

Experience Studies PRO



2015-2021 Universal Life Insurance Policy Surrender and Lapse Experience Study Report

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2015 – 2021 Universal Life Insurance Policy Surrender and Lapse Experience Study Report

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LIMRA

OVERSIGHT Universal Life Premium Persistency
and Lapse POG



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Section 1: Introduction

The Society of Actuaries (SOA) Research Institute and LIMRA have jointly conducted a study of Universal Life (UL) Insurance combined policy lapse and surrender behavior covering study years¹ 2015 through 2021. The primary purposes of this study are:

1. To analyze and report on recent policy owner behavior experience for all types of Universal Life Insurance products, both with and without secondary guarantees.
2. To update available industry benchmark data to include the most recent combined full surrender and lapse activity for universal life products, including traditional UL, indexed UL, and variable UL.
3. To examine trends in surrender/lapse experience for contracts both with and without a secondary guarantee, including a comparison of experience by length of the secondary guarantee period.
4. To analyze the experience by several factors, including attained age of insured, issue age and policy year², inclusion of a secondary guarantee, and various other product features.

Twenty-four individual companies contributed data to the current study, encompassing approximately 80% of industry sales during the period of the study. The current study contains about 34 million policies exposed, \$8.5 trillion in face amount exposed, and 1.3 million surrenders and lapses.

For simplicity, throughout this study the word “lapse” and the phrase “lapse rates” will include both terminations with value (surrenders) and terminations without value (forfeitures).

The bulk of the data request for this study was the historical, yearly VM-51 data submissions that each participating company sent to either the New York Department of Financial Services, the Kansas Department of Insurance, or the NAIC for calendar years 2015 – 2021. Not all companies were able to provide data for all years, with many companies unable to provide data for calendar year 2021. Please see appendix A for more detailed information on the data request.

The report analysis includes all companies for all study years that were provided. Subsection 11.5 includes a review of differences between the companies that provided data for all study years (common companies) and the total study results. In addition, a common company view option is provided in the data visualization tool provided with the study standard data package.

The experience data analyzed for this study includes only single-life policies sold inside the U.S. and its territories. The experience data excludes universal life plans sold at the workplace, universal life joint policies, and universal life policies sold outside the U.S. and its territories. Joint-life policies were excluded from the current study, but are expected to be included for future iterations.

This report includes an executive summary of key findings from the study in section 2. Section 3 discusses an overview of the distribution of study exposure by various policy and product factors. Sections 4, 6, and 8 provide an analysis of results for each of the primary types of universal life insurance: traditional universal life, indexed universal life, and variable universal life, respectively. Sections 5, 7, and 9 focus on universal life plans with a secondary guarantee. Section 10 focuses on universal life insurance policies with lifetime secondary guarantees and the differences in lapse experience for this business. Section 11 outlines

¹ Throughout this report, ‘study year xxxx’ refers to the time between contract anniversaries in calendar year xxxx and contract anniversaries in calendar year xxxx+1. So for this study, the observation years cover the time between anniversaries in 2015 and anniversaries in 2021. See section 11: Definitions and Methodology for more information.

² Throughout this report, excluding appendix A, policy year refers to a measure of time since issue date. See section 11: Definitions and Methodology for more information.

the exposure methodology used in the study to provide companies a better understanding of how their own experience may compare to the industry overall results.

The SOA Research Institute and LIMRA jointly collected, validated, and summarized the data for this report. Tableau dashboards have been published with this report and provide alternate breakdowns of results and the ability to view information of interest to the individual user. The experience data are available by death benefit amount and by policy count via downloads from Tableau. The data are available with a number of breakdowns, including, but not limited to: Sex, Issue Age, Policy Year, Study Year, Smoker Status, Risk Class, Face Amount, Death Benefit Option, and Lifetime Guarantee. Due to confidentiality requirements around the underlying company data, certain views are suppressed in the Tableau dashboards and in this report.

No assessment has been made concerning the applicability of this experience to other purposes. In developing this report, the SOA Research Institute and LIMRA relied upon data and information supplied by the participating company contributors. For each contributor, this information includes, but is not limited to, the data submission for policy owner experience and the responses to follow-up questions.



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Section 2: Executive Summary

The following are some of the more notable observations from the analyses detailed in this report:

Please keep in mind that, for simplicity, throughout this study the word “lapse” and the phrase “lapse rates” will include both terminations with value (surrenders) and terminations without value (forfeitures).

Distribution of policies included in the study

- Twenty-four companies submitted data for observation years 2015 – 2021 for six universal life insurance product types. Exposure prior to the anniversary in 2015 and after the anniversary in 2021 were excluded from this study, creating six complete study years of data in this anniversary-to-anniversary experience study. In total, there were 33.5 million exposures and 1.3 million lapse terminations.
- Approximately half of the exposure by count is on Traditional UL without Secondary Guarantees (Traditional UL). However, due to smaller average policy sizes, Traditional UL has about a quarter of the exposure by face amount. Traditional UL with Secondary Guarantees (ULSG) has the highest percent of total exposure by amount of approximately 38%.
- Average policy sizes are larger for product types with a secondary guarantee compared to their non-secondary guarantee counterpart, with the exception of Indexed Universal Life. Average policy size for Indexed Universal Life without Secondary Guarantees (IUL) and Indexed Universal Life with Secondary Guarantees (IULSG) are the largest of all the products, most likely due to the accumulation focus of these types of products.

Lapse rate trends across product types

- Where data is available, lapse rates by count and amount have generally decreased relative to the prior study covering 2009 – 2013.
- Lapse rates were notably lower during the pandemic study years (2019 and 2020) than the pre-pandemic study years (2015 – 2018) for many attained age and policy year cells.

Lapse rate trends by product type

- **Traditional UL:** Lapse rate based on count for issue ages 70+ was more than three times higher than the lapse rate based on amount (figure 4.2.1).
- **Traditional UL:** Lapse rates by count tended to increase as face amount band increased (figure 4.8.1).
- **ULSG:** Lapse rates by count were over three times higher than lapse rates by amount at the oldest attained ages (85-89 and 90+) (figure 5.3.1).
- **IUL:** Lapse rates increased significantly across all policy years between the earlier part of the study period (2015-2018) and the latter part of the study period (2019-2020) (figure 6.1.2). This was the only product type to exhibit consistently higher lapse rates by policy year during the pandemic relative to prior to the pandemic.
- **IUL/IULSG:** When comparing lapse rates for Indexed Universal Life with Secondary Guarantees (IULSG) against lapse rates for Indexed Universal Life (IUL), it is interesting to note that lapse rates by both count and amount were lower for IULSG across almost all policy years (figures 7.1.2 and 7.1.3).

- ***IULSG***: In the early policy years, lapse rates by count were generally higher than amount, but the pattern switched starting around policy year 6 when lapse rates by amount were higher (figure 7.1.1).
- ***IULSG***: In total, female lapse rates were higher than male lapse rates on a count basis (figure 7.4.1). Female lapse rates were slightly lower than male lapse rates on an amount basis.
- ***IULSG***: Lapse rates by count exhibited a decreasing pattern by increasing face amount band, with the highest face amount band experiencing the lowest lapse rates in total (figure 7.8.1).
- ***Variable Universal Life (VUL)***: For attained age groups 70 and older in Variable Universal Life (VUL) policies, lapse rates by amount were lower than by count. For attained age groups less than 70, the opposite was true and lapse rates by count were lower than by amount (figure 8.3.1).
- ***VUL***: In total, male lapse rates were higher than female lapse rates on both a count and amount basis (figure 8.4.1). For both males and females, lapse rates by count were lower than those by amount.
- ***VUL***: Lapse rates based on count increased as face amount band increased (figure 8.8.1). This might be a result of the accumulation-focused design of many VUL policies.
- ***VUL / Variable Universal Life with Secondary Guarantees (VULSG)***: When comparing lapse rates for VULSG against lapse rates for VUL, it is interesting to note that earlier policy year lapse rates by both count and amount were lower for VULSG (figures 9.1.2 and 9.1.3). However, the pattern by count switched in policy year 12 and in policy year 10 by amount.
- ***VULSG***: In the early policy years, lapse rates by count were generally higher than by amount, but the pattern switched starting around policy year 9 when lapse rates by amount were higher (figure 9.1.1).
- ***VULSG***: Lapse rates based on count were quite similar by face amount band. Face amounts between \$100,000 and \$199,999 had a slightly lower lapse rate than other face amount bands (figure 9.8.1).

Lapse rate trends for secondary guarantee products (ULSG, IULSG, VULSG) by length of secondary guarantee

- In total for all secondary guarantee product types, lapse rates for policies with a Lifetime Secondary Guarantee were 45% lower on both a count and amount basis than for policies with a secondary guarantee that was Not Lifetime (figure 10.1).
- Lapse rates based on both count and amount were lower for policies with a Lifetime Secondary Guarantee relative to those that were Not Lifetime across all policy years (figures 10.1.1 and 10.1.2). The relative difference in experience began to decrease starting around policy year 12 on both count and amount bases.
- Lifetime lapse rates by count were lower than Not Lifetime lapse rates for all attained age groups (figure 10.3). The relative difference in lapse rate increased as attained age increased. At the oldest attained age group, the lapse rate on Not Lifetime was almost three times higher than the Lifetime lapse rate.

Section 3: Mix of Business Included in the Study

This section examines the distribution of exposure for business included in this study, including demographics of the insureds and the types of UL products they purchased. Except where otherwise indicated, all distributions are shown on an exposure by count basis.

Throughout this report and in the data visualization tool, please note that where the sex of the insured is known, experience for unisex policies was combined with sex-distinct policies as the exposure for unisex was very small and would not have been able to be shown on its own.

3.1 EXPOSURE DISTRIBUTION BY PRODUCT TYPE

Product type is assigned from the plan codes within the VM-51 data format. Aside from ensuring a policy had the same product type throughout the study, there was no additional work to determine where a company put a policy with a “non-material” secondary guarantee (as defined by VM-01). Based on the guidance in the Valuation Manual, “non-material” secondary guarantees are expected to fall into the non-secondary guarantee product type, but it is possible some companies put those into the secondary guarantee product type.

Just under half of the exposure by count is Traditional UL business without Secondary Guarantees (Traditional UL). However, due to smaller average policy sizes, Traditional UL represents only about 21% of the exposure by face amount.

Traditional UL with Secondary Guarantees (ULSG) has the highest percent of total exposure by amount at approximately 38%.

Table 3.1

EXPOSURE DISTRIBUTION BY UL PRODUCT TYPE

UL Product Type	Exposure by Count	Percent of Total Exposure by Count	Exposure by Amount (000s)	Percent of Total Exposure by Amount
Traditional UL without Secondary Guarantees (Traditional UL)	15,480,151	46.2%	1,745,797,982	20.6%
Traditional UL with Secondary Guarantees (ULSG)	9,153,116	27.3%	3,241,872,245	38.3%
Indexed UL without Secondary Guarantees (IUL)	213,818	0.6%	161,418,395	1.9%
Indexed UL with Secondary Guarantees (IULSG)	2,551,457	7.6%	1,183,722,957	14.0%
Variable UL without Secondary Guarantees (VUL)	2,414,032	7.2%	761,592,289	9.0%
Variable UL with Secondary Guarantees (VULSG)	3,667,926	11.0%	1,374,565,914	16.2%
Total	33,480,500	100%	8,468,969,781.76	100%

3.2 POLICY EXPOSURE DETAIL BY PRODUCT TYPE

More than 80% of the exposure by count for Traditional UL without Secondary Guarantees (Traditional UL) was after policy year 10, while close to two-thirds of the exposure was between policy years 1 and 10 for Traditional UL with Secondary Guarantees (ULSG) (table 3.2.1).

The average face amount exposed was three times higher for ULSG than Traditional UL.

Approximately 56% of ULSG policies based on count had a lifetime secondary guarantee, which is defined as a guarantee to at least attained age 100.

Table 3.2.1

POLICY EXPOSURE DETAIL – TRADITIONAL UL

	Traditional UL	ULSG
Exposure in policy years 1-2	3.0%	12.6%
Exposure in policy years 3-5	4.9%	21.6%
Exposure in policy years 6-10	9.2%	30.7%
Exposure in policy years 11-29	52.8%	33.3%
Exposure in policy years 30+	30.1%	1.7%
Average Face Amount Exposed	\$112,777	\$354,182
Percent Preferred Exposure (all preferred classes)	12.6%	44.3%
Percent Male Exposure*	52.3%	53.2%
Percent Non-Smoker Exposure	76.1%	93.0%
Percent Lifetime SG Exposure	---	56.1%

*Includes both Male and Unisex Male

Compared to Traditional UL, Indexed Universal Life (IUL) policies had a much greater concentration in the early policy years. Approximately 75% of the exposure by policy year was in the first 5 durations (table 3.2.2).

Average policy size for IUL and IULSG was the largest of all the products, most likely due to the accumulation focus of these types of products. It is notable that the average policy size for IULSG was lower than IUL.

Eleven percent of the IULSG policies were issued with a secondary guarantee of to-age 100 or higher.

Table 3.2.2

POLICY EXPOSURE DETAIL – INDEXED UL

	IUL	IULSG
Exposure in policy years 1-2	39.8%	34.7%
Exposure in policy years 3-5	35.8%	36.2%
Exposure in policy years 6-10	17.5%	25.1%
Exposure in policy years 11-29	7.0%	4.0%
Exposure in policy years 30 and over	0.0%	0.0%
Average Face Amount Exposed	\$754,934	\$463,940
Percent Preferred Exposure	53.1%	42.5%
Percent Male Exposure*	54.9%	51.3%
Percent Non-Smoker Exposure	81.3%	84.0%
Percent Lifetime SG Exposure	---	10.7%

*Includes both Male and Unisex Male

Almost 90% of the Variable Universal Life (VUL) exposure was in policy year 11 or after (table 3.2.3). VUL and Variable Universal Life with Secondary Guarantees (VULSG) were also the products most heavily weighted towards Male insureds at 60% and 57%, respectively.

Nine percent of VULSG policies were issued with a secondary guarantee of to-age 100 or higher.

Table 3.2.3

POLICY EXPOSURE DETAIL – VARIABLE UL

	VUL	VULSG
Exposure in policy years 1-2	2.1%	9.0%
Exposure in policy years 3-5	3.1%	13.1%
Exposure in policy years 6-10	7.5%	21.1%
Exposure in policy years 11-29	81.1%	56.7%
Exposure in policy years 30 and over	6.2%	0.0%
Average Face Amount Exposed	\$315,486	\$374,753
Percent Preferred Exposure	23.4%	47.9%
Percent Male Exposure*	59.7%	56.8%
Percent Non-Smoker Exposure	83.2%	84.5%
Percent Lifetime SG Exposure	---	8.9%

*Includes both Male and Unisex Male

Section 4: Traditional Universal Life without a Secondary Guarantee

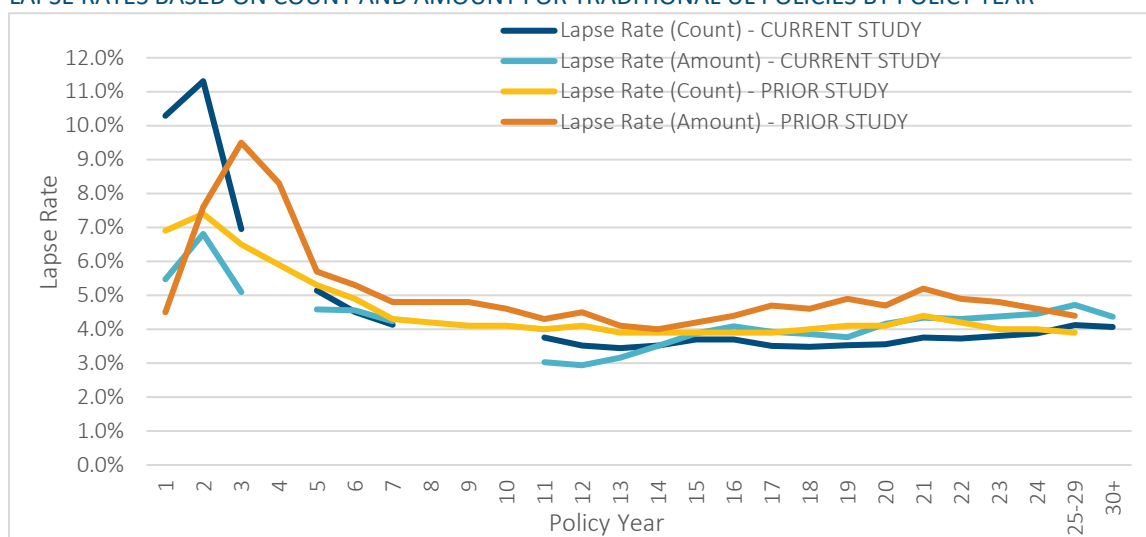
Twenty-three companies provided data for Traditional Universal Life without a Secondary Guarantee (Traditional UL).

For years where there was sufficient data, current study lapse rates tended to be lower than what was seen in the prior study covering years 2009 through 2013 on both a count and amount basis. For both study periods, the lapse rates by count were generally lower than the lapse rates by amount for this product type.

4.1 LAPSE RATES BY POLICY YEAR

Figure 4.1.1

LAPSE RATES BASED ON COUNT AND AMOUNT FOR TRADITIONAL UL POLICIES BY POLICY YEAR

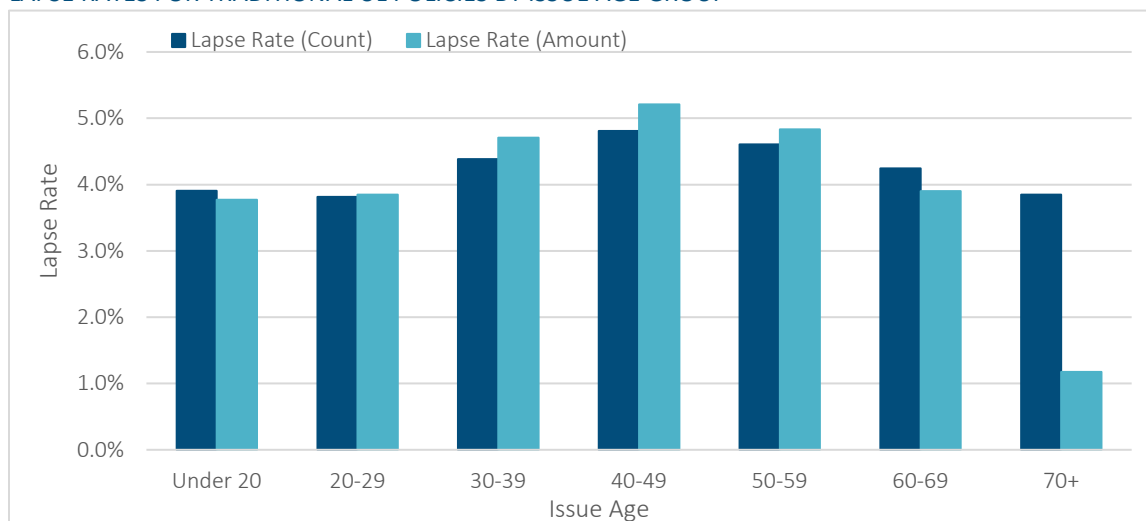


4.2 LAPSE RATES BY ISSUE AGE GROUP

It is notable that the lapse rate based on count for issue ages 70+ was more than three times higher than the lapse rate based on amount (figure 4.2.1).

Figure 4.2.1

LAPSE RATES FOR TRADITIONAL UL POLICIES BY ISSUE AGE GROUP

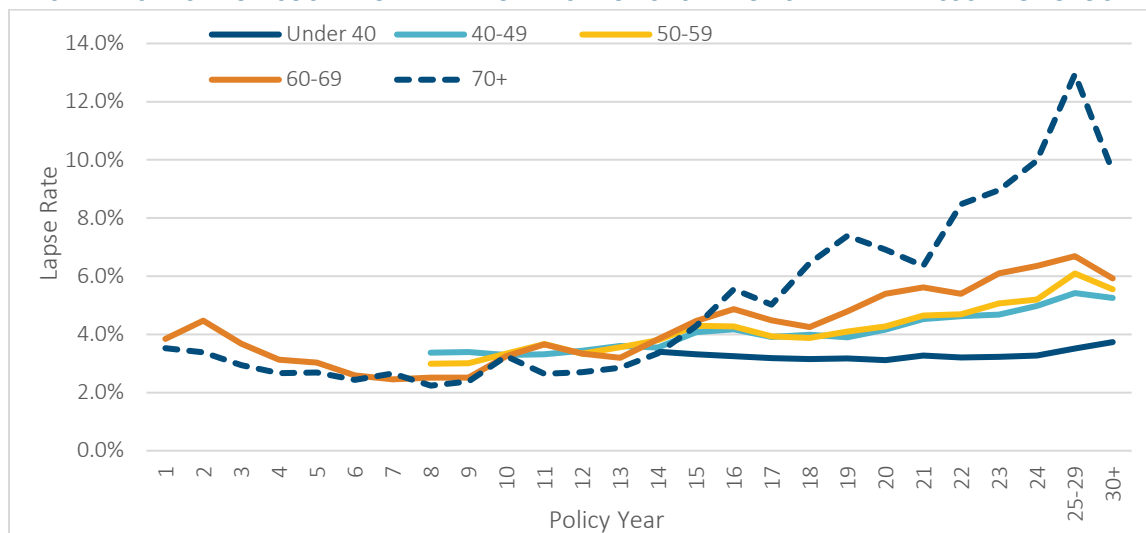


The exposure for this product type is concentrated in the later policy years. There is a clear pattern of increased lapse rates based on count with increasing age at issue in the later policy years (figure 4.2.2). For the group at issue ages 70+, there is also an increasing trend by policy year. It is worth noting that the number of lapses for issue age 70+ in each policy year was less than 400.

For younger issue age groups, the slope by policy year is much flatter.

Figure 4.2.2

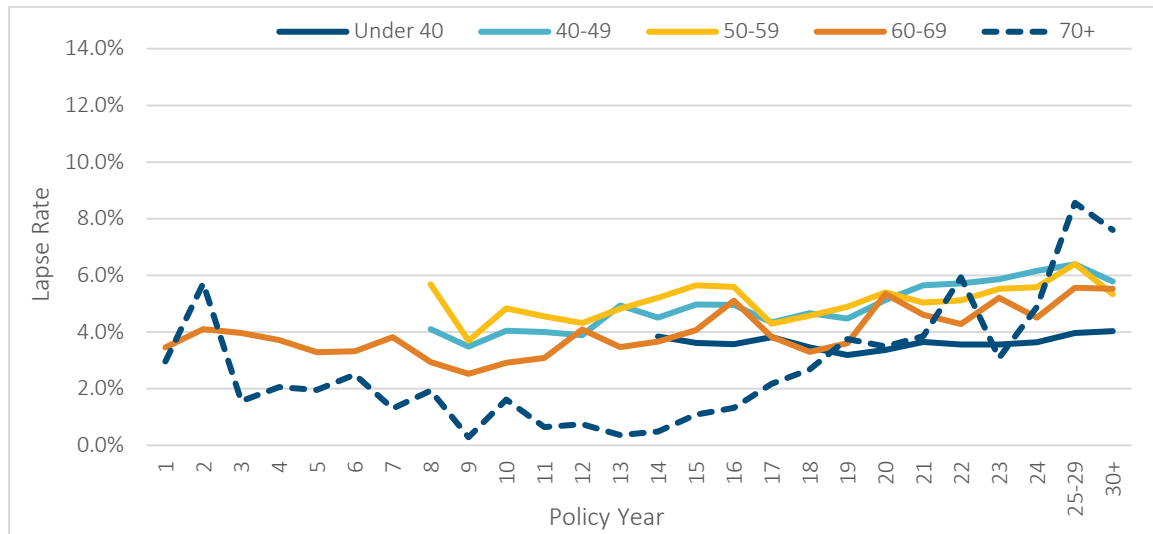
LAPSE RATES BASED ON COUNT FOR TRADITIONAL UL POLICIES BY POLICY YEAR AND ISSUE AGE GROUP



The pattern by amount is more volatile and less clear than the pattern by count (figure 4.2.3). Note that the age 70+ issue age group exhibited lapse rates under 2% by amount for most policy years between 3 and 16 and were lower than those by count in almost all policy years. This pattern might be driven by lower lapse rates on higher face amount stranger-owned life insurance policies.

