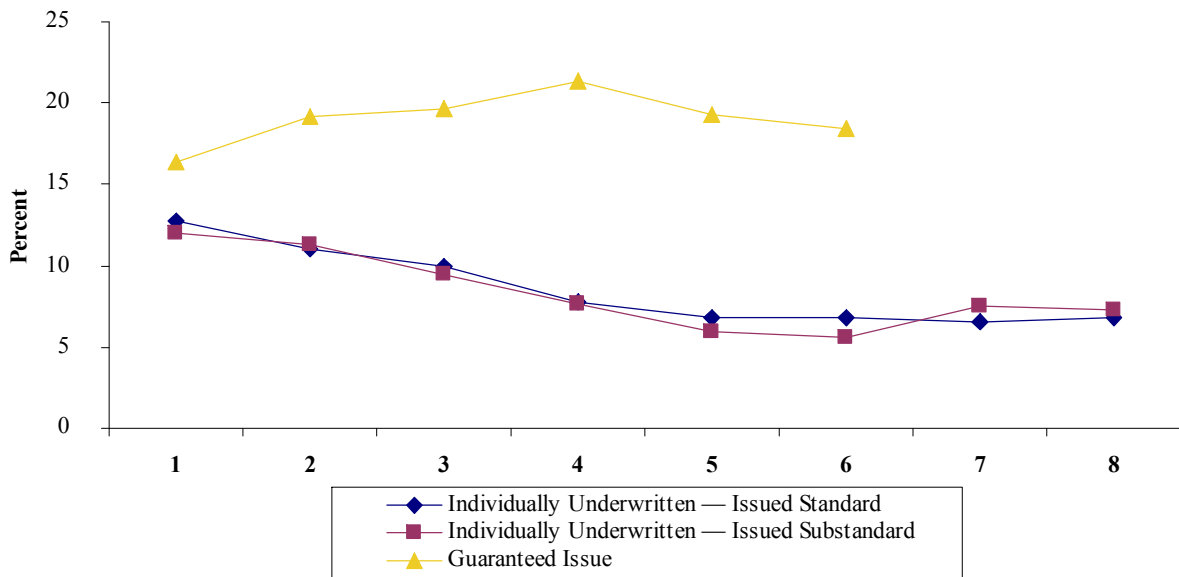
Many individual insurance carriers believe that policyholders who have gone through a thorough and rigorous underwriting process are more certain of their need for the product and the value of the coverage they have purchased, and this in turn should translate into higher rates of persistency.

Although guaranteed issue business represented only 13 percent and 7 percent of the guaranteed renewable and noncancelable exposure bases, respectively, there was a sufficient sample to compare rates of lapsation by underwriting type. Clearly, individual DI business sold on a fully underwritten basis experienced lower rates of lapsation than plans written on a guaranteed issue basis (Figures 26 and 27).

**Figure 26 —
Noncancelable Individual DI Lapse Rates by Underwriting Type and Policy Year**



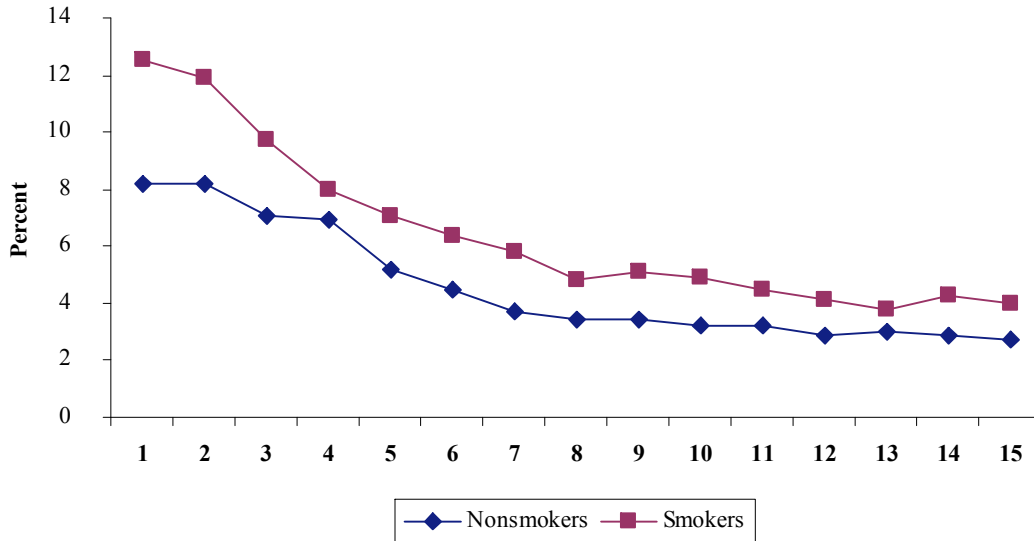
**Figure 27 —
Guaranteed Renewable Individual DI Lapse Rates by Underwriting Type and Policy Year**