Figure 4.2.3

LAPSE RATES BASED ON AMOUNT FOR TRADITIONAL UL POLICIES BY POLICY YEAR AND ISSUE AGE GROUP



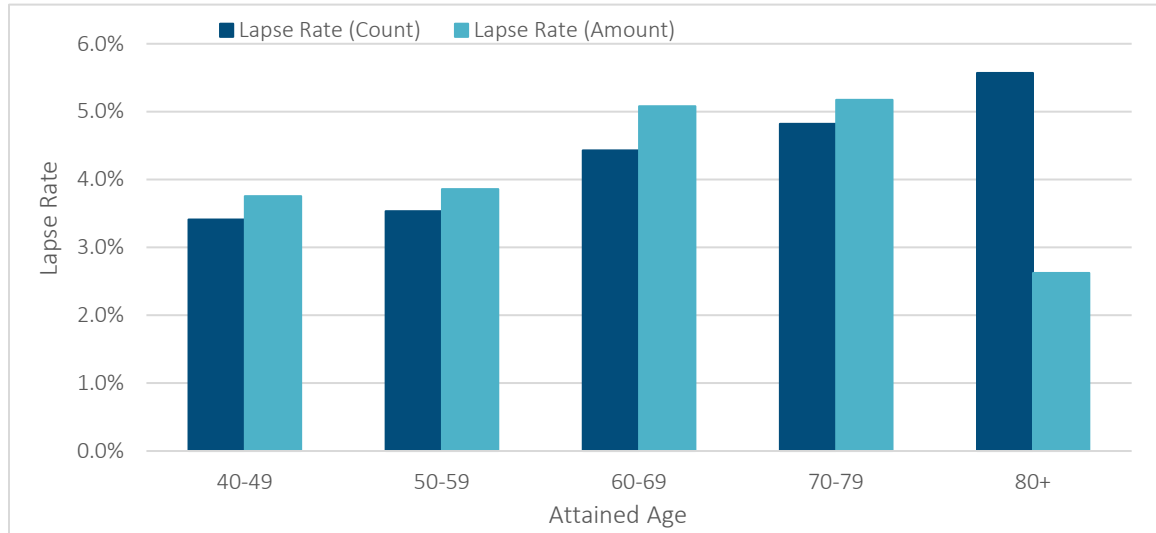
4.3 LAPSE RATES BY ATTAINED AGE GROUP

Consistent with the issue age and policy year view, the lapse rates based on count increased with attained age (figure 4.3.1).

Lapse rates by amount were higher than by count with the notable exception of the oldest group (attained age 80+). The pattern of higher rates by count than amount for attained age 80+ is most likely driven by issue ages 70+ (figure 4.2.1).

Figure 4.3.1

LAPSE RATES FOR TRADITIONAL UL POLICIES BY ATTAINED AGE GROUP

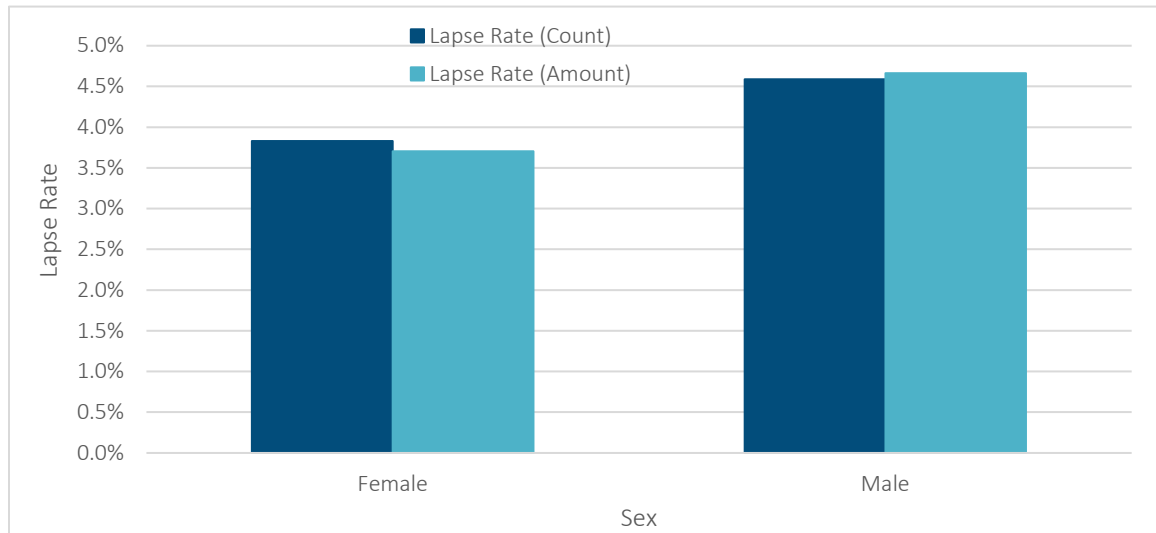


4.4 LAPSE RATES BY SEX

In total, male lapse rates were higher than female lapse rates on both a count and amount basis (figure 4.4.1).

Figure 4.4.1

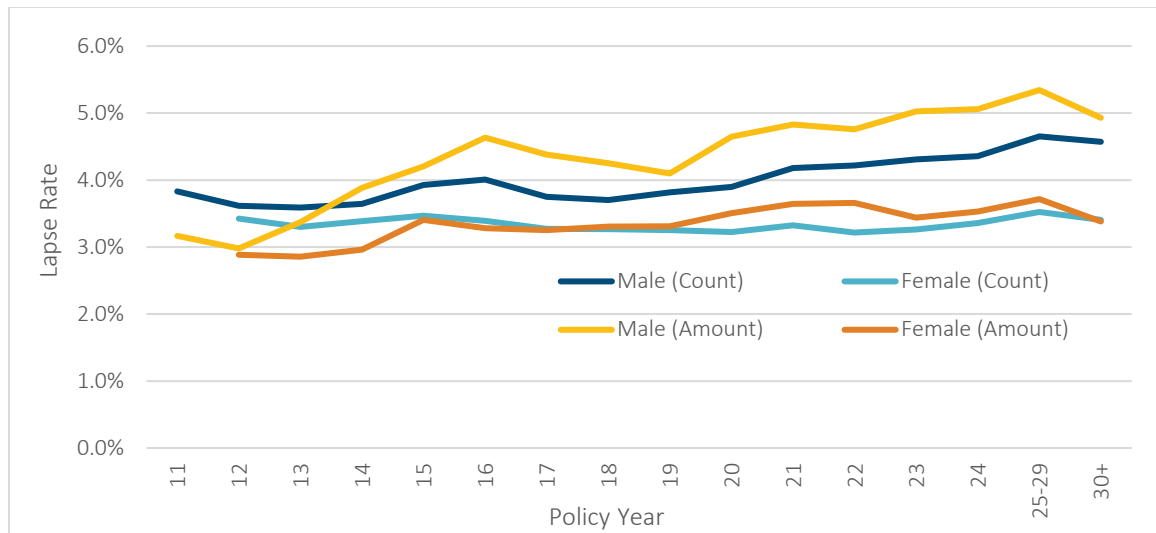
LAPSE RATES FOR TRADITIONAL UL POLICIES BY SEX



Looking in more detail by policy year and on a count basis, rates were lower for females than males for all policy years after 11 (figure 4.4.2) on both a count and amount basis.

Figure 4.4.2

LAPSE RATES FOR TRADITIONAL UL POLICIES BY SEX AND POLICY YEAR



4.5 LAPSE RATES BY RISK CLASS AND SMOKER STATUS

For Smoker and Non-Smoker Standard risk classes, lapse rates were higher on an amount basis than a count basis (figure 4.5.1). For Smoker and Non-Smoker Substandard risk classes, the opposite was true with lapse rates by count higher than lapse rates by amount.

Figure 4.5.1

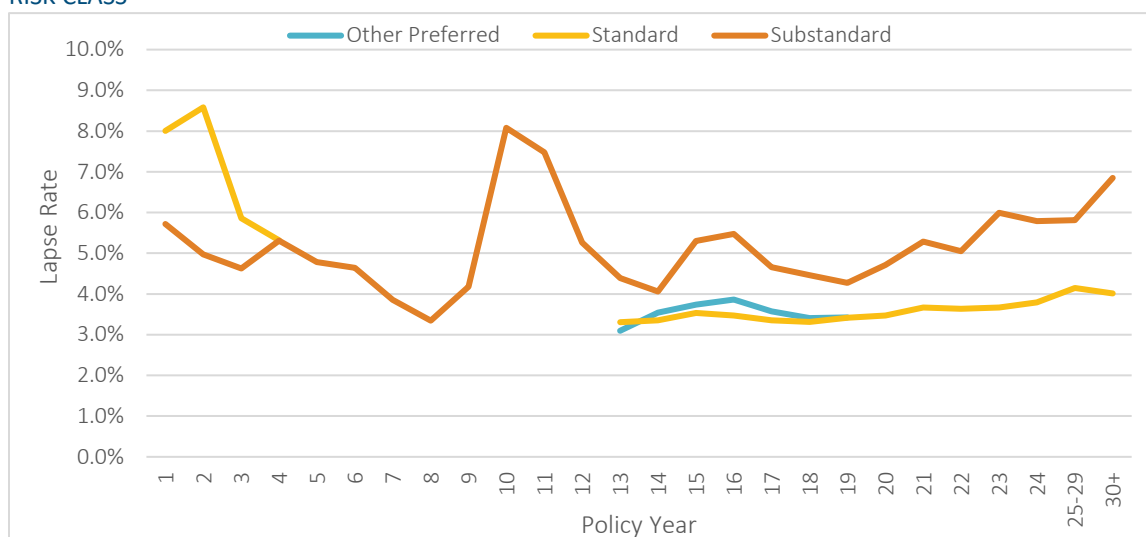
LAPSE RATES FOR TRADITIONAL UL POLICIES BY RISK CLASS



Early policy year lapse rates based on count were higher for Standard Non-Smokers than Substandard Non-Smokers (figure 4.5.2). Note, however, there were less than 100 lapses in each policy year for Substandard Non-Smoker through policy year 9. Policy years 5 through 12 could not be shown for Standard Non-Smoker, as well as all policy years for Best Preferred Non-Smoker, due to data confidentiality rules.

Figure 4.5.2

LAPSE RATES FOR NON-SMOKERS BASED ON COUNT FOR TRADITIONAL UL POLICIES BY POLICY YEAR AND RISK CLASS

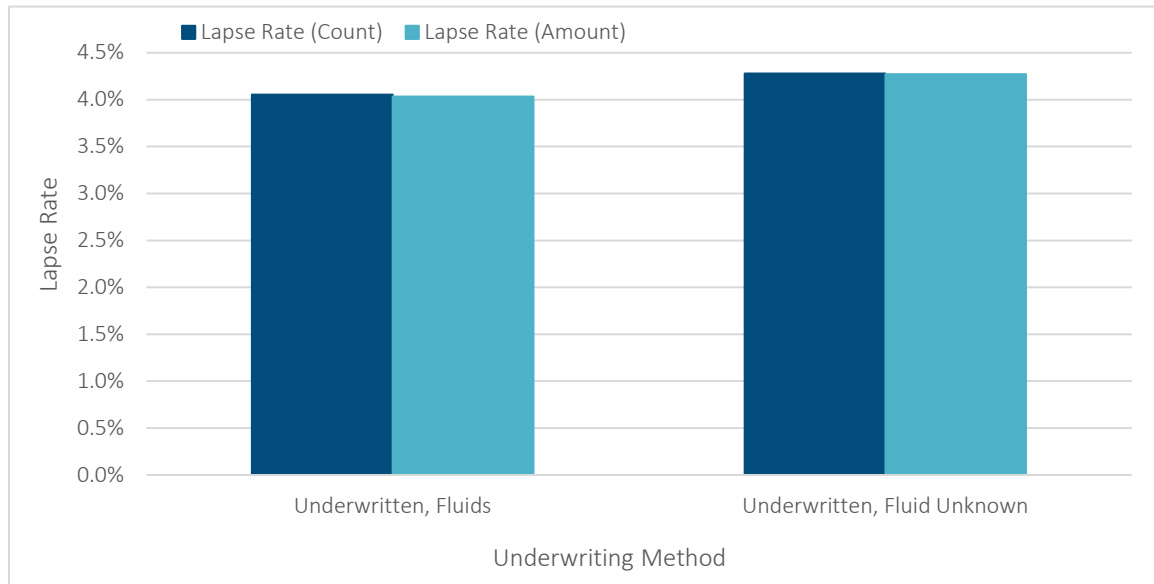


4.6 LAPSE RATES BY UNDERWRITING METHOD

Lapse rates based on count and amount were both slightly higher for policies issued with Unknown Fluid collection relative to those issued with Fluid collection (figure 4.6.1).

Figure 4.6.1

LAPSE RATES FOR TRADITIONAL UL POLICIES BY UNDERWRITING METHOD



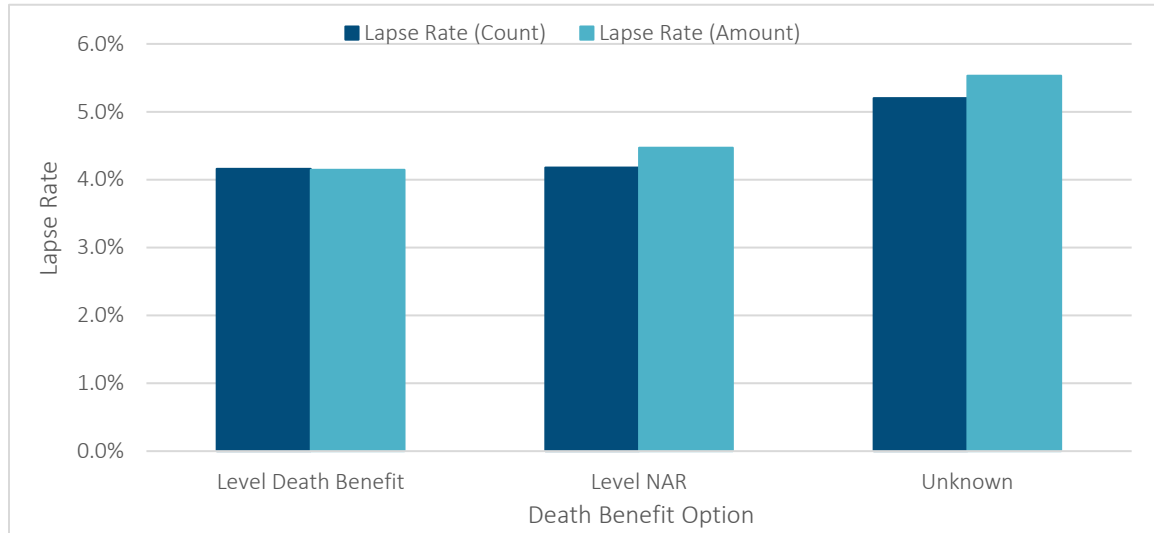
4.7 LAPSE RATES BY DEATH BENEFIT OPTION

The VM-51 data format allowed for two different death benefit options, Level Death Benefit or Level Net Amount at Risk, along with an Unknown option. The Unknown option was most likely chosen for any non-standard options such as level death benefit plus return of premium.

In total, lapse rates were slightly lower for the Level Death Benefit option, in comparison to the Level Net Amount at Risk (NAR) option (figure 4.7.1). Lapse rates were highest by count and amount for the Unknown death benefit option.

Figure 4.7.1

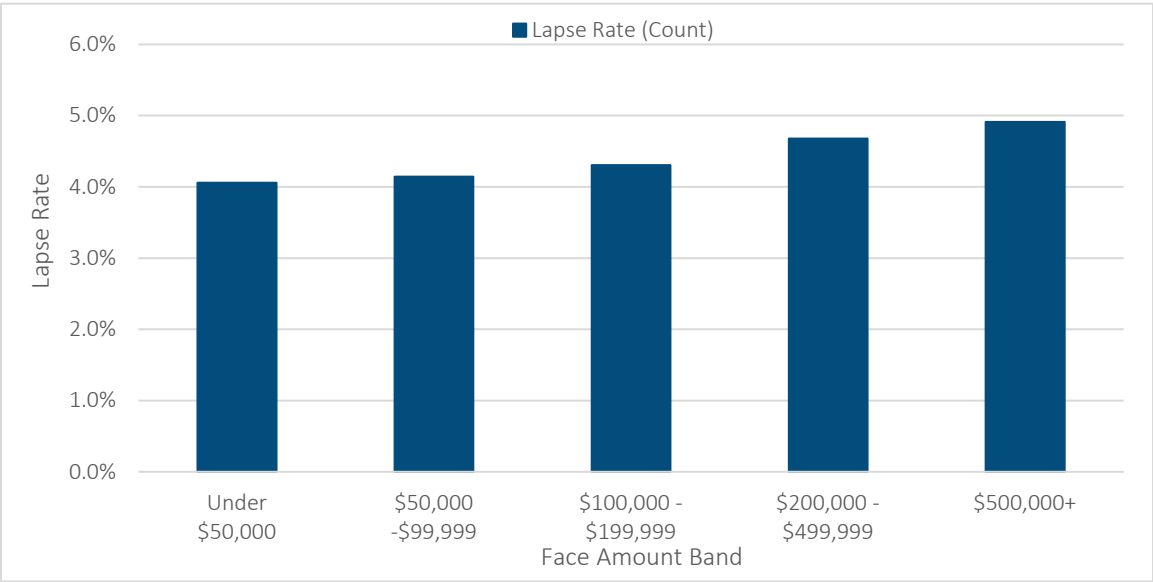
LAPSE RATES FOR TRADITIONAL UL POLICIES BY DEATH BENEFIT OPTION



4.8 LAPSE RATES BY FACE AMOUNT BAND

Lapse rates based on count tended to increase as face amount band increased (figure 4.8.1). This pattern is opposite of the historical pattern seen on whole life or term insurance where lapse rates decreased as face amount increased.

Figure 4.8.1
LAPSE RATES BASED ON COUNT FOR TRADITIONAL UL POLICIES BY FACE AMOUNT BAND

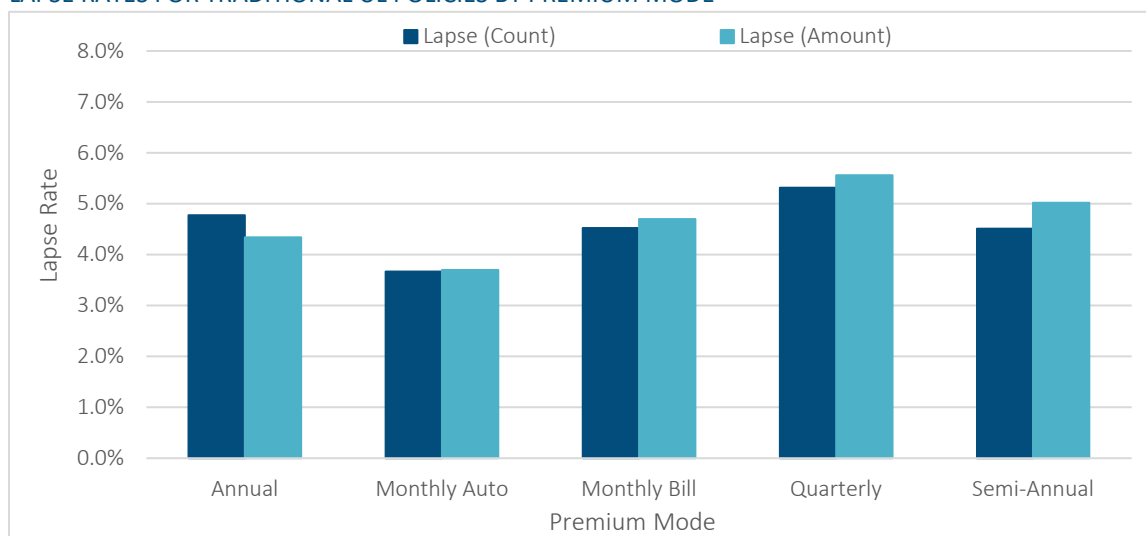


4.9 LAPSE RATES BY PREMIUM MODE

In total, lapse rates by both count and amount were lowest for policies under a monthly automatic payment premium mode (figure 4.9.1). It is worth noting that, since universal life policies allow for flexible premiums, the mode of the premium payment might be less impactful on the lapse rates than for a more traditional product, like whole life or term insurance.

Figure 4.9.1

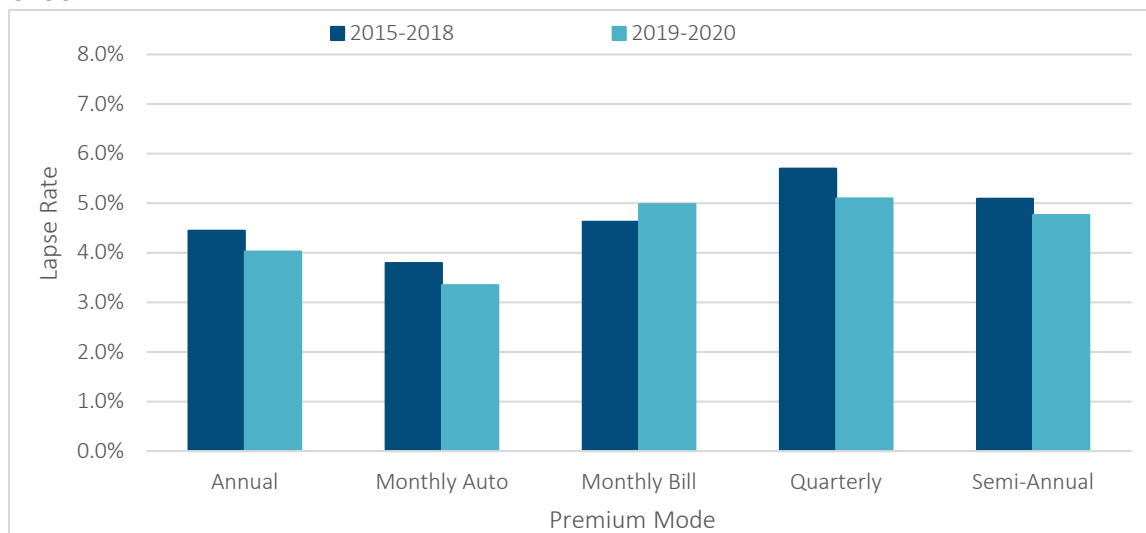
LAPSE RATES FOR TRADITIONAL UL POLICIES BY PREMIUM MODE



All premium mode groups, except Monthly Bill, had lower lapse rates based on amount during the pandemic period study year (2019-2020) than prior to the pandemic (figure 4.9.2).

Figure 4.9.2

LAPSE RATES BASED ON AMOUNT FOR TRADITIONAL UL POLICIES BY PREMIUM MODE AND STUDY YEAR GROUP



Section 5: Traditional Universal Life with a Secondary Guarantee

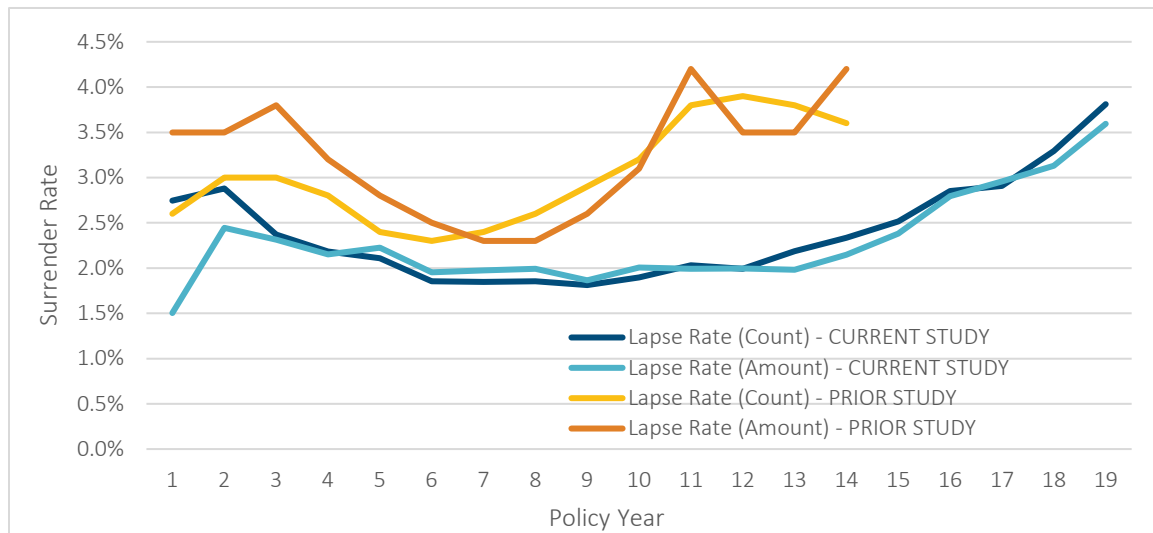
Twenty-one companies provided data for Traditional Universal Life with a Secondary Guarantee (ULSG).

For all policy years where comparable data exists, similar to Traditional UL without a Secondary Guarantee, lapse rates by both count and amount for ULSG were lower for this study than the 2009 – 2013 study (figure 5.1.1). Beginning in policy year 14, rates began to rise steadily with increasing policy year.

5.1 LAPSE RATES BY POLICY YEAR

Figure 5.1.1

LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY POLICY YEAR



Lapse rates based on both count and amount were lower for ULSG than for UL in almost all policy years (figures 5.1.2 and 5.1.3).

Figure 5.1.2

LAPSE RATES BASED ON COUNT FOR TRADITIONAL UL WITH AND WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR

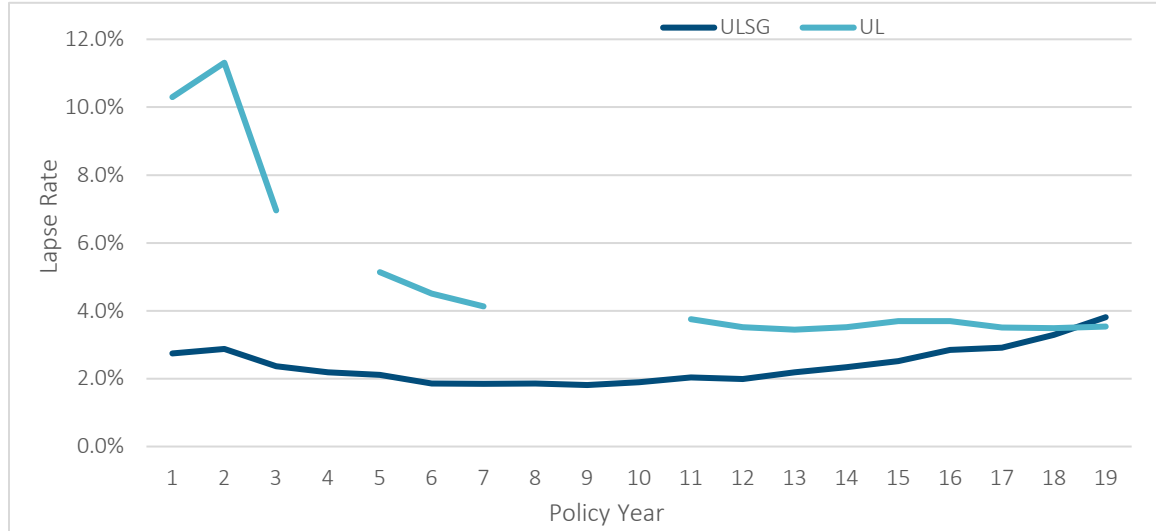
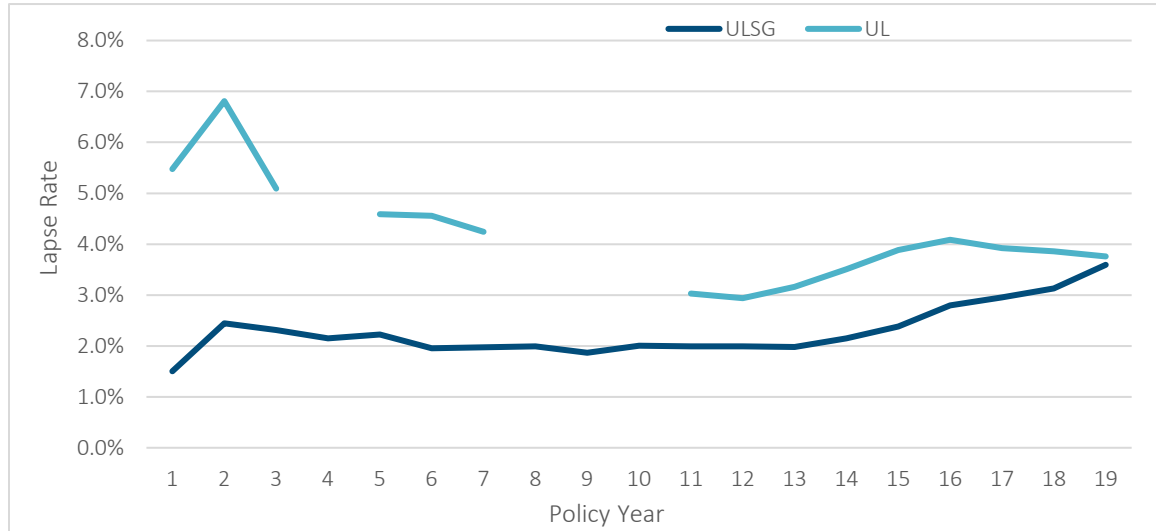


Figure 5.1.3

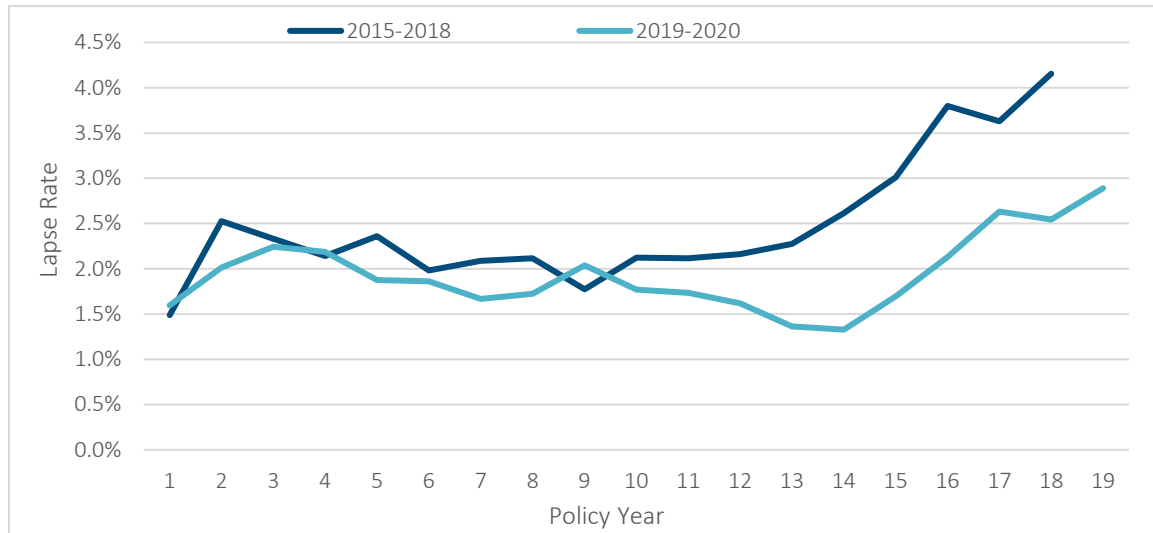
LAPSE RATES BASED ON AMOUNT FOR TRADITIONAL UL WITH AND WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR



Looking more closely at ULSG lapse rates based on amount and study year, lapse rates prior to the pandemic (study years 2015-2018) were generally higher than lapse rates during the pandemic (study years 2019-2020) (figure 5.1.4). It should be noted that lapse rates for the period 2019-2020 were likely impacted, at least to some extent, by extended grace periods that were prevalent during the early portions of the COVID-19 pandemic.

Figure 5.1.4

LAPSE RATES BY AMOUNT FOR TRADITIONAL ULSG POLICIES BY POLICY YEAR AND STUDY YEAR

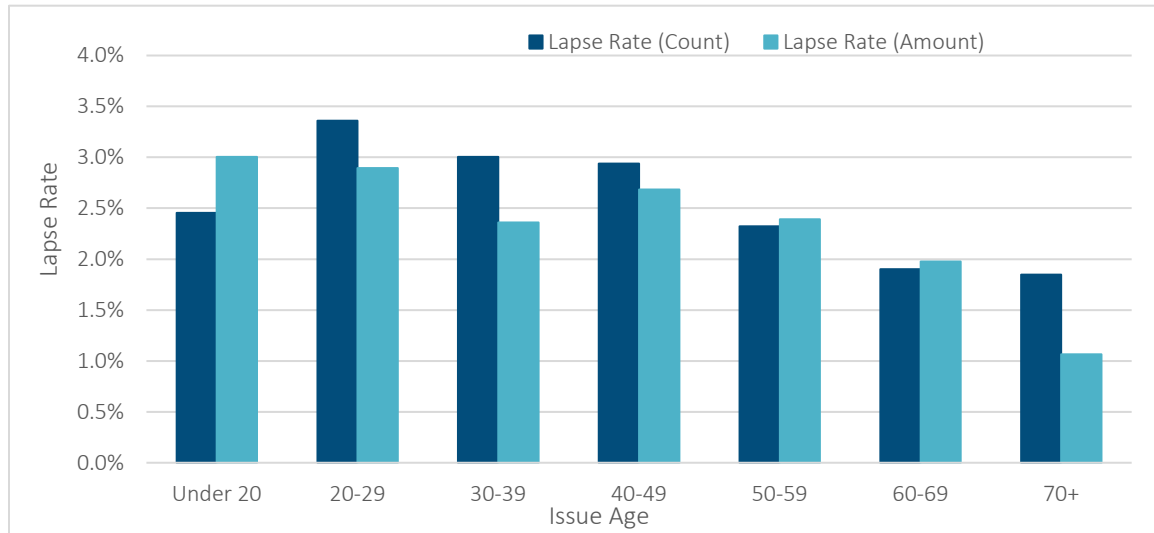


5.2 LAPSE RATES BY ISSUE AGE GROUP

Lapse rates on both a count and amount basis tended to decrease as issue age increased (figure 5.2.1). Lapse rates by amount for the oldest issue age group were notably less than those by count, but the difference was not as large as it was for Traditional UL (figure 4.2.1).

Figure 5.2.1

LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY ISSUE AGE GROUP



The pattern of lapse rates decreasing with increasing issue age was not as clear across policy year (figure 5.2.2). Lapse rates by amount were notably lowest for the oldest issue age group, starting in policy year 7 (figure 5.2.3).

Figure 5.2.2

LAPSE RATES BASED ON COUNT FOR TRADITIONAL ULSG POLICIES BY POLICY YEAR AND ISSUE AGE GROUP

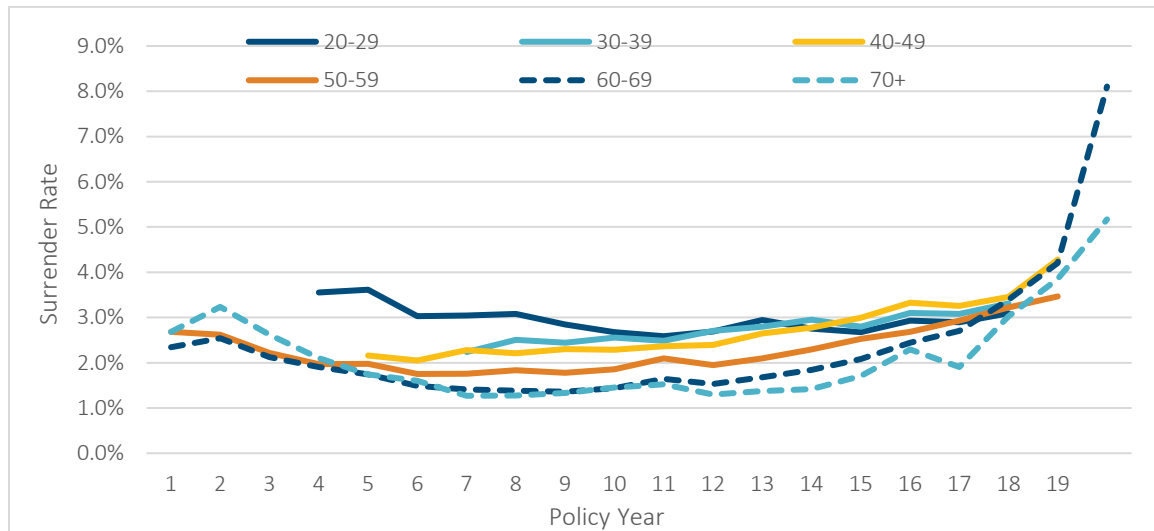
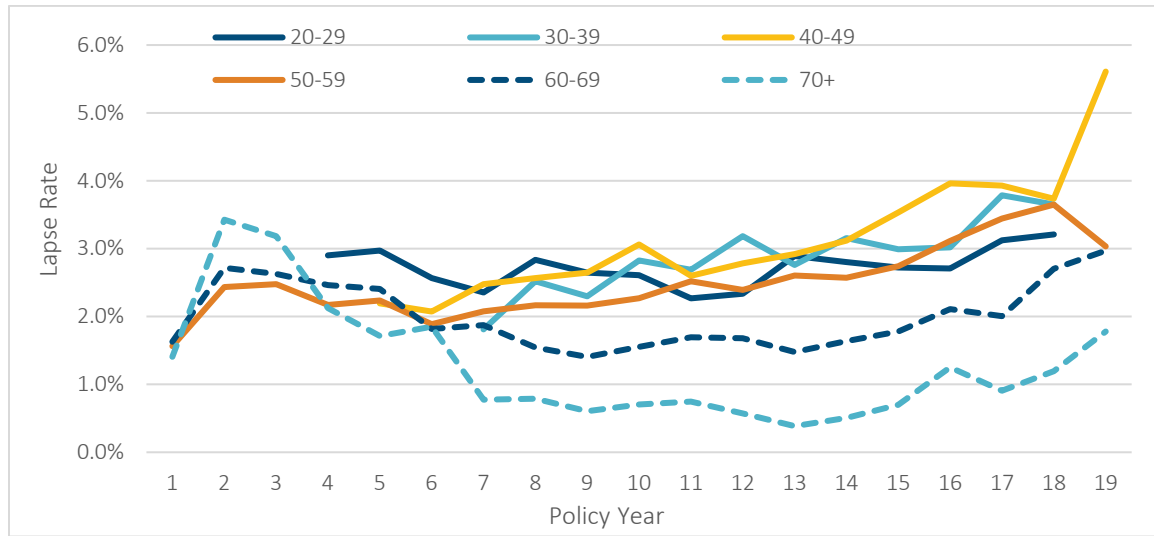
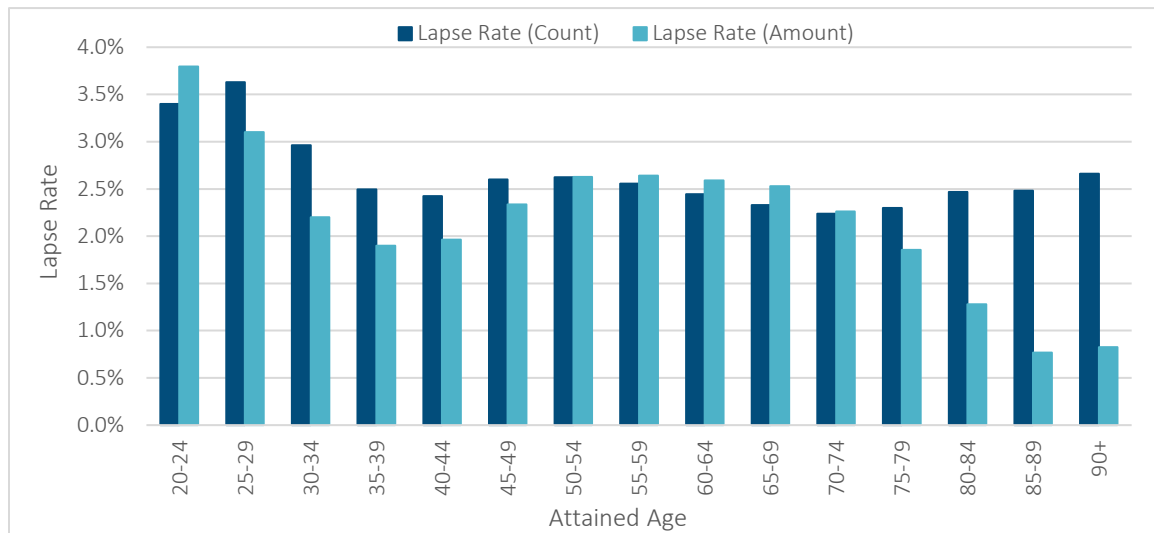


Figure 5.2.3**LAPSE RATES BASED ON AMOUNT FOR TRADITIONAL ULSG POLICIES BY POLICY YEAR AND ISSUE AGE GROUP****5.3 LAPSE RATES BY ATTAINED AGE GROUP**

Starting at attained age group 35-39, lapse rates by count for ULSG were relatively flat by attained age group (figure 5.3.1). Lapses by amount were a bit more volatile and highest for the youngest attained age group, decreased through attained age 39, increased between ages 40 and 59, and then decreased again.

Lapse rates by count were over three times higher than lapse rates by count at the oldest attained ages (85-89 and 90+).

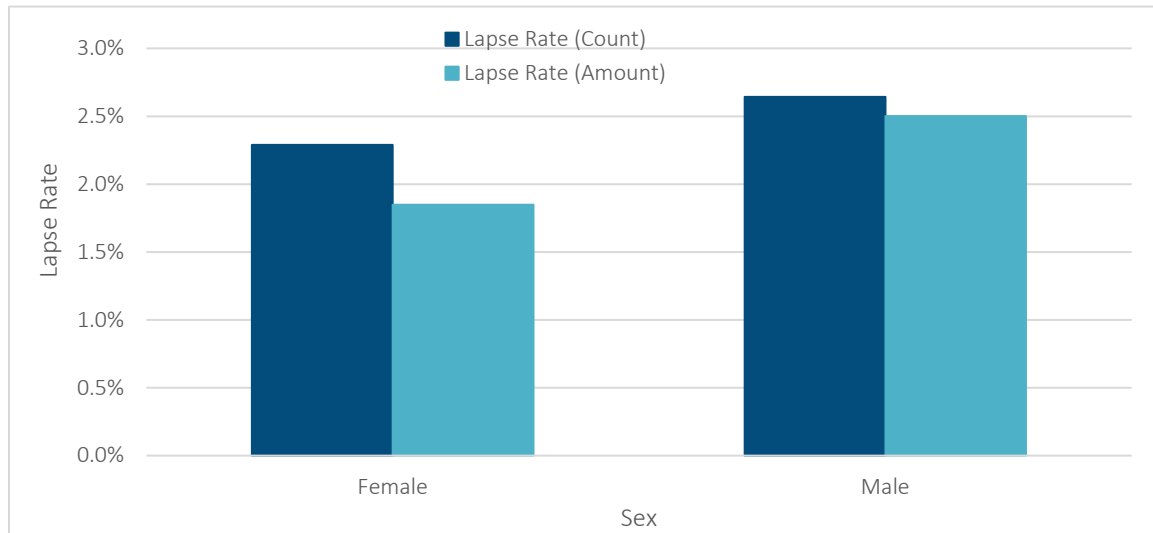
Figure 5.3.1**LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY ATTAINED AGE GROUP**

5.4 LAPSE RATES BY SEX

Similar to Traditional UL, ULSG lapse rates for males were higher than females on both a count and amount basis in total, with a greater difference on an amount basis (figure 5.4.1).

Figure 5.4.1

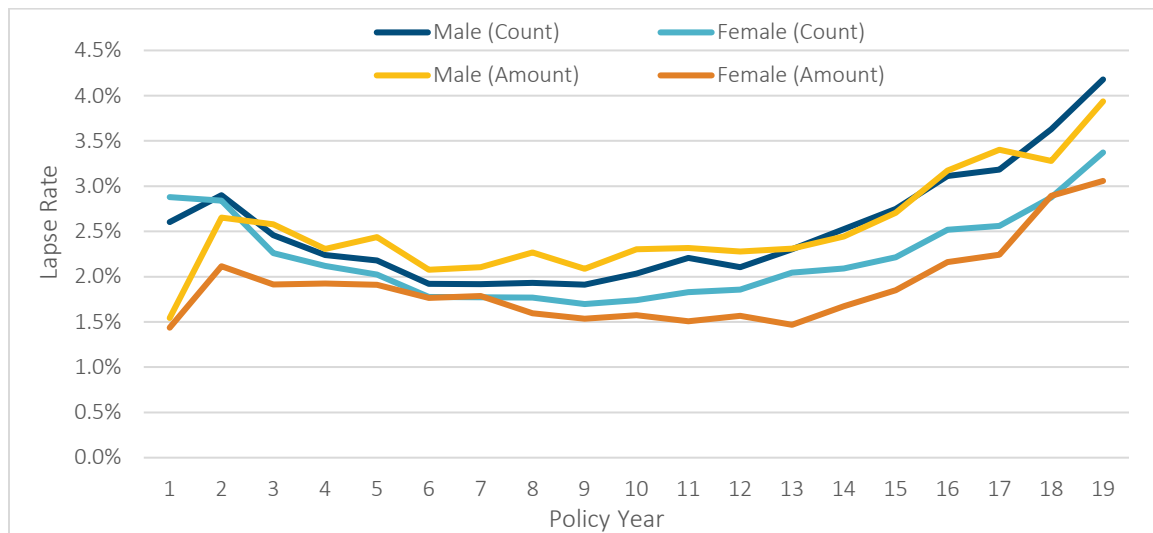
LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY SEX



The pattern of female lapse rates being slightly lower than male rates held across all policy years except policy year 1, with larger differences on an amount basis and in later policy years (figure 5.4.2).