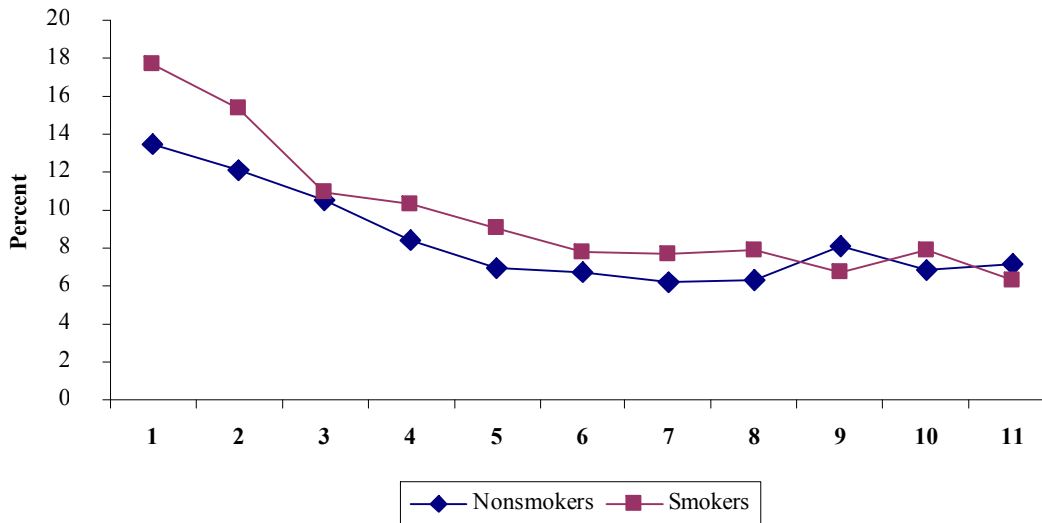
VOLUNTARY LAPSE RATES BY SMOKER STATUS

For both noncancelable and guaranteed renewable individual DI plans, smokers exhibited consistently higher rates of lapse than nonsmokers (Figures 28 and 29).

**Figure 28 —
Noncancelable Individual DI Lapse Rates by Smoker Status and Policy Year**



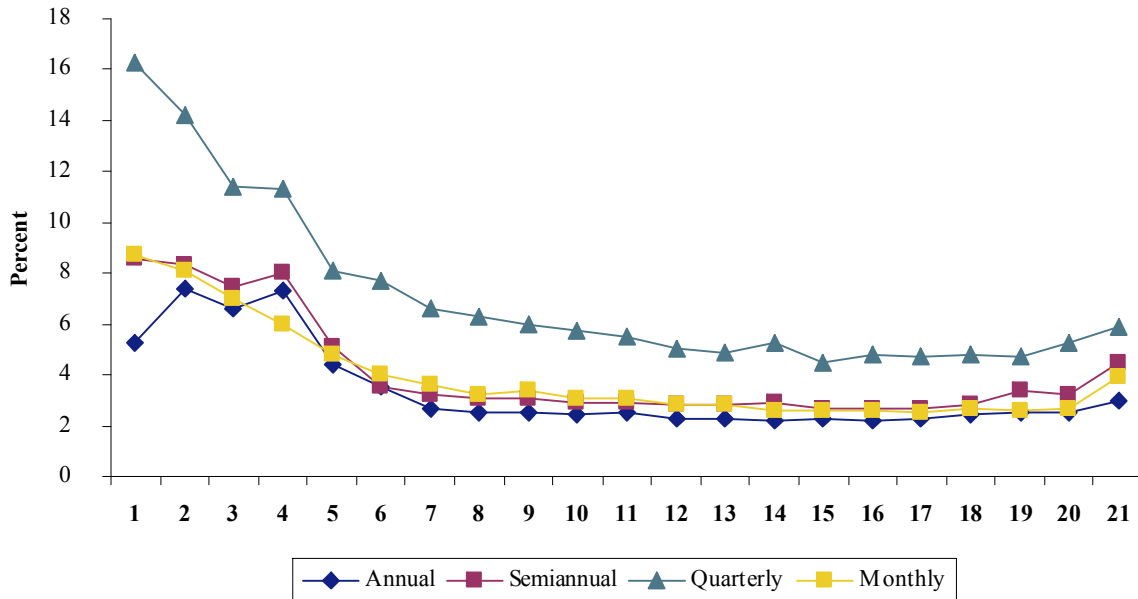
**Figure 29 —
Guaranteed Renewable Individual DI Lapse Rates by Smoker Status and Policy Year**