Figure 5.4.2

LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY SEX AND POLICY YEAR



5.5 LAPSE RATES BY RISK CLASS AND SMOKER STATUS

For ULSG, lapse rates were materially higher for Smokers than for Non-Smokers across all risk classes where there was available data (figure 5.5.1). For Non-Smoker Best Preferred, lapse rates by amount were less than lapse rates by count, which is the opposite of the other risk class and smoker combinations.

Figure 5.5.1

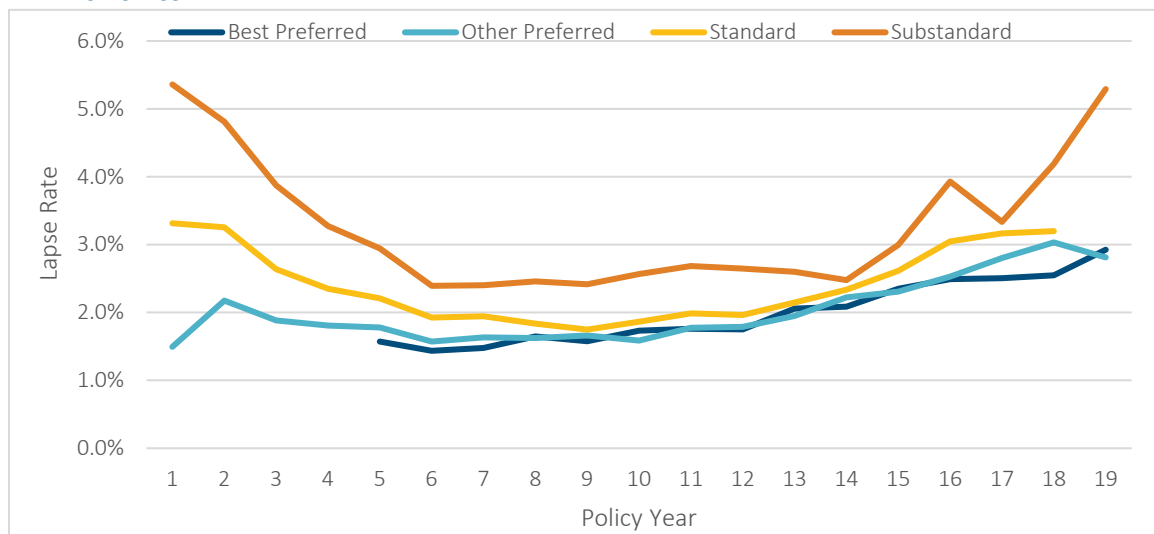
LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY RISK CLASS



The pattern by smoker distinct class and policy year (figure 5.5.2) is similar to the pattern in total, with lapse rates by count increasing with class for Non-Smokers.

Figure 5.5.2

LAPSE RATES FOR NON-SMOKERS BASED ON COUNT FOR TRADITIONAL ULSG POLICIES BY POLICY YEAR AND RISK CLASS

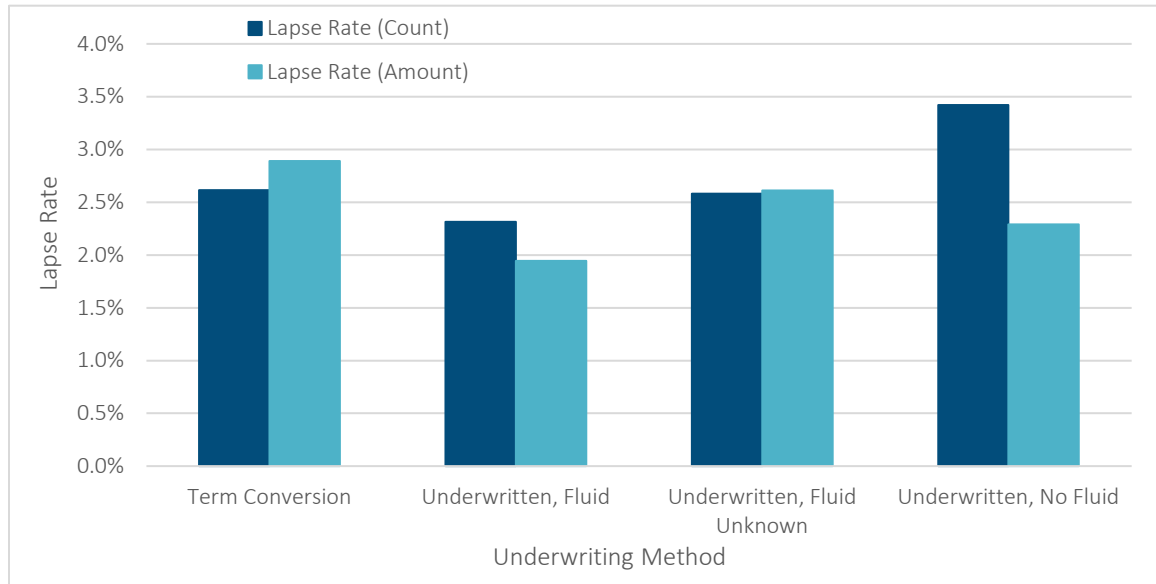


5.6 LAPSE RATES BY UNDERWRITING METHOD

For ULSG, lapse rates were higher for policies that were underwritten without fluid collection compared to those with fluid collection (figure 5.6.1), more so on a count basis. ULSG policies issued as a result of a Term Conversion exhibited higher lapse rates by amount than by count.

Figure 5.6.1

LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY UNDERWRITING METHOD



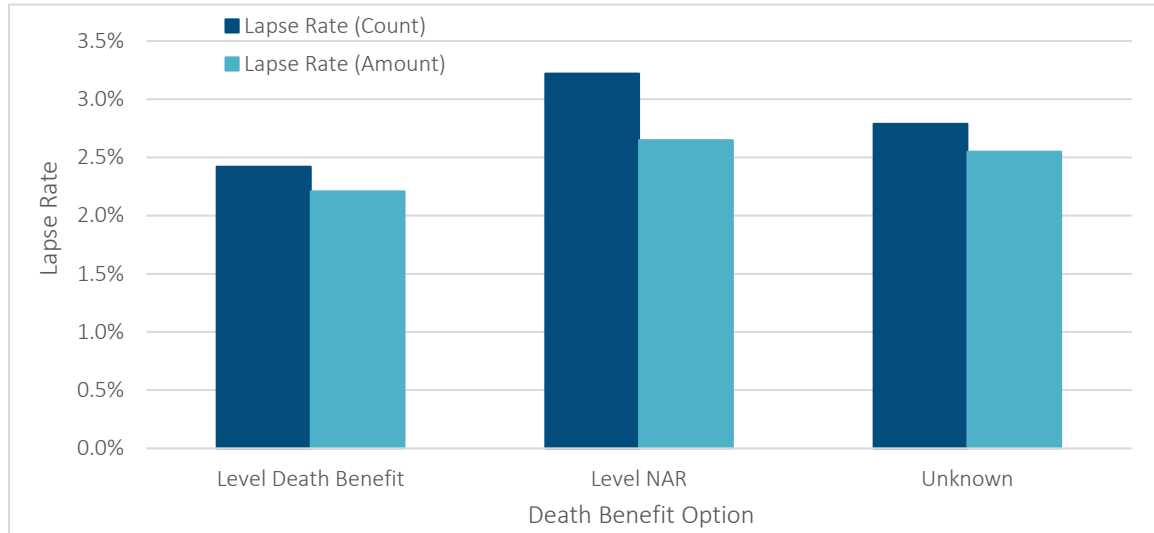
5.7 LAPSE RATES BY DEATH BENEFIT OPTION

The VM-51 data format allowed for two different death benefit options, Level Death Benefit or Level Net Amount at Risk, along with an Unknown option. The Unknown option was most likely chosen for any non-standard death benefit option such as level death benefit plus return of premium.

By death benefit option, Level Death Benefit policies exhibited lower lapse rates on a count and amount basis relative to Level Net Amount at Risk policies, with a greater difference by count (figure 5.7.1).

Figure 5.7.1

LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY DEATH BENEFIT OPTION

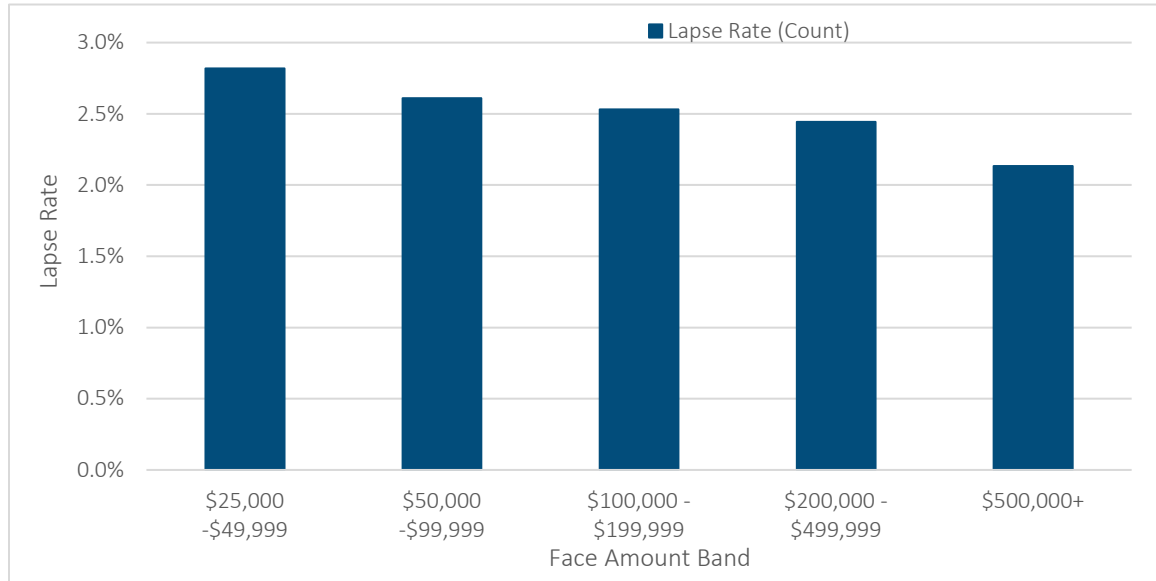


5.8 LAPSE RATES BY FACE AMOUNT BAND

For Traditional UL business with a Secondary Guarantee, lapse rates gradually decreased as policy size increased (figure 5.8.1).

Figure 5.8.1

LAPSE RATES BASED ON COUNT FOR TRADITIONAL ULSG POLICIES BY FACE AMOUNT BAND



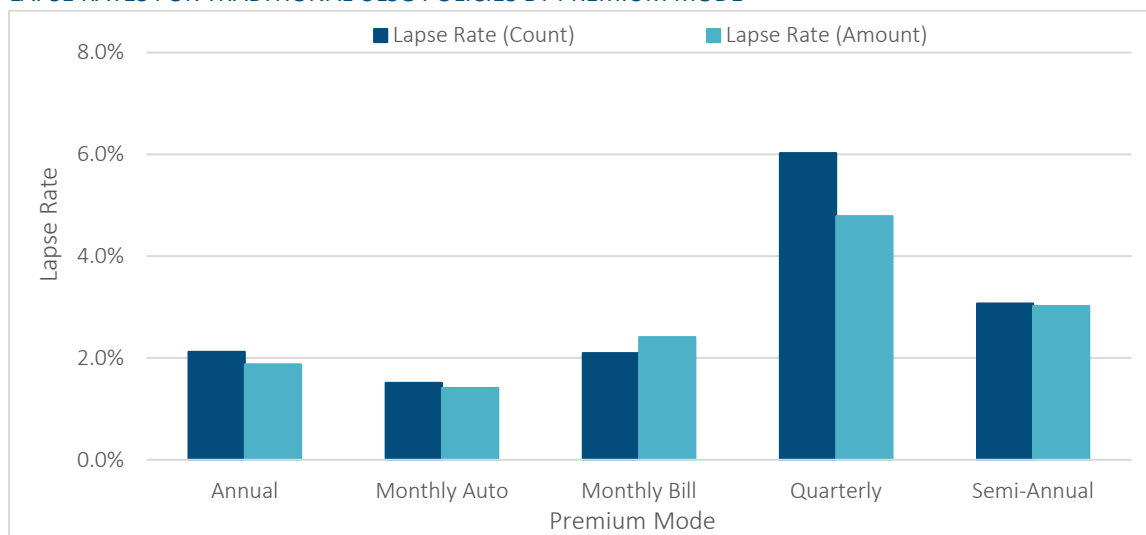
5.9 LAPSE RATES BY PREMIUM MODE

Traditional UL with a Secondary Guarantee with Monthly Automatic Payments had the lowest lapse rate of all premium modes (figure 5.9.1). For modes other than monthly, lapse rates followed an increasing pattern with the number of payments made per year.

It is worth noting that, since universal life policies allow for flexible premiums, the mode of the premium payment might be less impactful on the lapse rates than for a more traditional product, like whole life or term insurance.

Figure 5.9.1

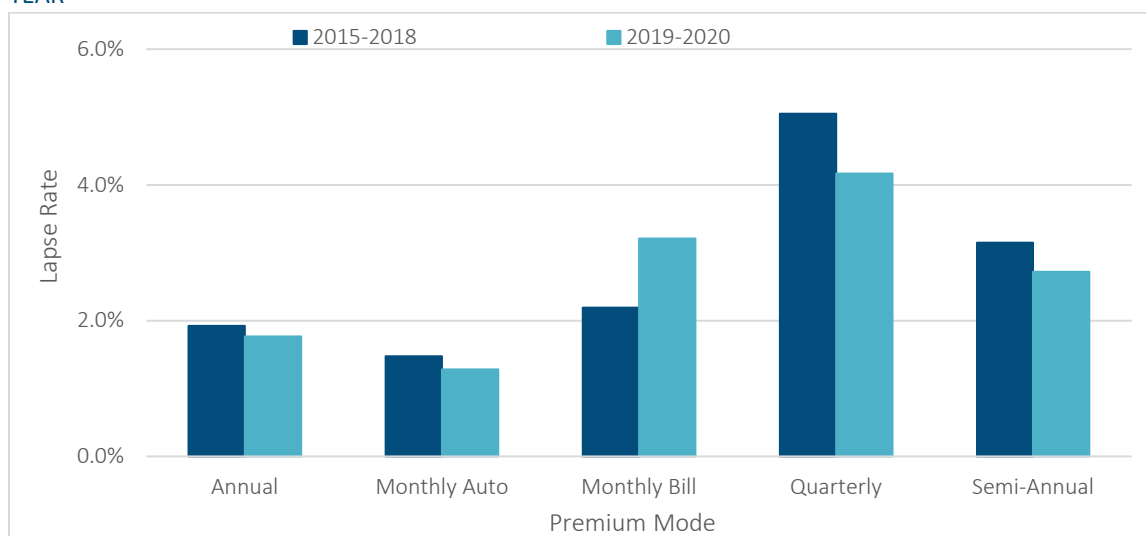
LAPSE RATES FOR TRADITIONAL ULSG POLICIES BY PREMIUM MODE



Lapse rates based on amount across all premium modes, except Monthly Bill, were lower prior to the pandemic than during the pandemic (figure 5.9.2).

Figure 5.9.2

LAPSE RATES BASED ON AMOUNT FOR TRADITIONAL ULSG POLICIES BY PREMIUM MODE AND STUDY YEAR



Section 6: Indexed Universal Life without a Secondary Guarantee

Twelve companies provided data for Indexed Universal Life without a Secondary Guarantee (IUL). IUL represents less than 1% of the total exposure for the study based on count. As such, the experience cannot be broken out in as much detail as other product types.

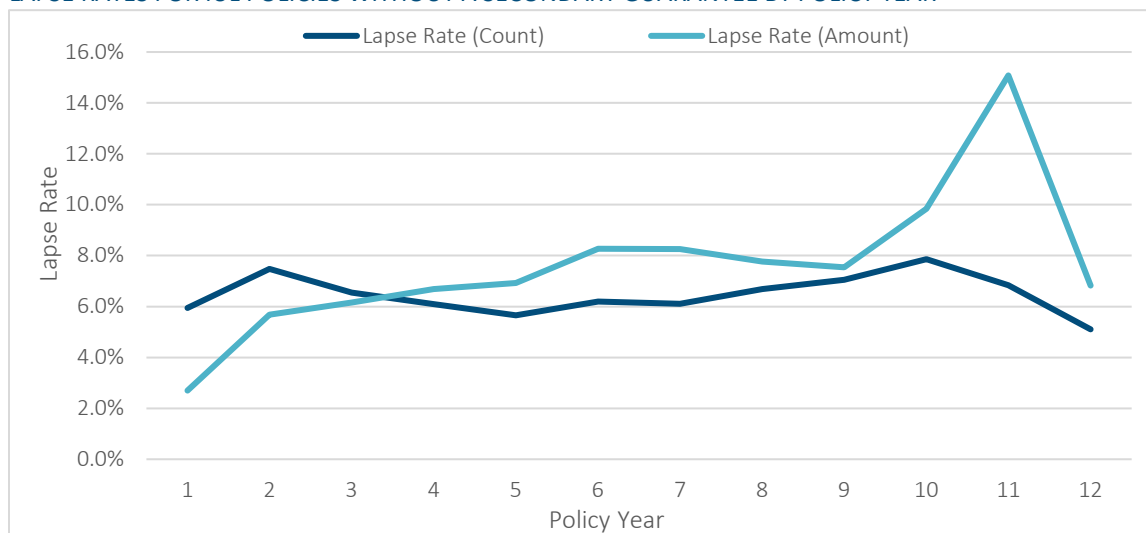
6.1 LAPSE RATES BY POLICY YEAR

The prior report did not have the ability to separate Indexed Universal Life from Traditional Universal Life, as such no comparison can be made to the 2009-2013 study.

For IUL policies without a secondary guarantee, lapse rates by count were higher than lapse rates by amount in the early policy years (figure 6.1.1). The pattern shifted starting in policy year 4, as lapse rates by amount tended to have a generally increasing pattern by policy year.

Figure 6.1.1

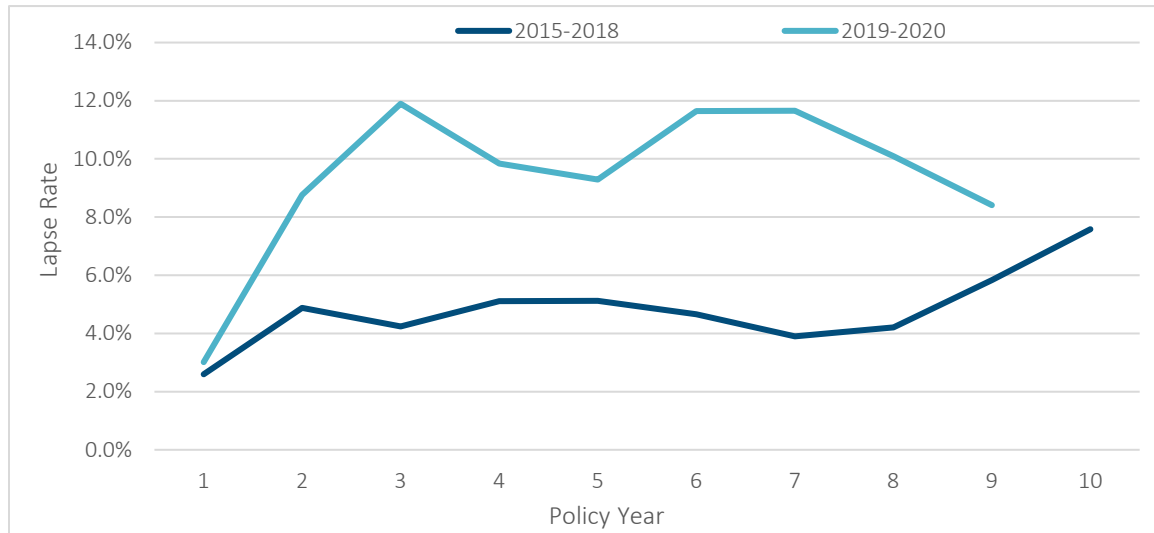
LAPSE RATES FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR



For IUL business without a secondary guarantee, lapse rates increased significantly across all policy years between the earlier part of the study period (2015-2018) and the latter part of the study period (2019-2020) (figure 6.1.2). This was the only product type to exhibit consistently higher lapse rates by policy year during the pandemic relative to prior to the pandemic.

Figure 6.1.2

LAPSE RATES BASED ON AMOUNT FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR AND STUDY YEAR



6.2 LAPSE RATES BY ISSUE AGE GROUP

In the early policy years, lapse rates based on count tended to decrease as issue age increased (figure 6.2.1). Please note that, for many issue age groups, there tended to be less than 500 lapses in each of the early durations, with the number of lapses falling under 100 per policy year starting in year 8 or 9. For the oldest issue age group (issue age 70+), there were less than 100 lapses in every policy year.

Figure 6.2.1

LAPSE RATES BASED ON COUNT FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR AND ISSUE AGE GROUP

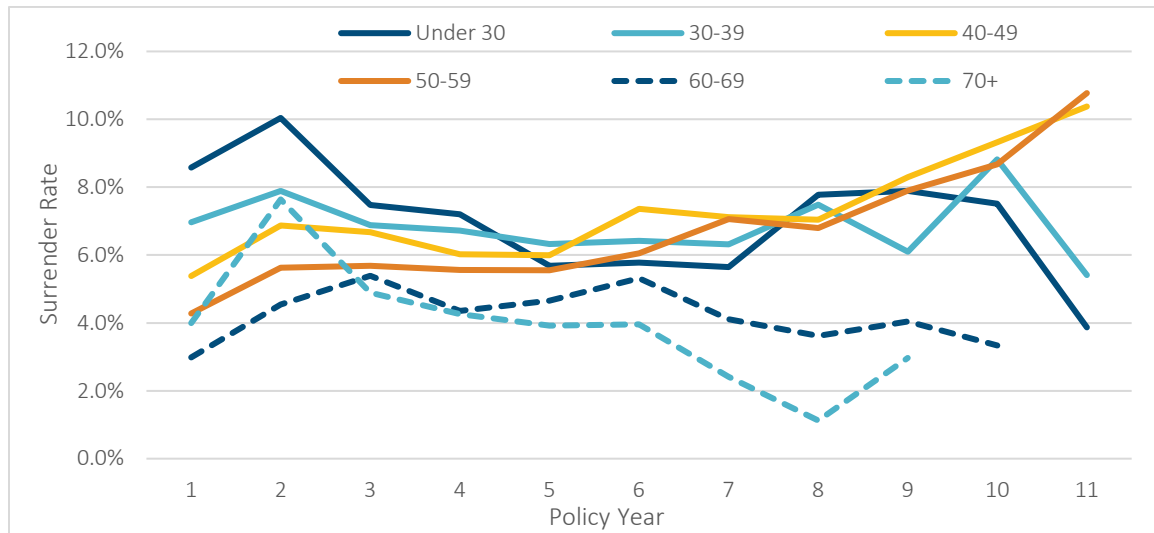
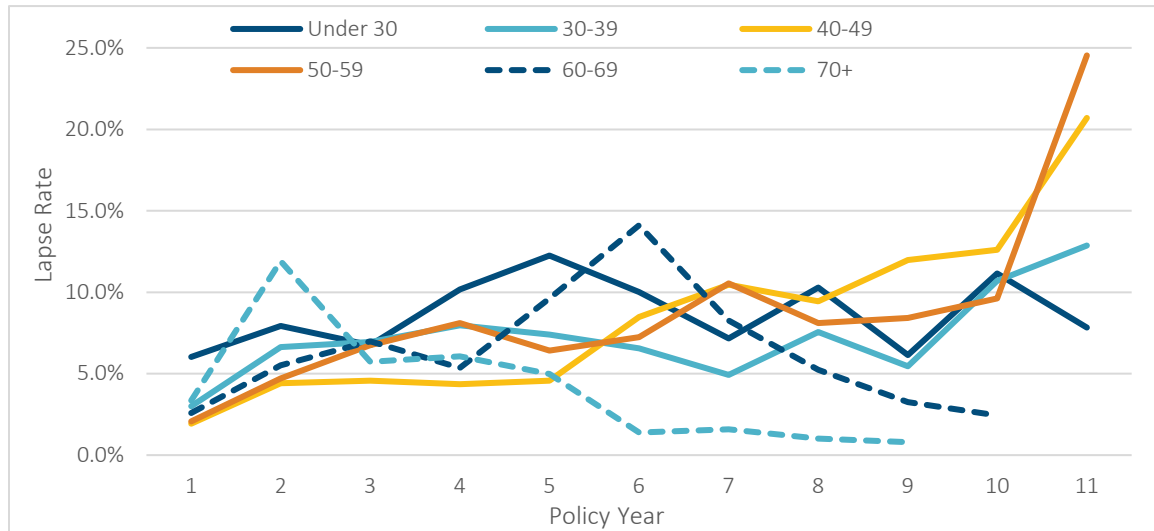


Figure 6.2.2

LAPSE RATES BASED ON AMOUNT FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR AND ISSUE AGE GROUP

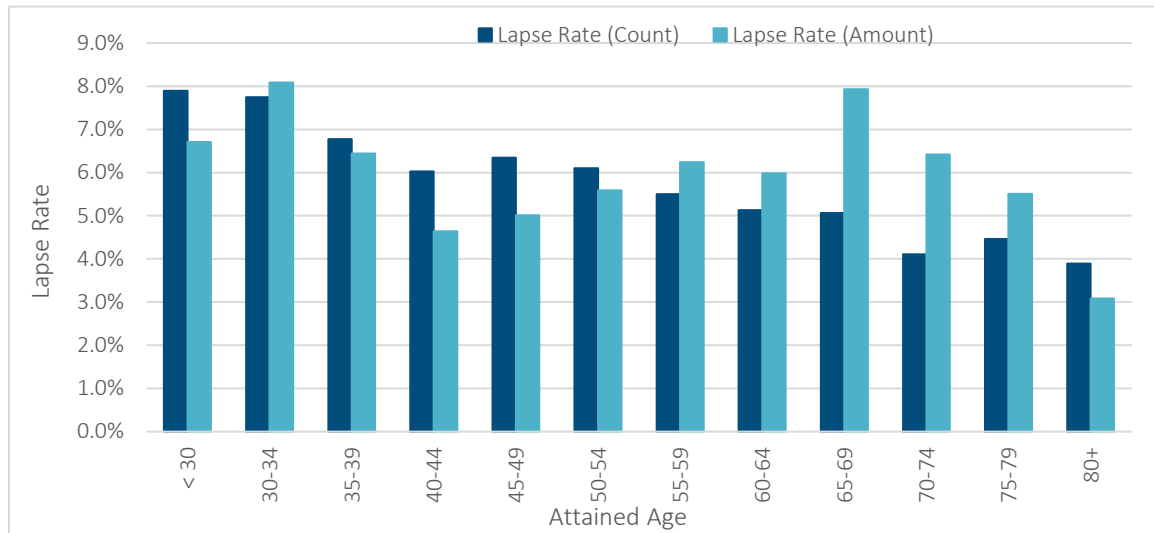


6.3 LAPSE RATES BY ATTAINED AGE GROUP

By attained age group, there is a clear pattern of decreasing lapse rates with increasing attained age on a by count basis (figure 6.3.1). The pattern did not appear to hold on an amount basis.

Figure 6.3.1

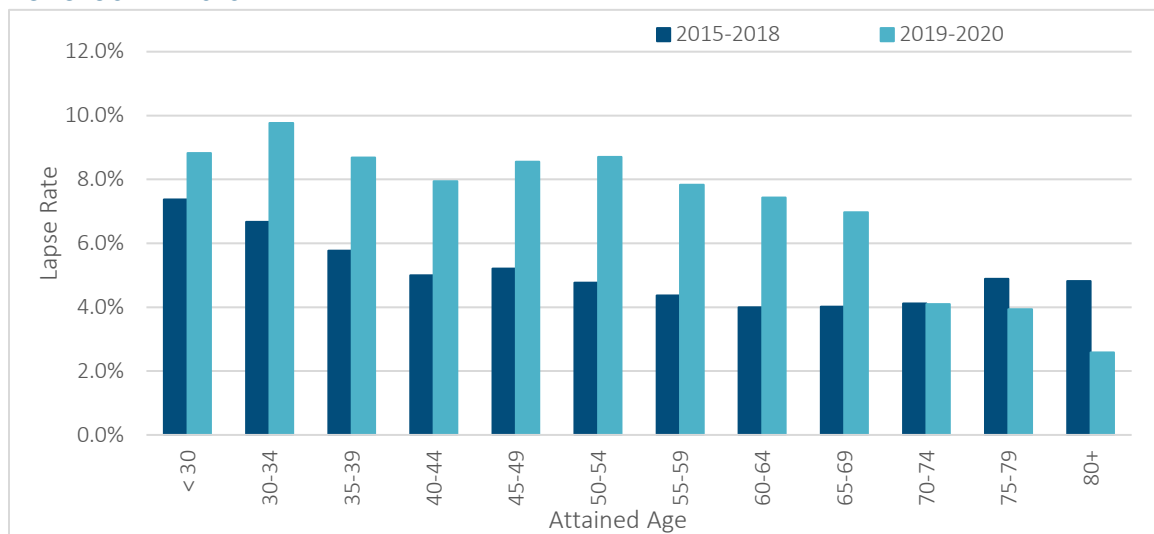
LAPSE RATES FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY ATTAINED AGE GROUP



On a count basis, differences in lapse rates between the earlier and latter part of the study period were seen across all attained age groups, except for the age groups over 70+ where rates were slightly lower in the latter part of the study (figure 6.3.2).

Figure 6.3.2

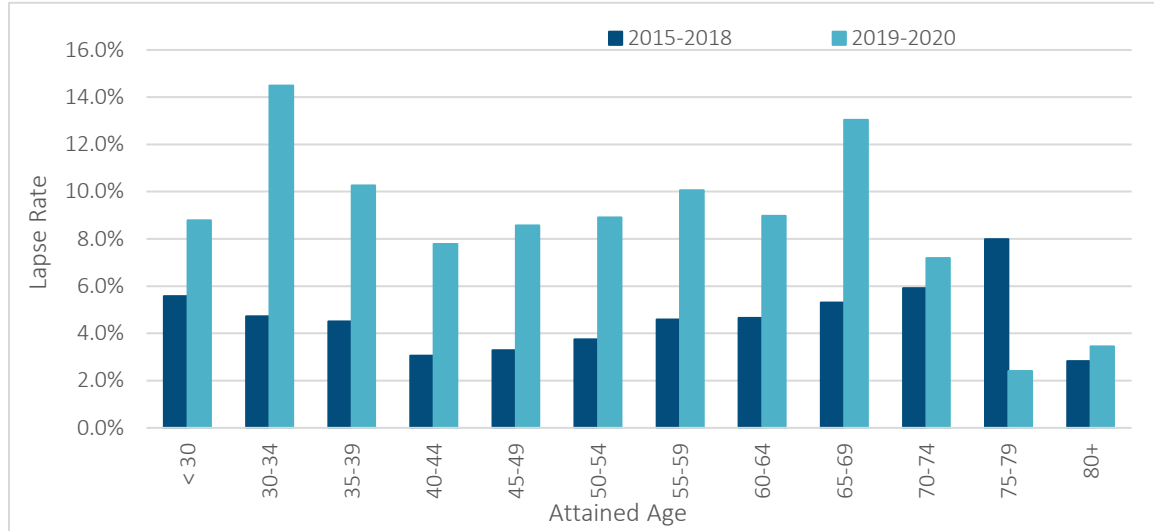
LAPSE RATES BASED ON COUNT FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY ATTAINED AGE GROUP AND STUDY YEAR



The higher lapse rates in the latter part of the study period were also seen across all attained age groups, except ages 75-79 (figure 6.3.3).

Figure 6.3.3

LAPSE RATES BASED ON AMOUNT FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY ATTAINED AGE GROUP AND STUDY YEAR

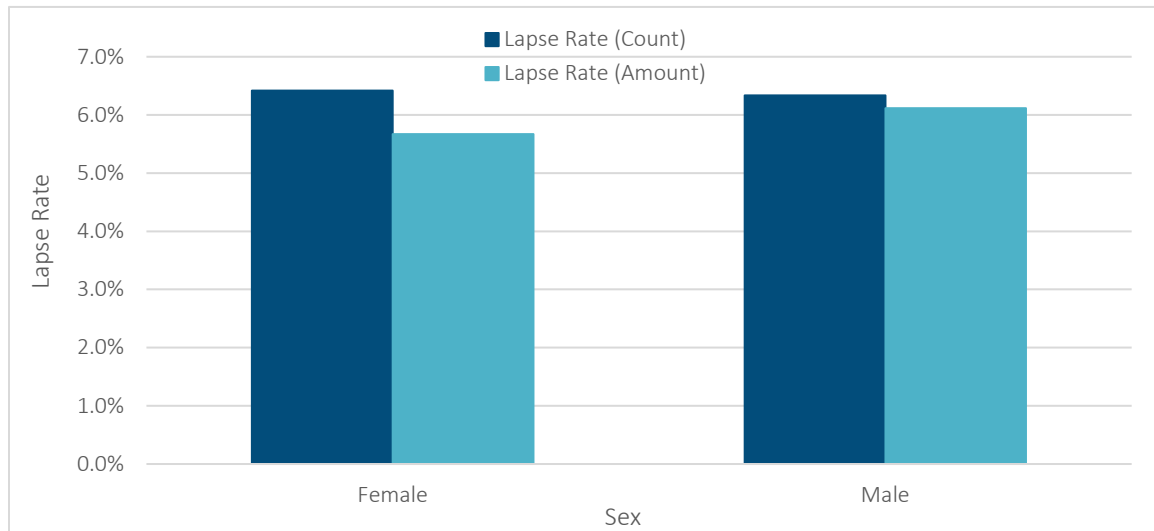


6.4 LAPSE RATES BY SEX

Lapse rates based on count were nearly the same for females and males (figure 6.4.1). Lapse rates by amount were higher for males.

Figure 6.4.1

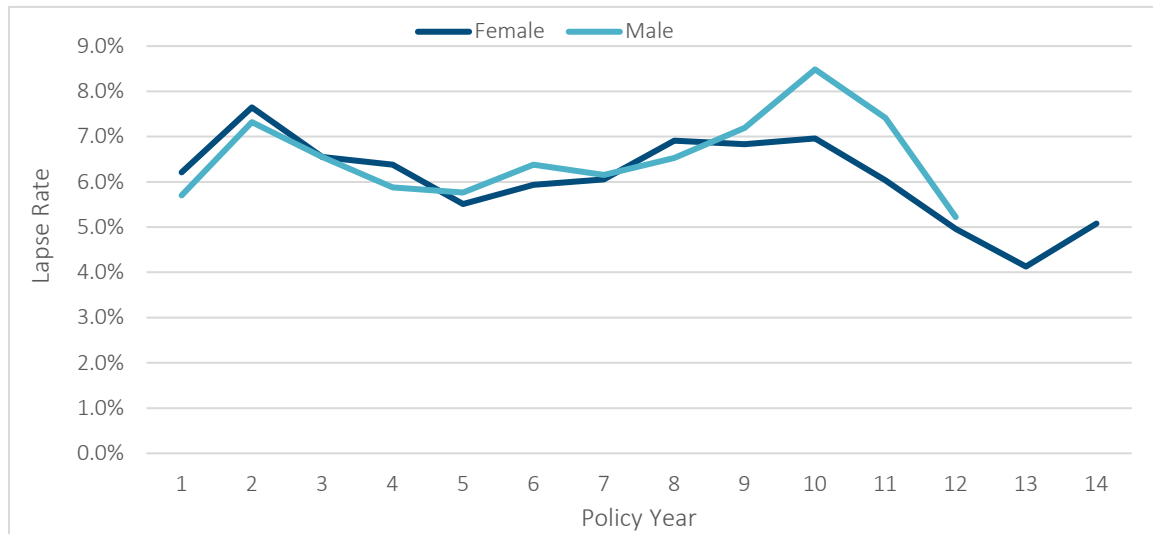
LAPSE RATES FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY SEX



The pattern of similar lapse rates based on count for males and females held for most policy years (figure 6.4.2). Note that there were less than 100 lapses beginning in policy year 11 for males and policy year 10 for females.

Figure 6.4.2

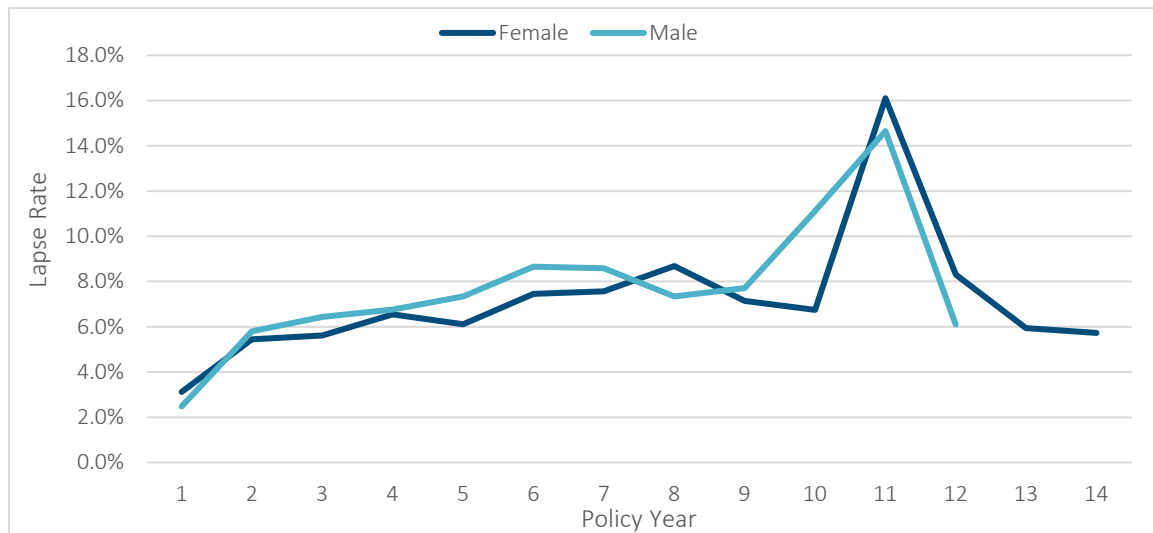
LAPSE RATES BASED ON COUNT FOR INDEXED UNIVERSAL LIFE WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR AND SEX



Higher lapse rates based on count for males relative to females held true across many policy years (figure 6.4.3).

Figure 6.4.3

LAPSE RATES BASED ON AMOUNT FOR INDEXED UNIVERSAL LIFE WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR AND SEX

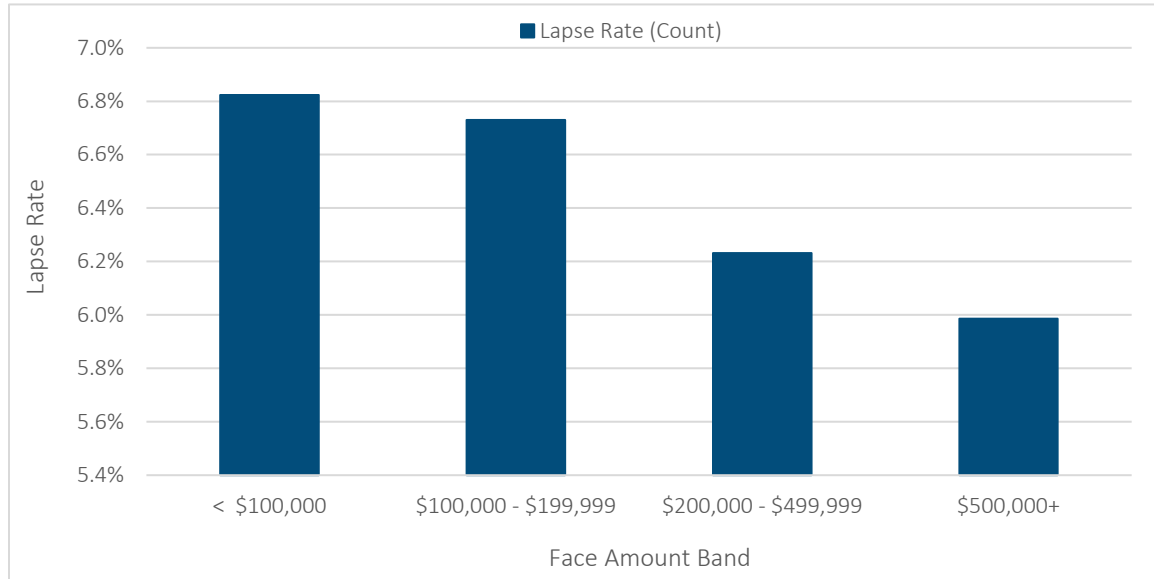


6.5 LAPSE RATES BY FACE AMOUNT BAND

Lapse rates for IUL without a secondary guarantee decreased as face amount band increased (figure 6.5.1).

Figure 6.5.1

LAPSE RATES FOR IUL POLICIES WITHOUT A SECONDARY GUARANTEE BY FACE AMOUNT BAND



Section 7: Indexed Universal Life with a Secondary Guarantee

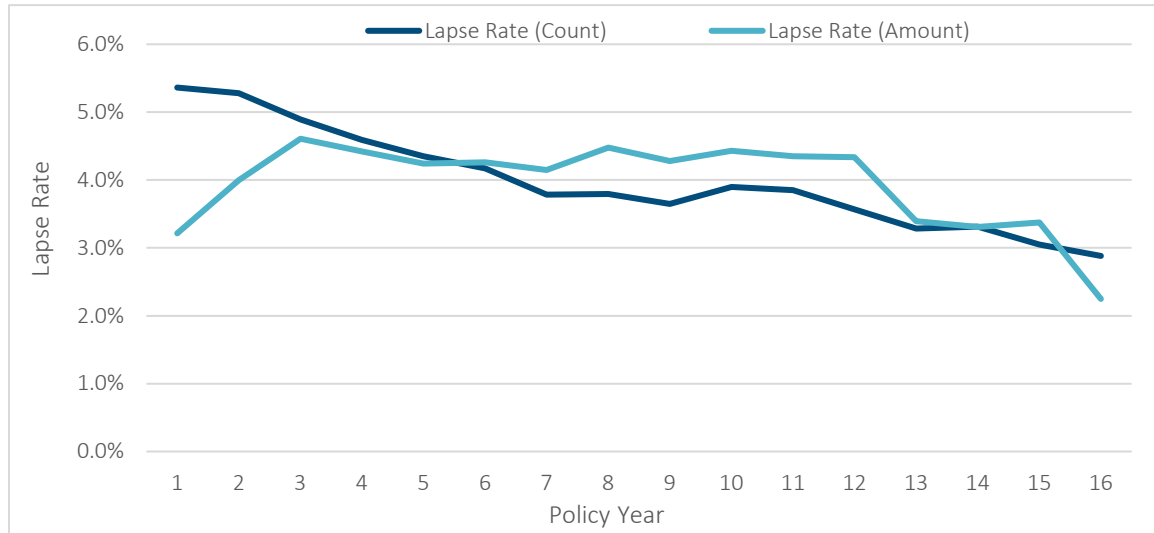
Seventeen companies provided data for Indexed Universal Life with a Secondary Guarantee (IULSG). The prior report did not have the ability to separate Indexed Universal Life from Traditional Universal Life so, as such, no comparison can be made to the 2009-2013 study.

7.1 LAPSE RATES BY POLICY YEAR

In the early policy years, lapse rates by count were generally higher than by amount, but the pattern switched starting around policy year 6 when lapse rates by amount were higher (figure 7.1.1).

Figure 7.1.1

LAPSE RATES FOR IULSG BY POLICY YEAR



When comparing lapse rates for Indexed Universal Life with Secondary Guarantees (IULSG) against lapse rates for Indexed Universal Life (IUL), it is interesting to note that lapse rates by both count and amount were lower for IULSG across almost all policy years (figures 7.1.2 and 7.1.3).