LAPSE RATES BY PREMIUM PAYMENT MODE AND BILLING TYPE

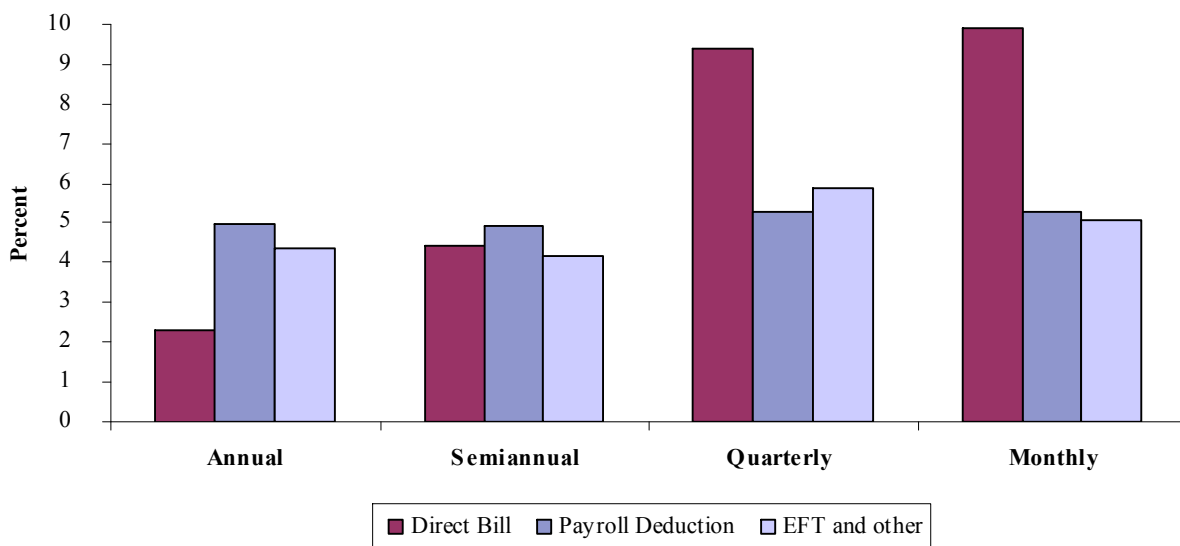
Individual disability income persistency generally increases as the number of premium payments per year decreases (Figure 30). This is consistent with experience on individual life and long-term care insurance policies as well. The theory is that since most of the annual, semiannual, and quarterly business is direct bill, every check a policyholder has to write provides him or her another opportunity to reconsider the purchase decision. In addition, individuals who choose to pay larger amounts less frequently tend to be less concerned with cost and affordability.