Figure 7.1.2

LAPSE RATES BASED ON COUNT FOR IUL WITH AND WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR

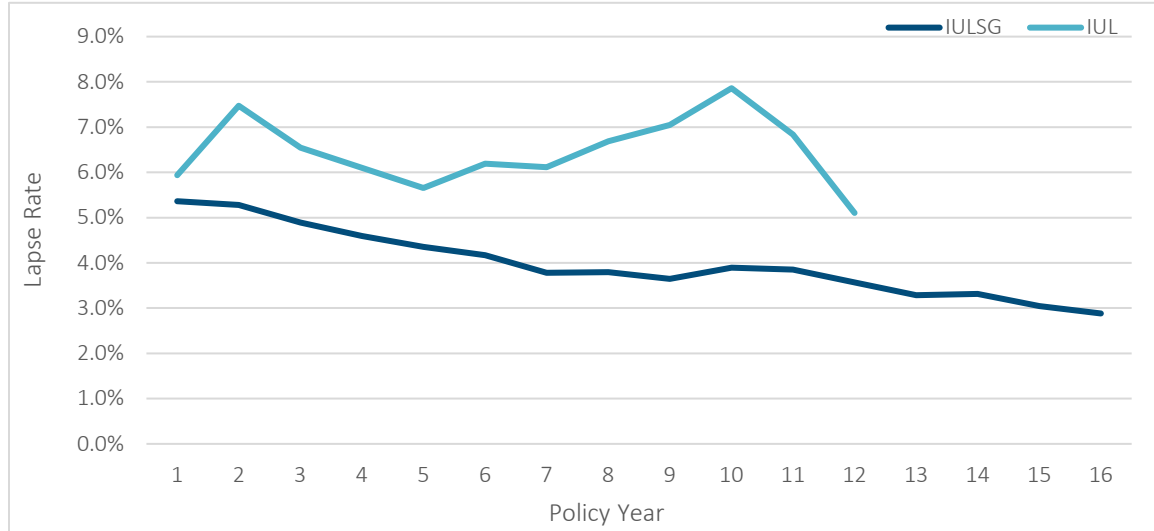
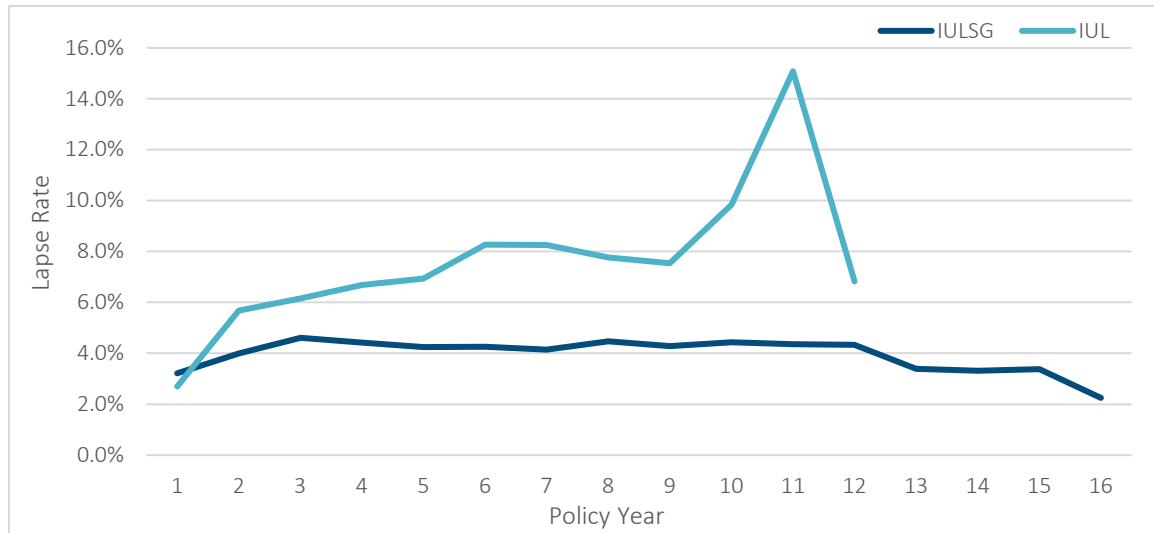


Figure 7.1.3

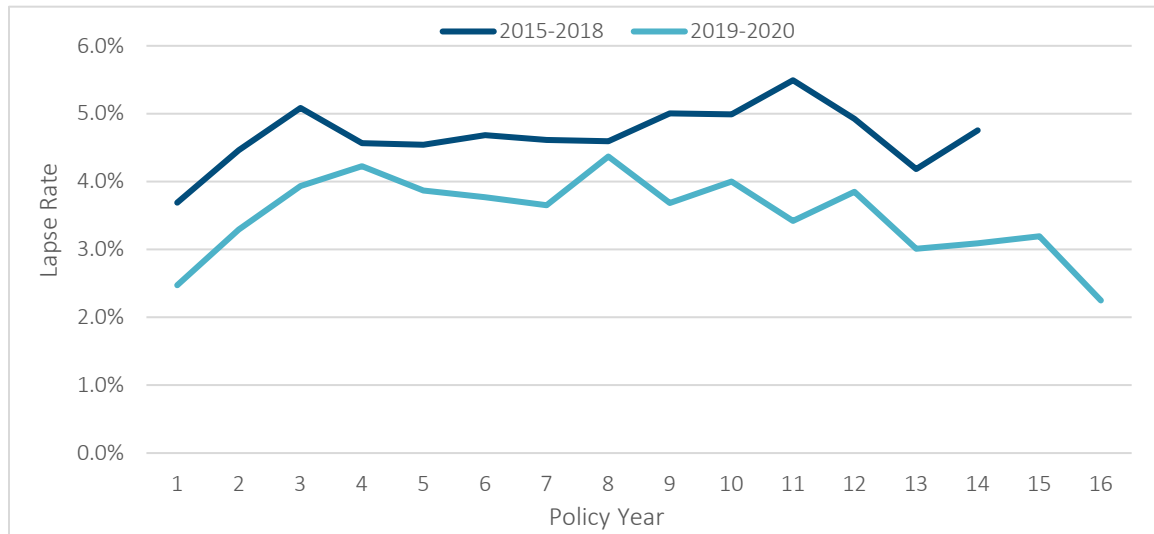
LAPSE RATES BASED ON AMOUNT FOR IUL WITH AND WITHOUT A SECONDARY GUARANTEE BY POLICY YEAR



IULSG lapse rates by amount during the pandemic study years (2019-2020) were less than pre-pandemic study years (2015-2018) for all policy years (figure 7.1.4).

Figure 7.1.4

LAPSE RATES BASED ON AMOUNT FOR IULSG BY POLICY YEAR AND STUDY YEAR

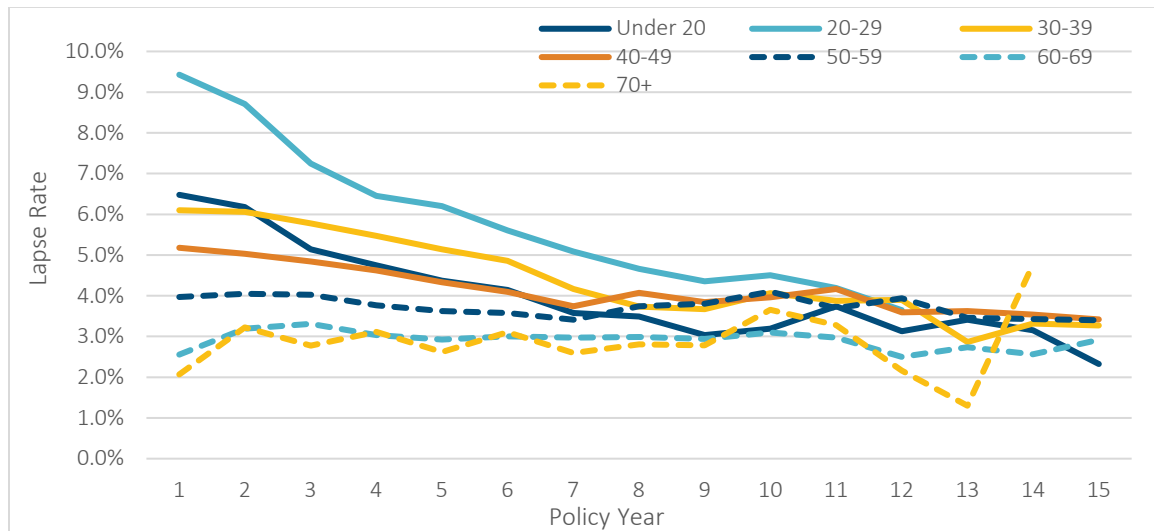


7.2 LAPSE RATES BY ISSUE AGE GROUP

With the exception of the youngest age group, lapse rates by count tended to have a decreasing pattern by issue age group (figure 7.2.1). Starting around policy year 8, the lapse rates for issue ages 30-59 became similar and harder to distinguish.

Figure 7.2.1

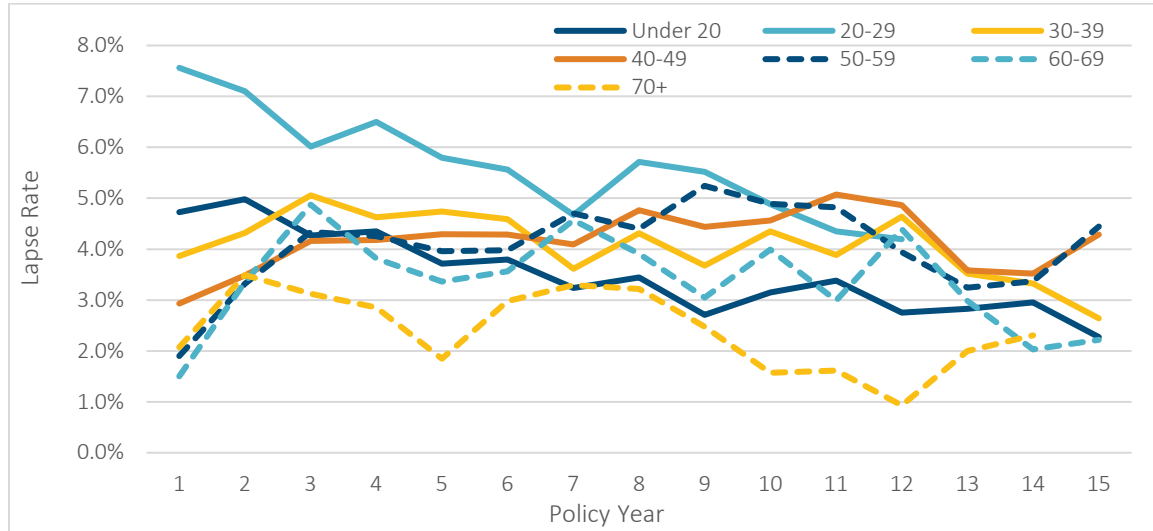
LAPSE RATES BASED ON COUNT FOR IULSG BY POLICY YEAR AND ISSUE AGE GROUP



The pattern based on amount was more volatile and less clear than the pattern by count (figure 7.2.2). Generally, lapse rates based on amount were lowest for the oldest issue age group (70+).

Figure 7.2.2

LAPSE RATES BASED ON AMOUNT FOR IULSG BY POLICY YEAR AND ISSUE AGE GROUP

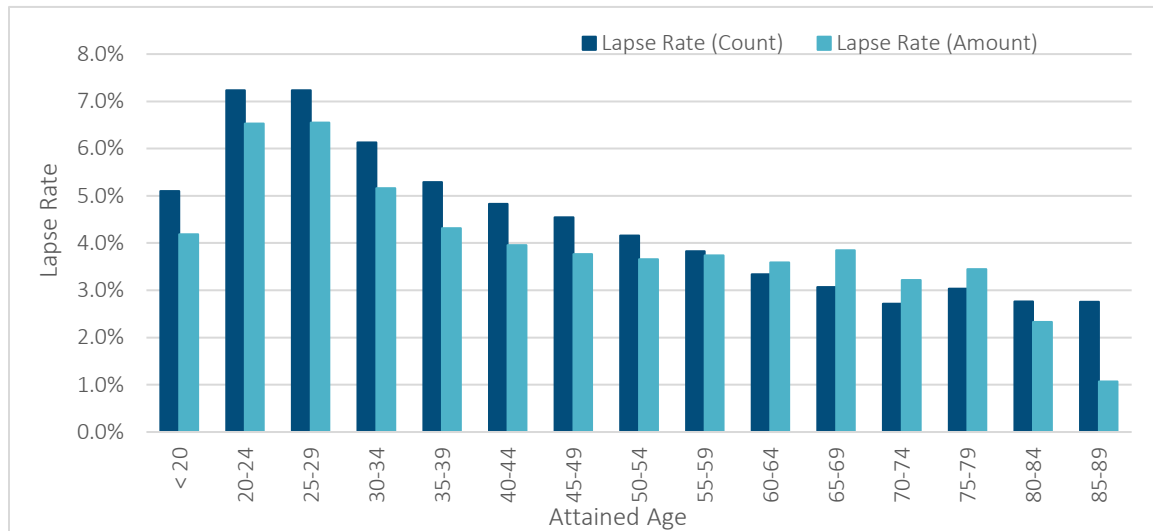


7.3 LAPSE RATES BY ATTAINED AGE GROUP

There was a decreasing pattern of lapse rates by count by attained age between attained age groups 25-29 and 70-74 (figure 7.3.1). Lapse rates by amount were notably lower than lapse rates by count at the younger attained age groups through age 50-54.

Figure 7.3.1

LAPSE RATES FOR IULSG BY ATTAINED AGE GROUP



Lapse rates by count and amount were both lower during the pandemic study years than the study years prior to the pandemic across all attained age groups (figures 7.3.2 and 7.3.3).

Figure 7.3.2

LAPSE RATES BASED ON COUNT FOR IULSG BY ATTAINED AGE GROUP AND STUDY YEAR

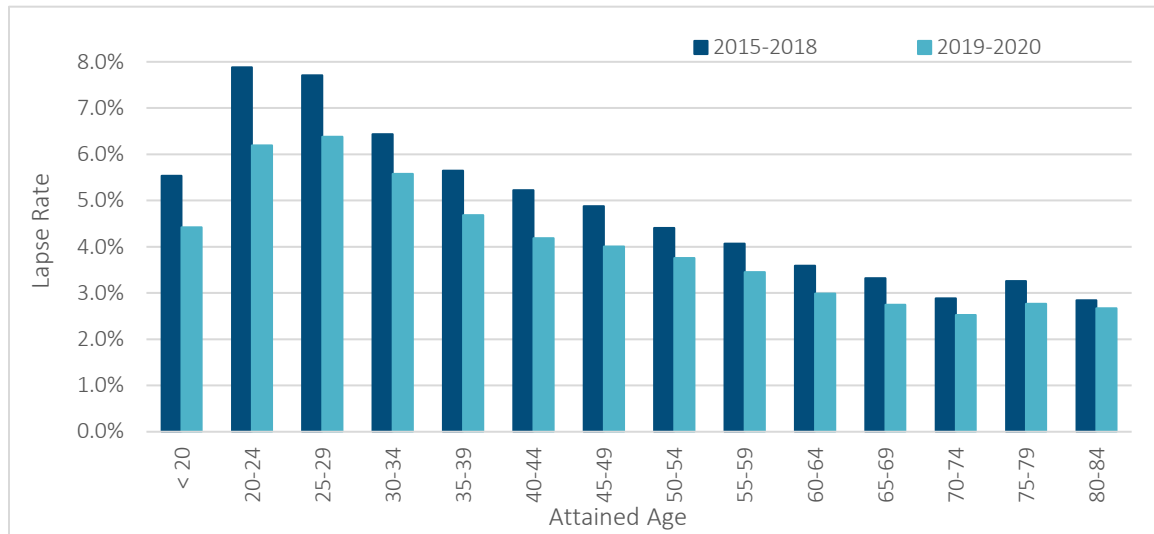
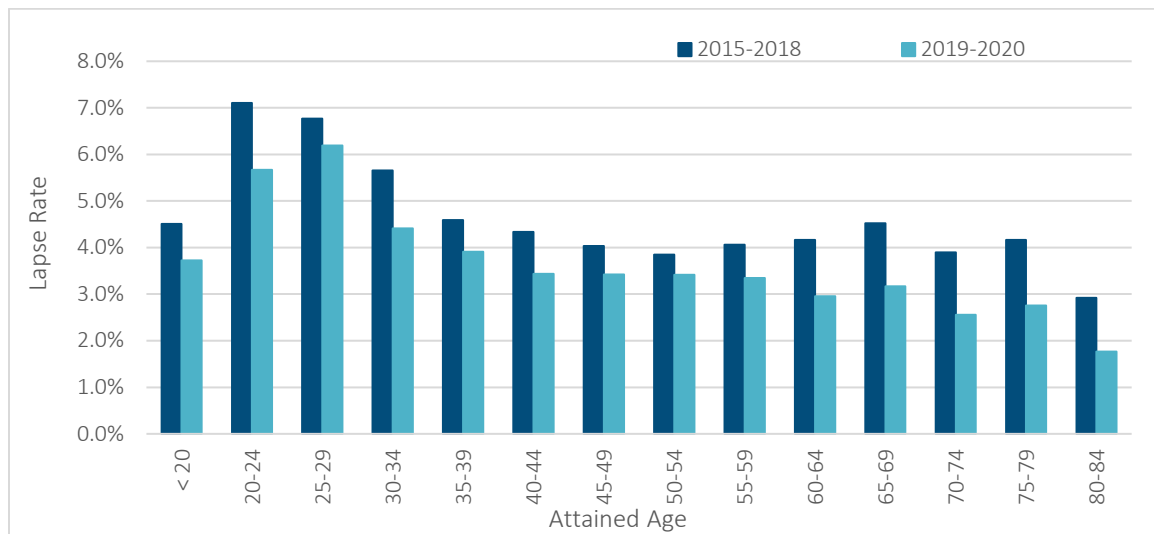


Figure 7.3.3

LAPSE RATES BASED ON AMOUNT FOR IULSG BY ATTAINED AGE GROUP AND STUDY YEAR

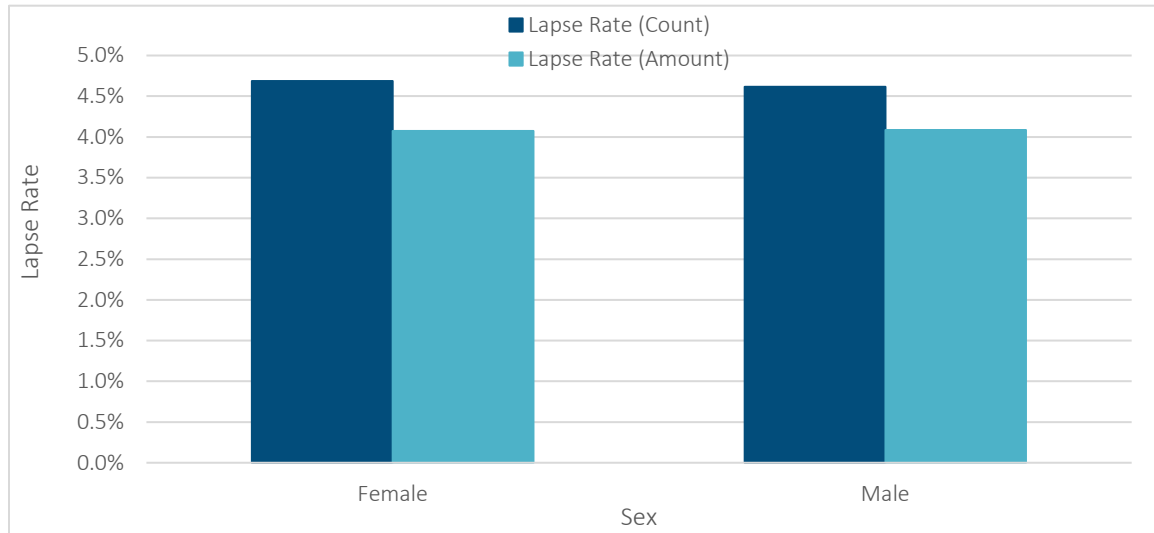


7.4 LAPSE RATES BY SEX

In total, female lapse rates were slightly higher than male lapse rates on a count basis and similar on an amount basis (figure 7.4.1). Lapse rates by count were notably higher than lapse rates by amount for both males and females.

Figure 7.4.1

LAPSE RATES FOR IULSG BY SEX



The pattern of slightly higher lapse rates for females based on count in total appears to be mainly from the first three policy years (figure 7.4.2). After policy year 3, female lapse rates based on count were similar to or less than male lapse rates.

The pattern by amount was more volatile (figure 7.4.3).

Figure 7.4.2

LAPSE RATES BASED ON COUNT FOR IULSG BY POLICY YEAR AND SEX

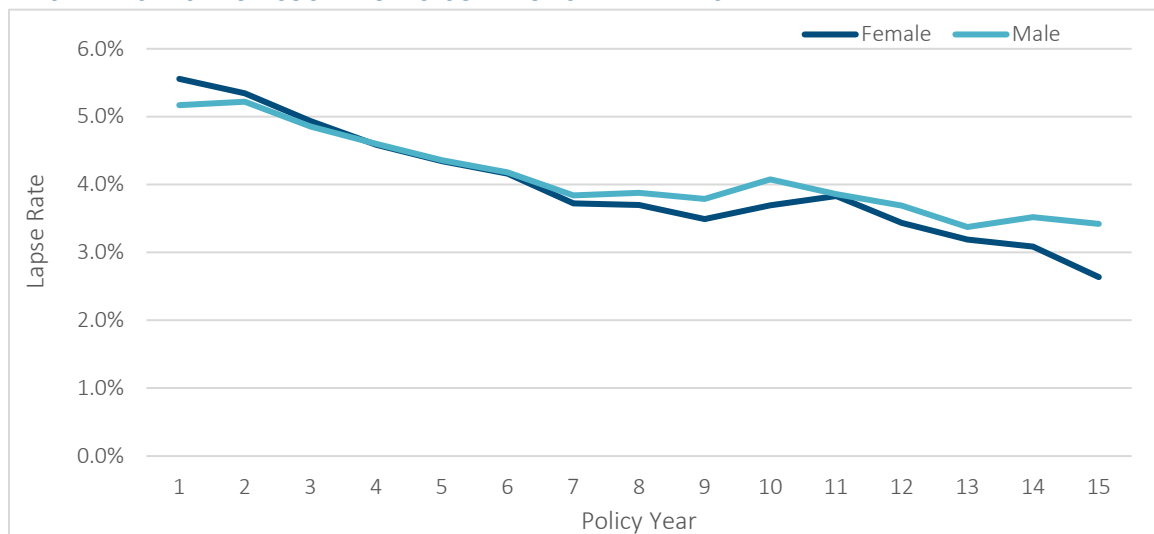
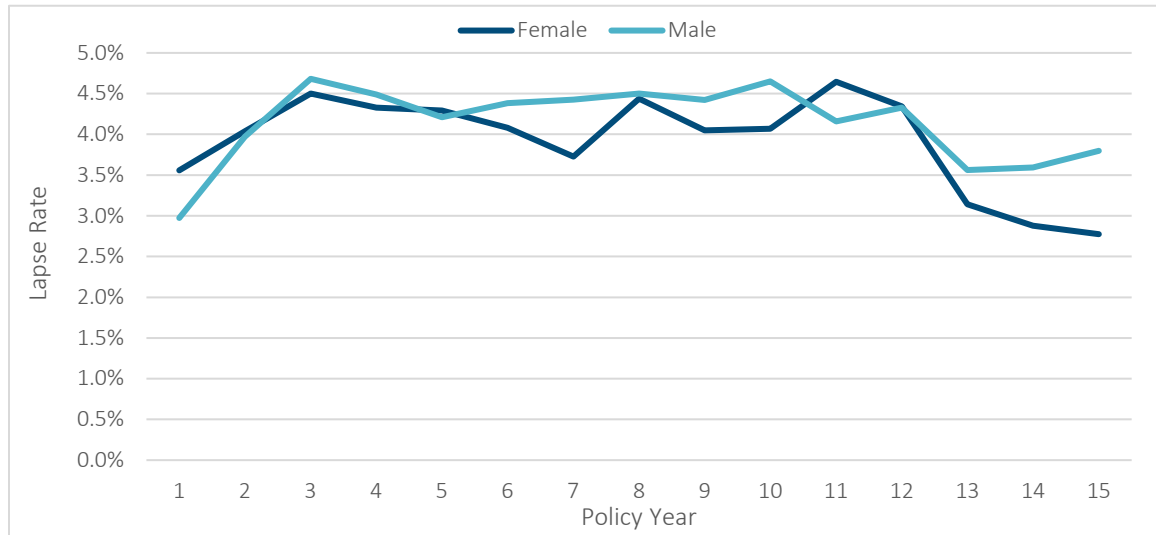


Figure 7.4.3**LAPSE RATES BASED ON AMOUNT FOR IULSG BY POLICY YEAR AND SEX****7.5 LAPSE RATES BY RISK CLASS AND SMOKER STATUS**

For both Smokers and Non-Smokers, lapse rates by amount were lower than lapse rates by count (figure 7.5.1). By count and amount, lapse rates for the Best Preferred class were 70% to 80% higher for Smokers than Non-Smokers.