**Figure 30 —
Individual DI Lapse Rates by Premium Payment Mode and Policy Year**
All Plans Combined

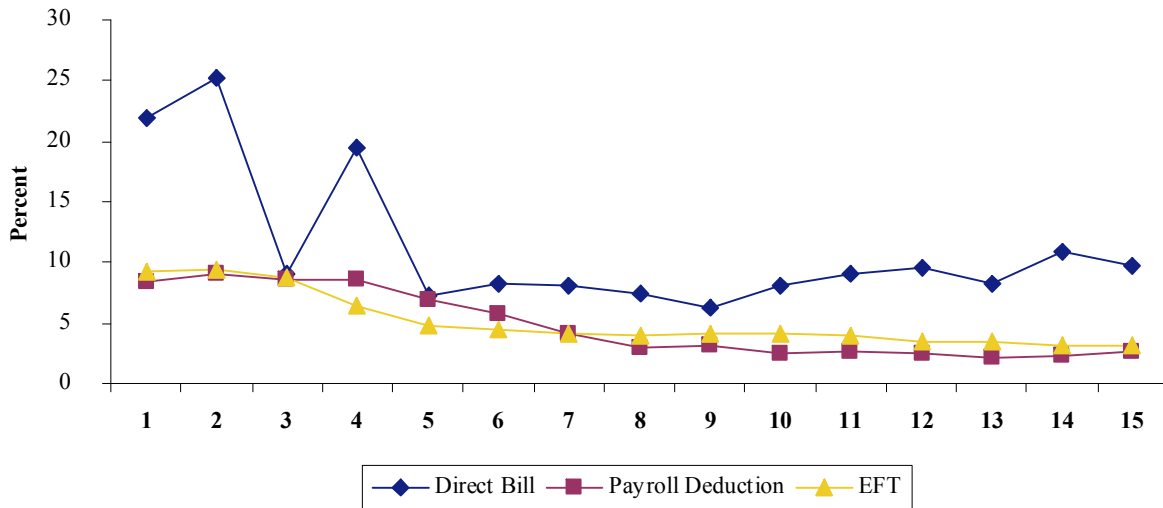


The exceptions to this pattern are the monthly and quarterly payment modes where there are significant differences in lapse experience by billing type. For example, the vast majority of monthly pay business underlying the current study exposure base is billed on either a payroll deduction or electronic fund transfer (EFT) basis where rates of lapsation more closely resemble annual premium payment business (Figures 31 to 33).

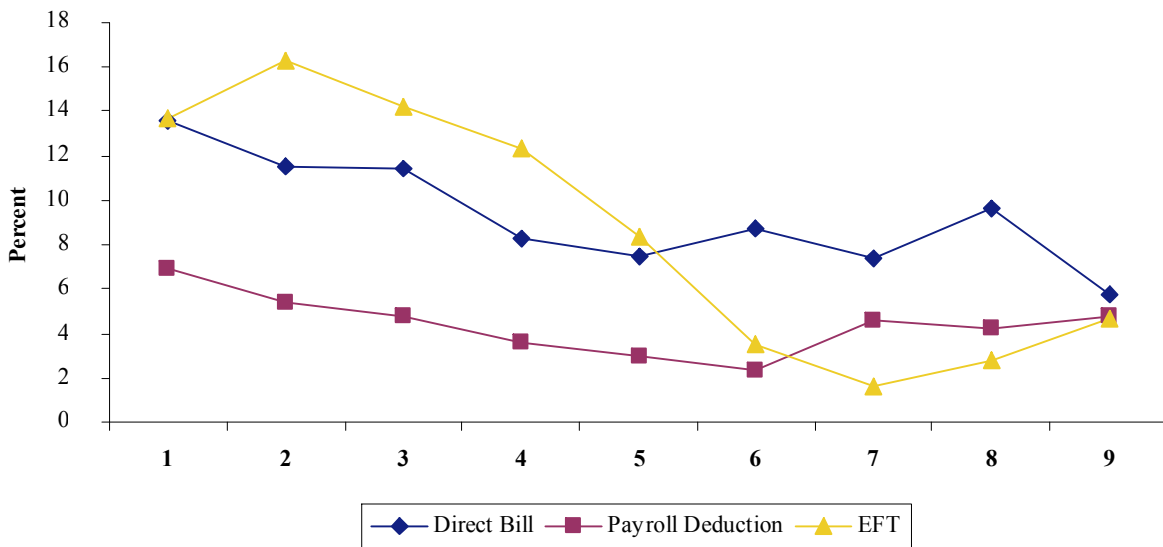
**Figure 31 —
Individual DI Lapse Rates by Premium Payment Mode and Bill Type**
All Plans Combined



**Figure 32 —
Noncancelable Individual DI Lapse Rates by Bill Type and Policy Year**
Monthly Payment Mode Only



**Figure 33 —
Guaranteed Renewable Lapse Rates by Bill Type and Policy Year**
Monthly Payment Mode Only



RELATED LINKS

The following links are valid as of 7/29/04.

LIMRA

U.S. Individual Disability Income Insurance Sales (1st quarter 2004)

This survey reports individual disability income (DI) insurance sales for 20 U.S. companies — of which 14 offer noncancelable products and 15 offer guaranteed renewable products. The sales results for the one company that reports cancelable/commercial policies are not included in this summary. A separate participants' report that lists data by company is also available to companies that provide data to this survey.

<http://www.limra.com/abstracts/4559.asp>

2003 U.S. Individual Disability Income Insurance Issues and In Force Survey (2004)

This survey reports individual disability income (DI) insurance results for 28 U.S. companies — of which 16 offer noncancelable products, 17 offer guaranteed renewable products, and four offer commercial products. In-force business, reinsurance assumed, distribution channel, and business policy information are also provided. A separate participants' report that lists data by company is also available to companies that provide data to this survey.

<http://www.limra.com/abstracts/4500.asp>

Long-Term Care Insurance Persistency Experience (2004)

This report represents the first study conducted jointly by LIMRA International and the Society of Actuaries (SOA) Long-Term Care Experience Committee that focuses on long-term care insurance (LTCI) persistency. The study examines voluntary lapse and total termination activity for calendar years 2000 and 2001.

<http://www.limra.com/abstracts/4482.asp>

Individual Life Persistency Study (2001)

This study examines individual life insurance persistency experience for 13 participating U.S. companies. The report provides lapse rates separately for traditional whole life, term, universal life, and variable universal life products. Lapse results are reviewed for a variety of policy and product features, which explains some of the variations in experience from one study period to the next.

<http://www.limra.com/abstracts/3506.asp>

PARTICIPATING COMPANIES

Country Financial

IDS Life

Minnesota Life Insurance Company

Northwestern Mutual Life Insurance Company

Principal Financial

Standard Insurance Company in U.S.

Union Central Life Insurance Company

Unum Provident

APPENDIX A: EXPOSURE TABLES

**Table A-1
Exposure by Renewability Condition and Issue Age**

Issue age	Non-cancelable	Guaranteed renewable	Total (all policy forms)
<25	3.8%	1.9%	2.0%
25–34	33.6	40.8	40.4
35–44	38.4	42.2	42.0
45–54	19.7	13.7	14.1
55–64	4.3	1.4	1.5
>65	0.2	0.0	0.0
Total	100%	100%	100%

**Table A-2
Exposure by Renewability Condition and Gender**

Issue age	Non-cancelable	Guaranteed renewable	Total (all policy forms)
Males	21.1%	29.4%	21.6%
Females	78.9	70.6	78.4
Total	100%	100%	100%

Table A-3
Exposure by Renewability Condition and Elimination Period

Issue Age	Non-Cancelable	Guaranteed Renewable	Total (all Policy Forms)
0 day	2.8%	0.6%	2.7%
7–15 day	1.7	1.2	1.7
30 day	10.9	13.1	11.1
60 day	9.5	5.8	9.3
90 day	56.9	61.1	57.2
180 day	14.7	16.0	14.8
360/365 day	3.0	2.0	3.0
720/730 day	0.4	0.2	0.4
Total	100%	100%	100%

Table A-4
Exposure by Renewability Condition and Benefit Period

Issue Age	Non-Cancelable	Guaranteed Renewable	Total (all Policy Forms)
6 months	*	*	*
1 year	3.3%	2.5%	3.2%
18 months	0.3%	0.1%	0.3%
2 years	4.7%	12.2%	5.0%
5 years	8.1%	0.0%	7.7%
10 years	0.0%	0.1%	0.0%
To Age 65	67.3%	84.7%	68.1%
Lifetime	16.3%	0.4%	15.5%
Total	100%	100%	100%

* Less than 1/10 of 1 percent.

SNAPSHOT

This report examines individual disability income lapse experience including both guaranteed renewable and noncancelable business. Eight of the major individual DI writers submitted data representing experience for years 1999 through 2001.

MEET THE PROJECT DIRECTOR

Marianne Purushotham, FSA
Research Actuary
LIMRA International

mpurushotham@limra.com

Purushotham, who joined LIMRA in 2000, works on individual life and health product research. She is also responsible for the long-term care, individual life, and individual disability income persistency studies.

Before joining LIMRA, she spent eight years at New England Financial in Boston working on individual life and annuity product development and financial reporting. Her prior experience also includes two years at MassMutual in Hartford, CT managing the financial reporting area for the individual disability income line of business.

Purushotham received her bachelor's degree in mathematics from Middlebury College and her master's degree in applied mathematics from Virginia Polytechnic Institute. She is a member of the Society of Actuaries.

A World of Insight

At LIMRA International we make insight the basis of everything we do. Over 800 financial services organizations around the world rely on us to provide the kinds of value-added marketing and distribution expertise they can't find anywhere else.

Insight is what enables LIMRA to anticipate trends, evaluate challenges, and create solutions. And it's what gives our member companies the power to succeed in an ever-changing global marketplace.



HARTFORD TORONTO LONDON MELBOURNE SHANGHAI

300 Day Hill Road, Windsor, CT 06095-4761, U.S.A. • P.O. Box 208, Hartford, CT 06141-0208, U.S.A.

Phone: 860-688-3358 • Fax: 860-298-9555 • Web: www.limra.com