Figure 7.5.1**LAPSE RATES FOR IULSG BY RISK CLASS AND SMOKER STATUS**

When examining lapse rate by policy year and risk class for each smoker status individually, lapse rates based on count generally followed the same pattern as they did in aggregate, with Best Preferred experiencing the lowest lapse rates and Substandard experiencing the highest lapse rates (figures 7.5.2 and 7.5.3). The largest difference between the classes was in the early policy years.

Figure 7.5.2

LAPSE RATES FOR NON-SMOKERS BASED ON COUNT FOR IULSG BY POLICY YEAR AND RISK CLASS

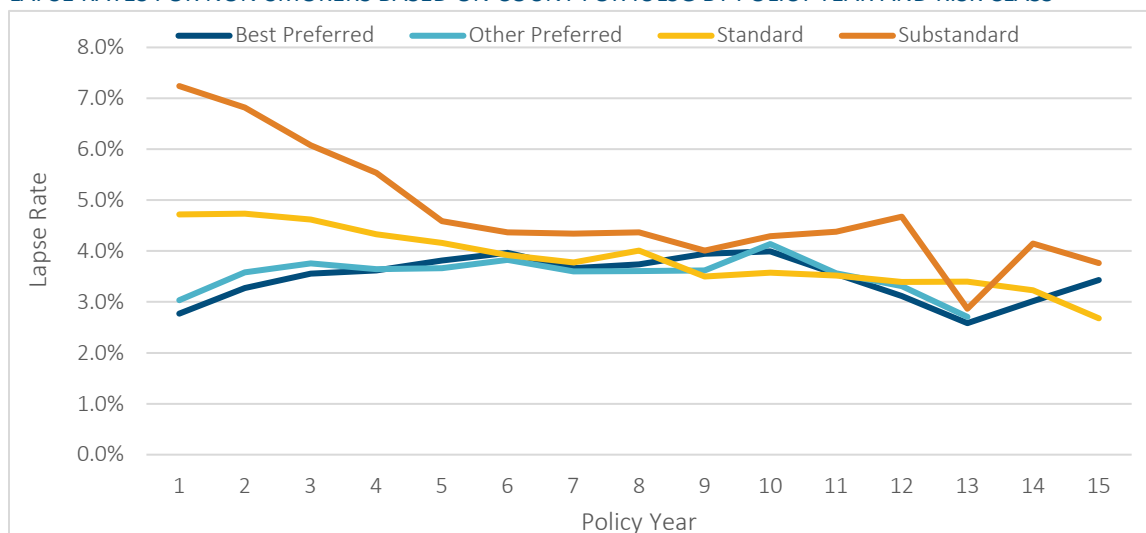
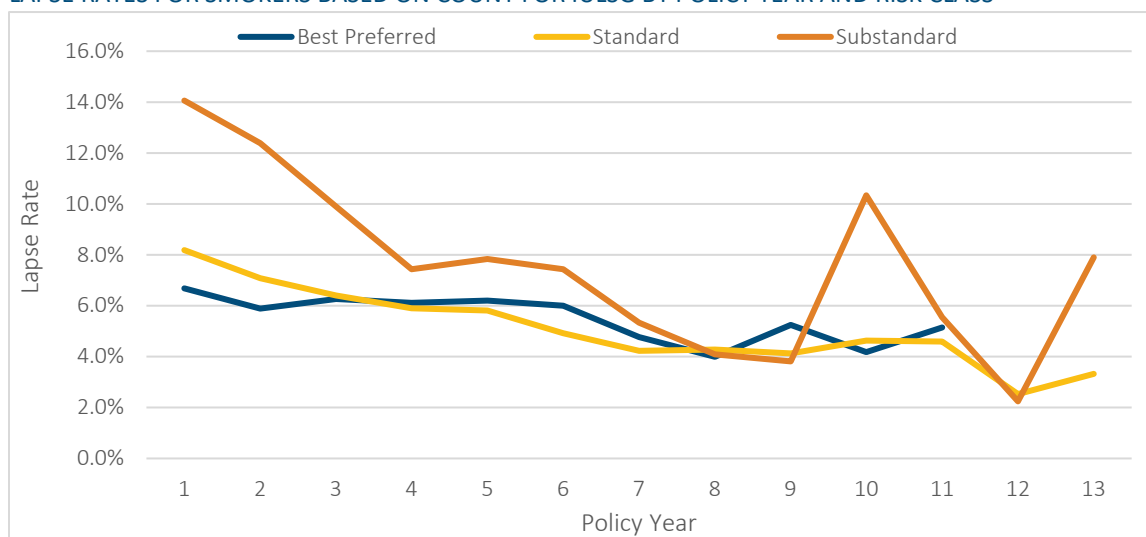


Figure 7.5.3

LAPSE RATES FOR SMOKERS BASED ON COUNT FOR IULSG BY POLICY YEAR AND RISK CLASS

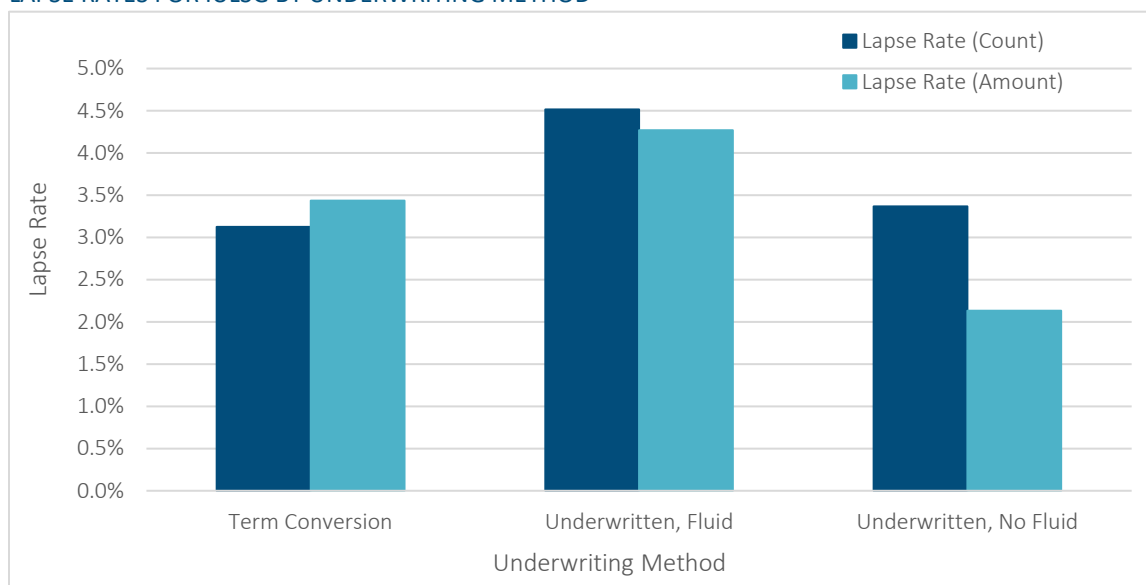


7.6 LAPSE RATES BY UNDERWRITING METHOD

In total, lapse rates based on count and amount were lower for policies that were Underwritten without Fluids compared to policies that were Underwritten with Fluids (figure 7.6.1). Also notable, lapse rates based on amount were higher than lapse rates by count for IULSG policies as a result of a Term Conversion.

Figure 7.6.1

LAPSE RATES FOR IULSG BY UNDERWRITING METHOD



7.7 LAPSE RATES BY DEATH BENEFIT OPTION

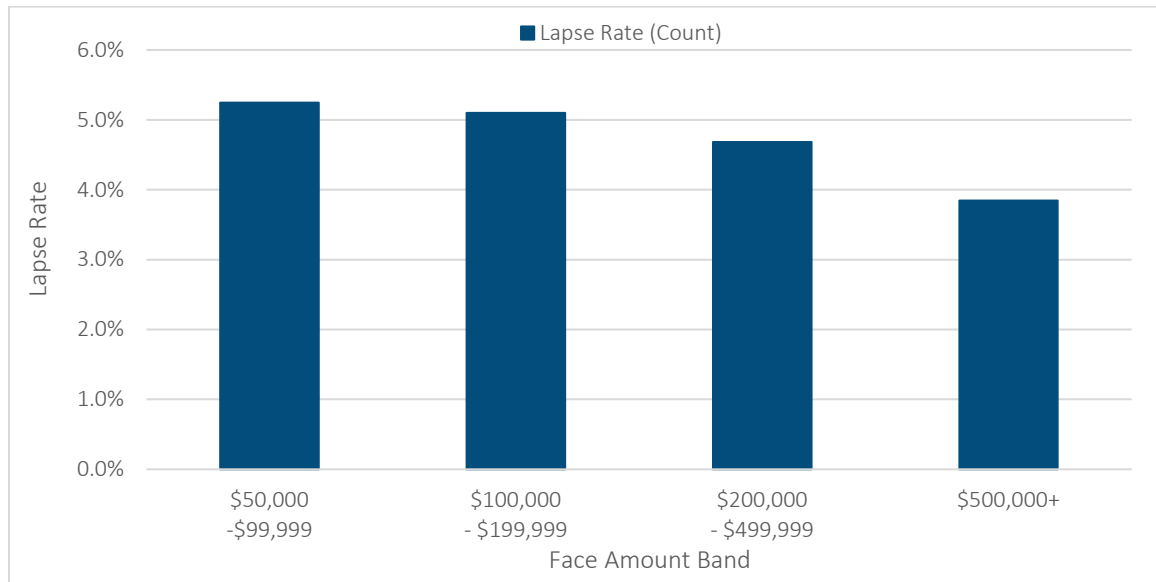
The data call format (VM-51 data submissions each participating company sent to either the New York Department of Financial Services, the Kansas Department of Insurance, or the NAIC) does not distinguish by Death Benefit Option for IUL plans.

7.8 LAPSE RATES BY FACE AMOUNT BAND

Lapse rates based on count exhibited a decreasing pattern by increasing face amount band, with the highest face amount band experiencing the lowest lapse rates in total (figure 7.8.1).

Figure 7.8.1

LAPSE RATES BASED ON COUNT FOR IULSG BY FACE AMOUNT BAND



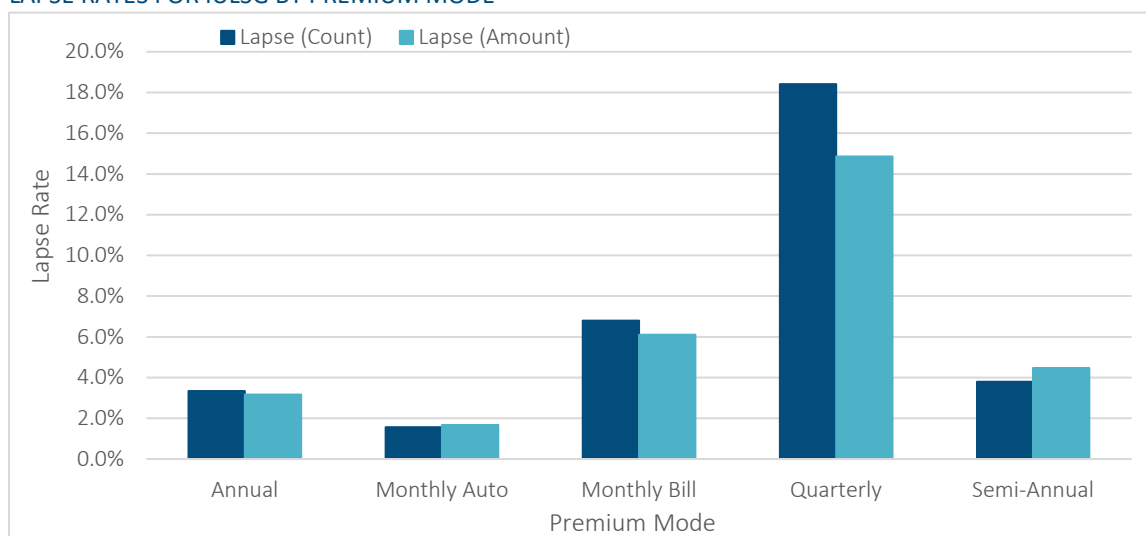
7.9 LAPSE RATES BY PREMIUM MODE

Lapse rates based on both count and amount were lowest for policies under a monthly automatic payment premium mode (figure 7.9.1).

It is worth noting that, since universal life policies allow for flexible premiums, the mode of the premium payment might be less impactful on the lapse rates than for a more traditional product, like whole life or term insurance.

Figure 7.9.1

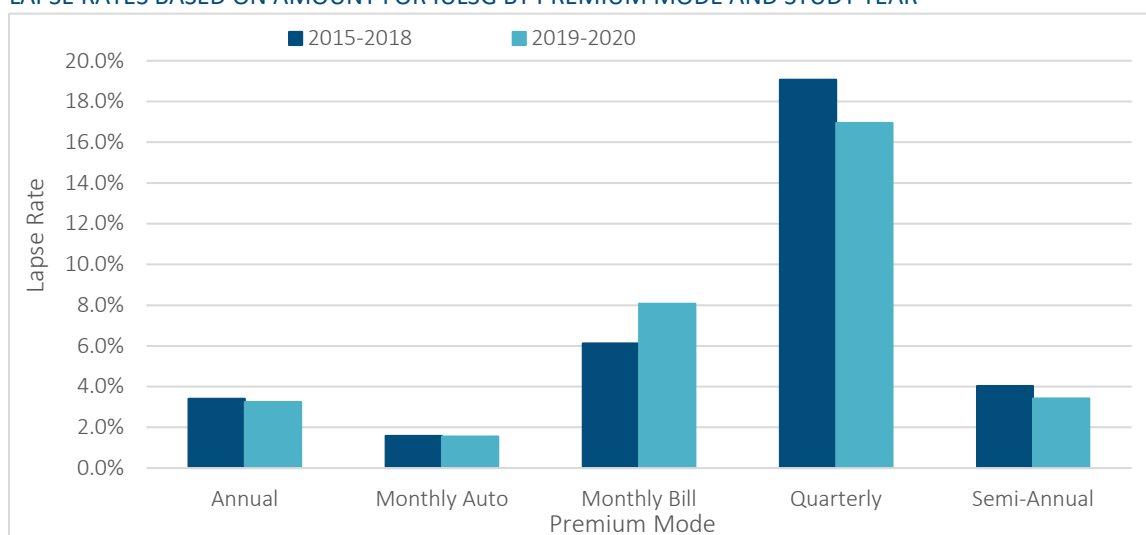
LAPSE RATES FOR IULSG BY PREMIUM MODE



Lapse rates based on amount were equal to or lower during the pandemic study years (2019-2020) than pre-pandemic study years for all premium modes except Monthly Bill (figure 7.9.2).

Figure 7.9.2

LAPSE RATES BASED ON AMOUNT FOR IULSG BY PREMIUM MODE AND STUDY YEAR



Section 8: Variable Universal Life without a Secondary Guarantee

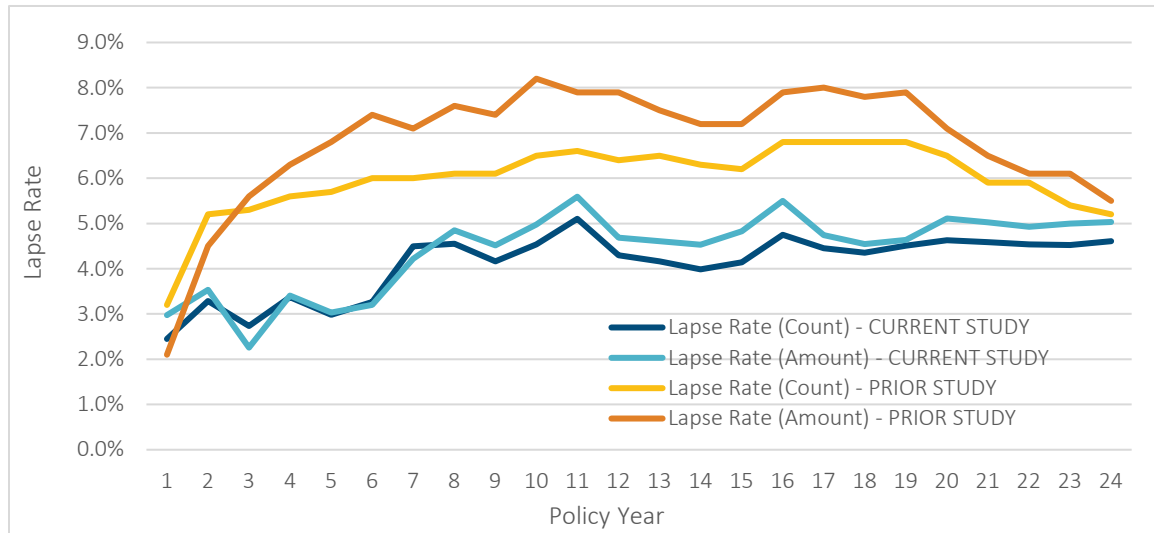
Seventeen companies provided data for Variable Universal Life without a Secondary Guarantee (VUL).

8.1 LAPSE RATES BY POLICY YEAR

In most policy years, lapse rates by both count and amount decreased notably from the prior study covering years 2009 through 2013 (figure 8.1.1). The difference between lapse rates based on count and amount also decreased.

Figure 8.1.1

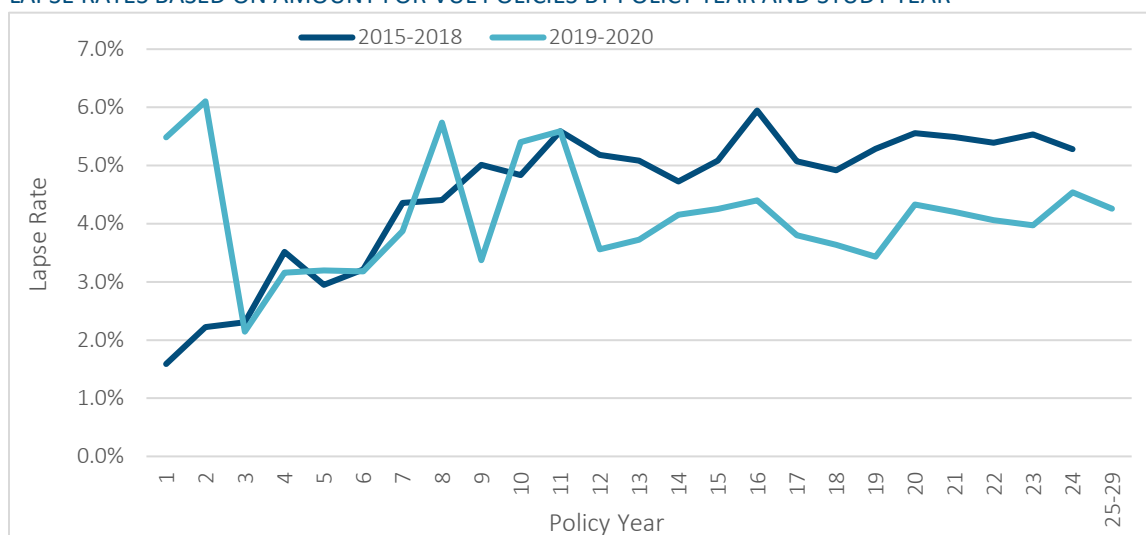
LAPSE RATES FOR VUL POLICIES BY POLICY YEAR



Lapse rates based on amount in policy years 12 and later were notably lower during the pandemic study years (2019-2020) than prior to the pandemic (2015-2018) (figure 8.1.2).

Figure 8.1.2

LAPSE RATES BASED ON AMOUNT FOR VUL POLICIES BY POLICY YEAR AND STUDY YEAR

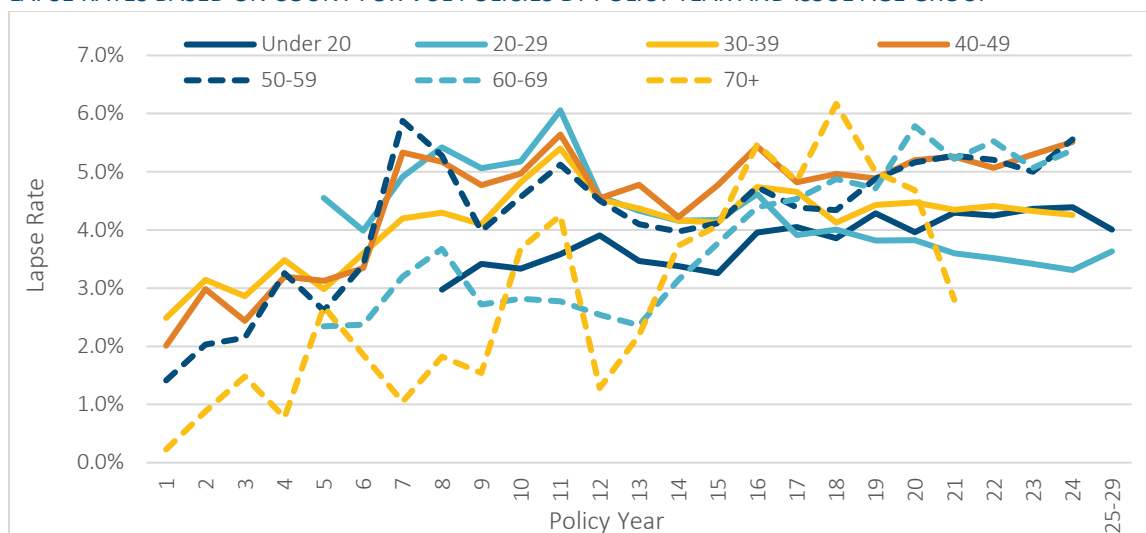


8.2 LAPSE RATES BY ISSUE AGE GROUP

In the early policy years, lapse rates based on count tended to have a decreasing pattern by issue age group (figure 8.2.1). However, the pattern by issue age group reversed for many groups around policy year 15.

Figure 8.2.1

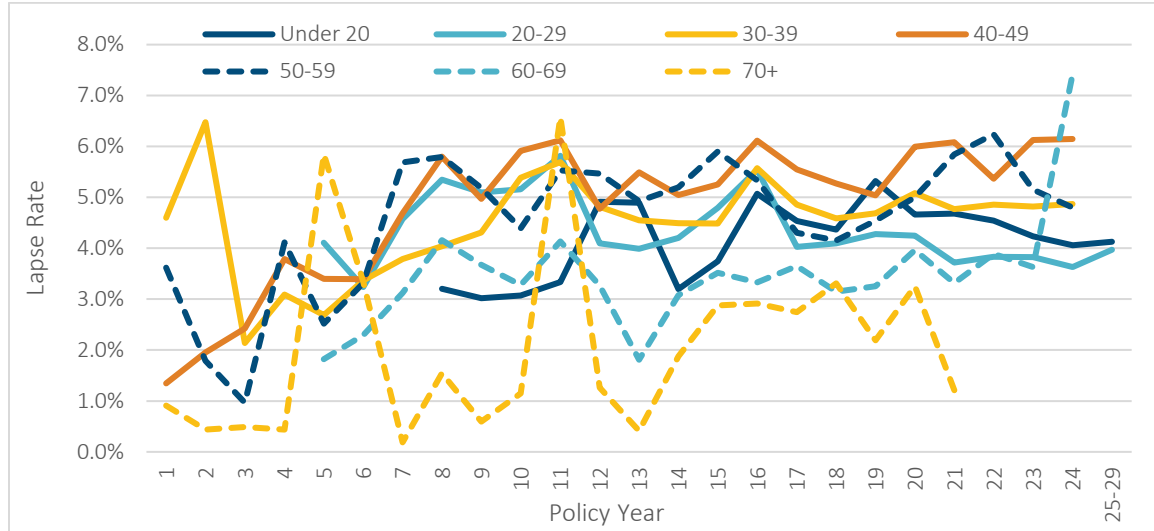
LAPSE RATES BASED ON COUNT FOR VUL POLICIES BY POLICY YEAR AND ISSUE AGE GROUP



The pattern by amount is more volatile and less clear than the pattern based on count (figure 8.2.2). Note that the exposure by policy year for the oldest issue age group was very low, with many cells having less than 1,000 exposures and less than 100 lapses in any given policy year.

Figure 8.2.2

LAPSE RATES BASED ON AMOUNT FOR VUL POLICIES BY POLICY YEAR AND ISSUE AGE GROUP

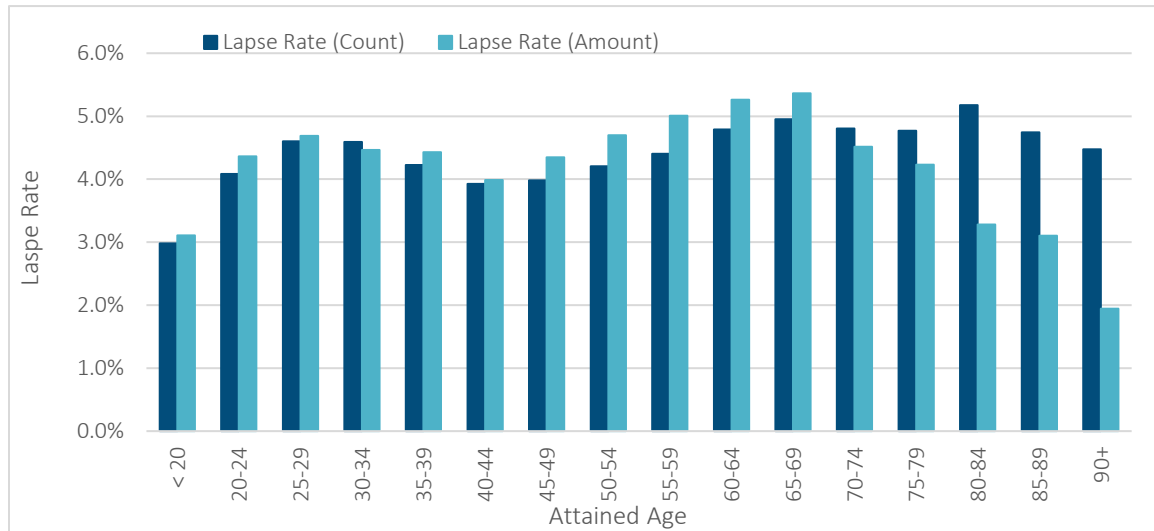


8.3 LAPSE RATES BY ATTAINED AGE GROUP

For attained age groups 70 and older, lapse rates based on amount were lower than count. For attained age groups less than 70, the opposite is true and lapse rates based on count were lower than amount (figure 8.3.1).

Figure 8.3.1

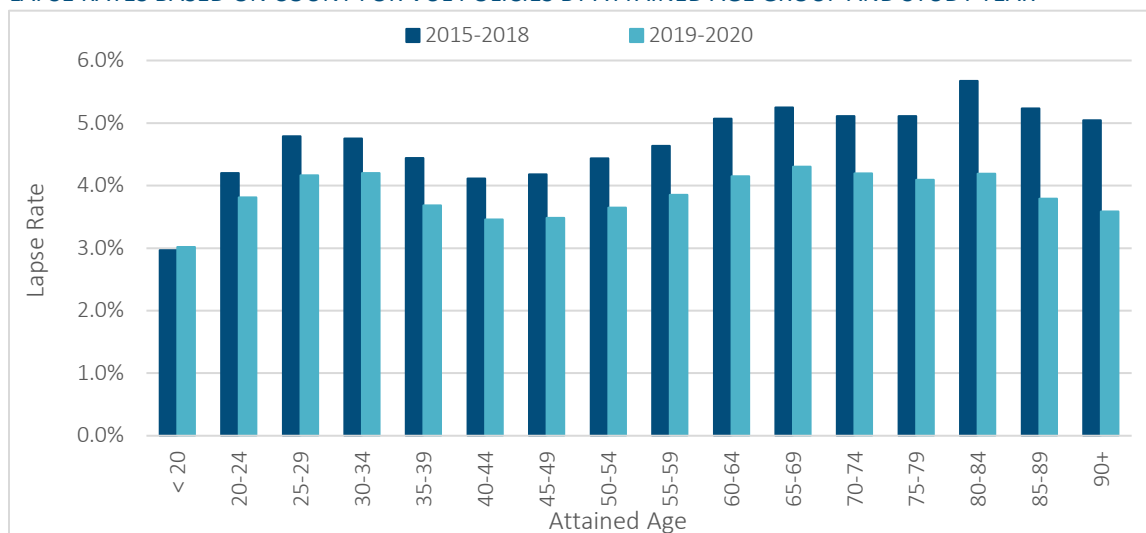
LAPSE RATES FOR VUL POLICIES BY ATTAINED AGE GROUP



Lapse rates based on count were lower during the pandemic study years than the study years prior to the pandemic across all attained ages except the youngest (figure 8.3.2).

Figure 8.3.2

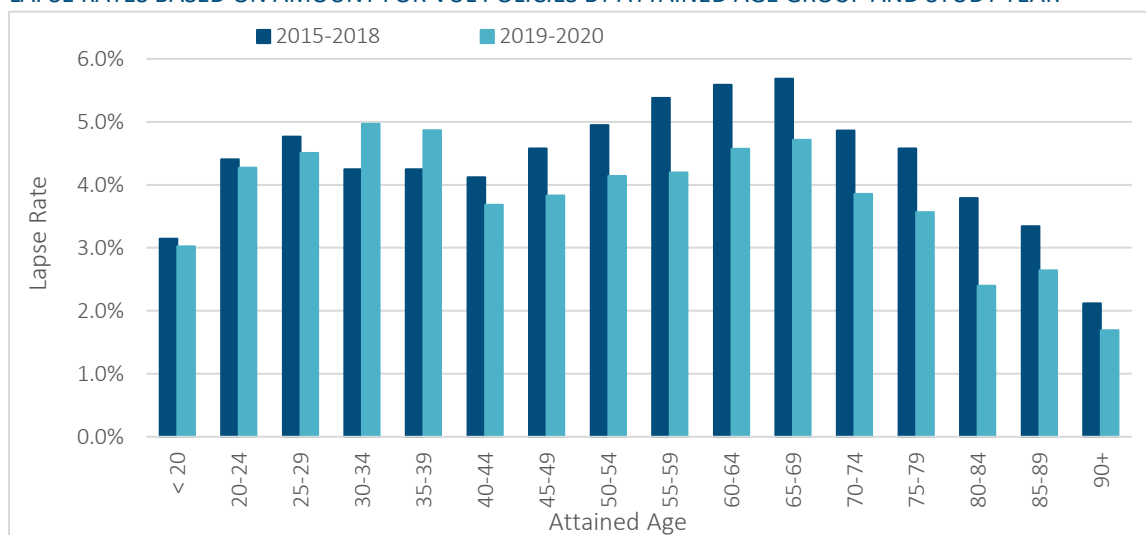
LAPSE RATES BASED ON COUNT FOR VUL POLICIES BY ATTAINED AGE GROUP AND STUDY YEAR



Lapse rates based on amount were also lower during the pandemic study years for attained ages 40 and older (figure 8.3.3).

Figure 8.3.3

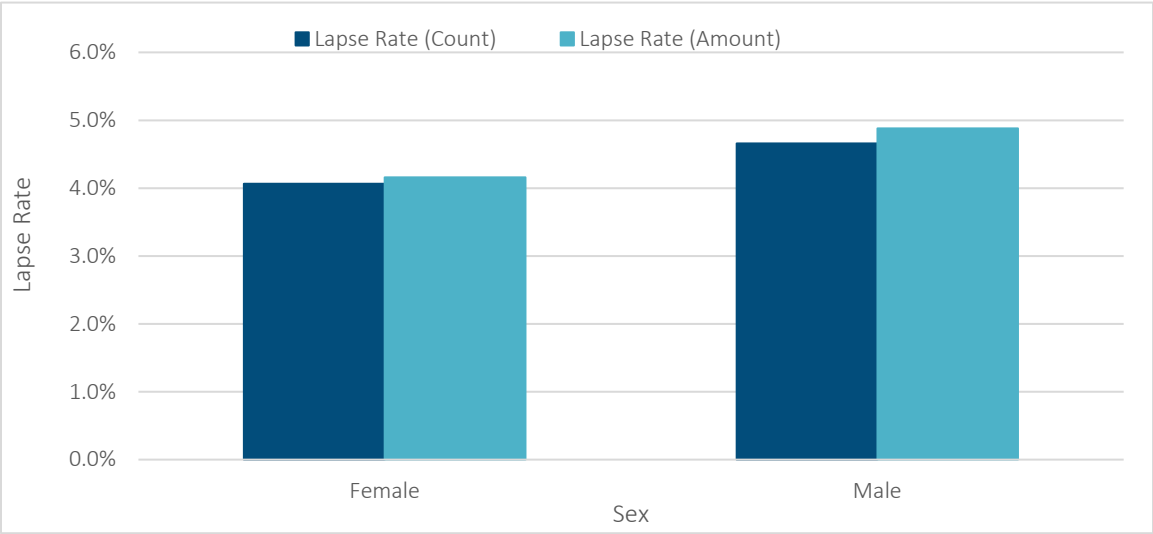
LAPSE RATES BASED ON AMOUNT FOR VUL POLICIES BY ATTAINED AGE GROUP AND STUDY YEAR



8.4 LAPSE RATES BY SEX

In total, male lapse rates were higher than female lapse rates on both a count and amount basis (figure 8.4.1). For both sexes, lapse rates based on count were higher than those based on amount.

Figure 8.4.1
LAPSE RATES FOR VUL POLICIES BY SEX



The pattern of higher lapse rates for males held for almost every policy year based on count (figure 8.4.2) and amount (figure 8.4.3).

Figure 8.4.2
LAPSE RATES BASED ON COUNT FOR VUL BY POLICY YEAR AND SEX

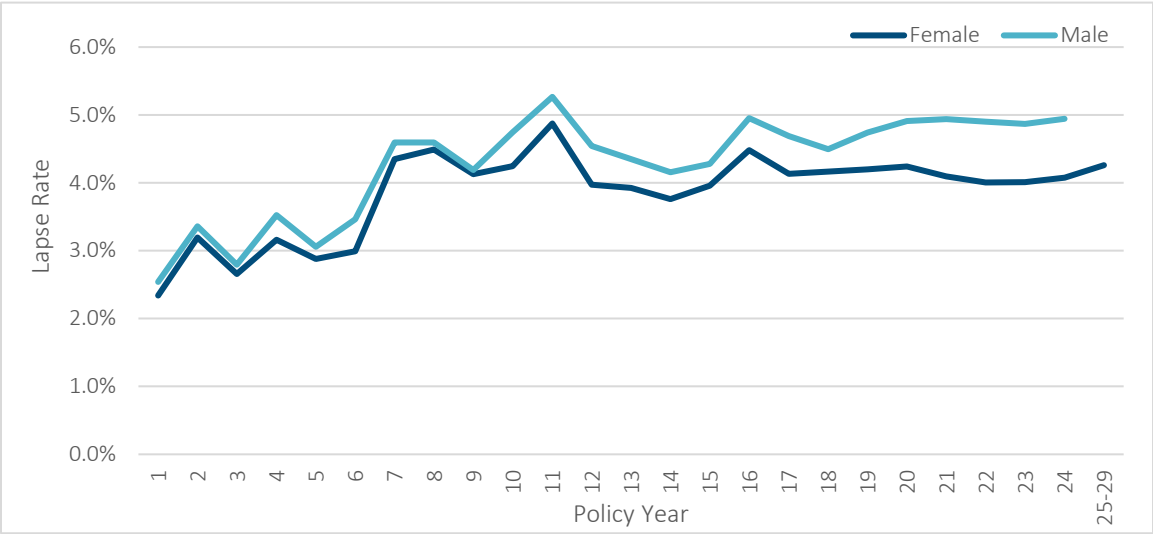
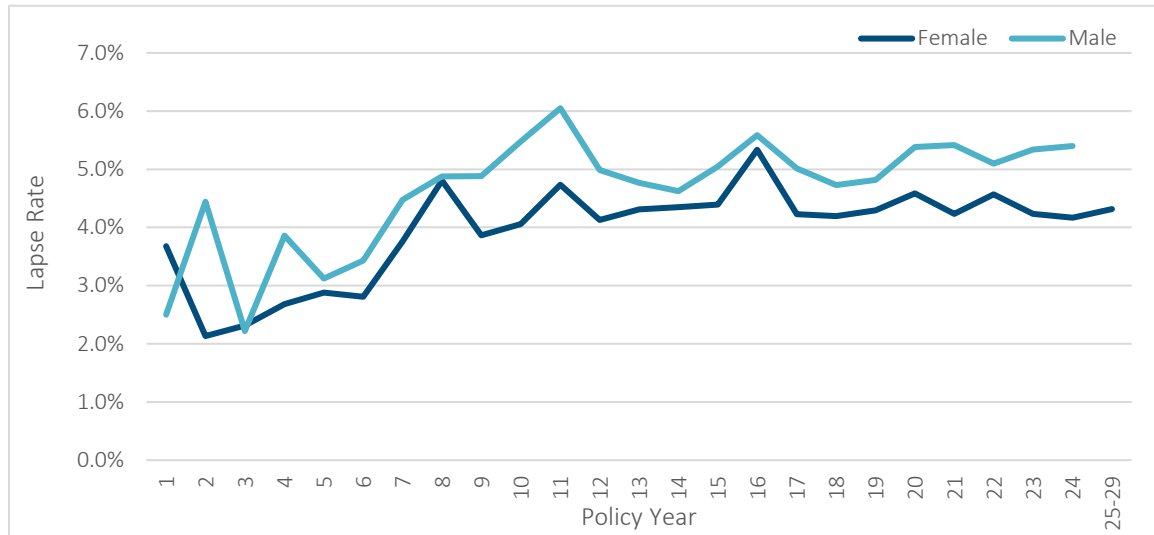


Figure 8.4.3**LAPSE RATES BASED ON AMOUNT FOR VUL BY POLICY YEAR AND SEX****8.5 LAPSE RATES BY RISK CLASS AND SMOKER STATUS**

For Non-Smokers and Smokers, lapse rates based on count were less than lapse rates based on amount across all risk classes (figure 8.5.1). For the Standard class, the relative difference in lapse rates was much less by smoker status than for the other risk classes.

Figure 8.5.1**LAPSE RATES FOR VUL POLICIES BY RISK CLASS AND SMOKER STATUS**

When examining lapse rates by policy year and smoker-distinct risk class individually, the pattern based on count is volatile for both Smokers and Non-Smokers (figures 8.5.2 and 8.5.3). For Smokers, lapse rates based on count for the Substandard risk class tended to be the highest, although the number of exposures was less than 500 in every policy year.

Figure 8.5.2

LAPSE RATES FOR NON-SMOKERS BASED ON COUNT FOR VUL POLICIES BY POLICY YEAR AND RISK CLASS

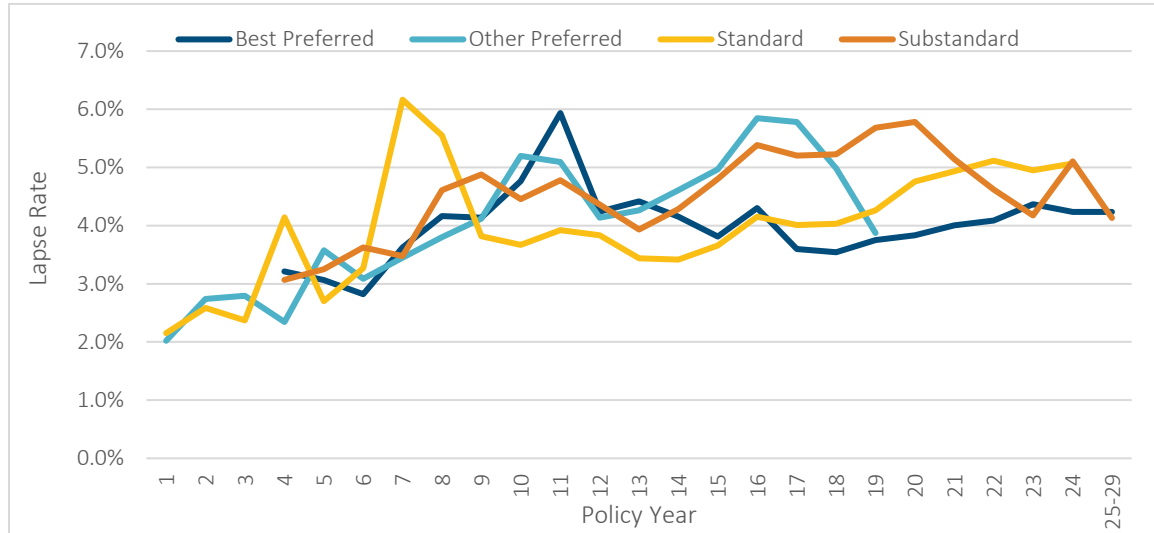
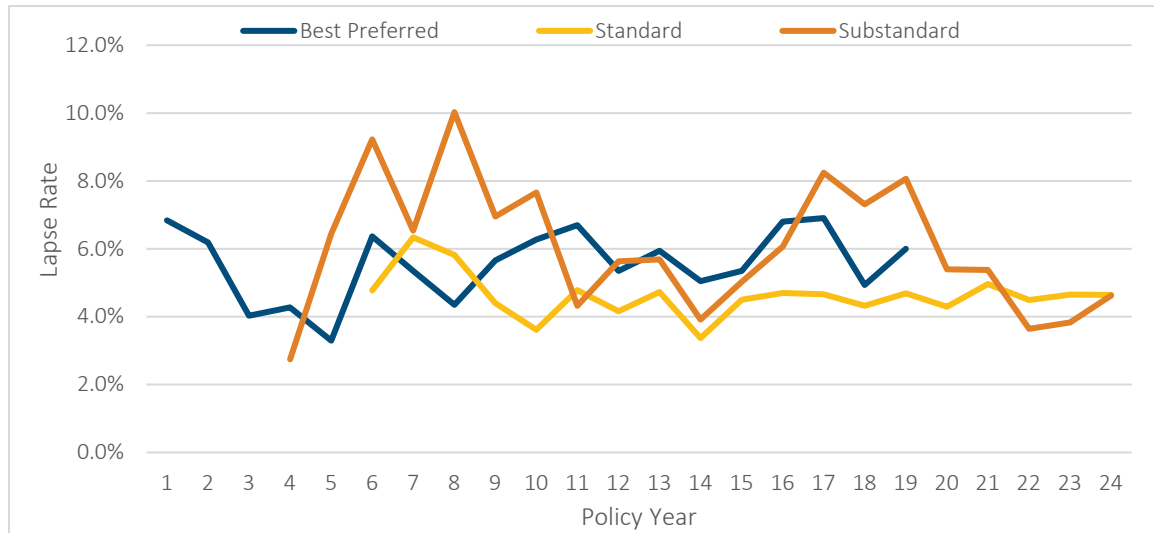


Figure 8.5.3

LAPSE RATES FOR SMOKERS BASED ON COUNT FOR VUL POLICIES BY POLICY YEAR AND RISK CLASS

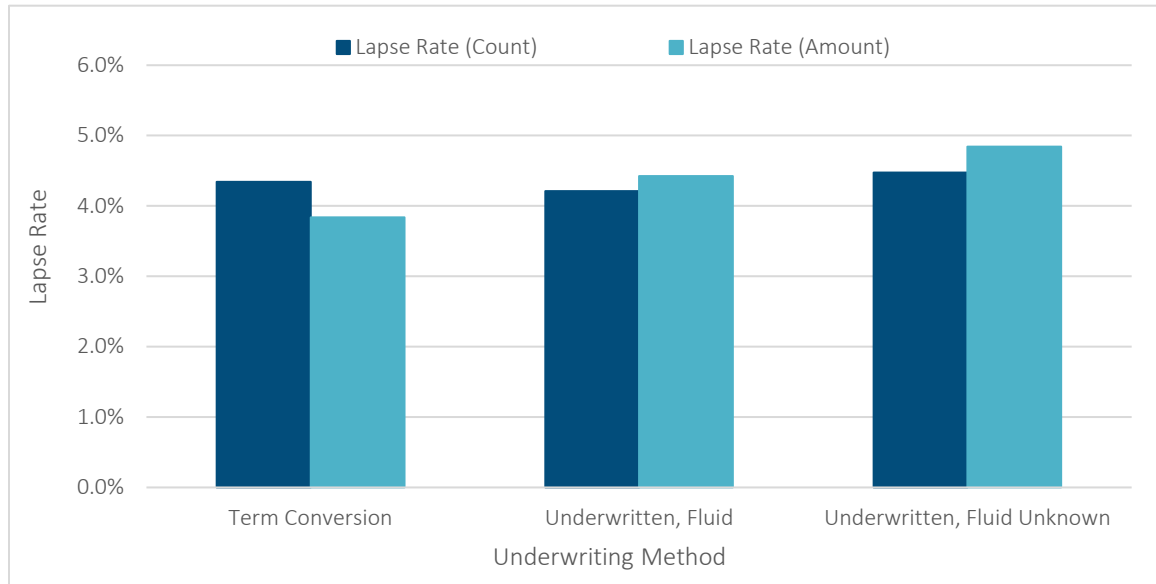


8.6 LAPSE RATES BY UNDERWRITING METHOD

It is notable that lapse rates based on amount were lower than lapse rates based on count for VUL policies arising from term conversions (figure 8.6.1). The opposite pattern is true for policies that were fully underwritten as VUL at issue.

Figure 8.6.1

LAPSE RATES FOR VUL POLICIES BY UNDERWRITING METHOD



8.7 LAPSE RATES BY DEATH BENEFIT OPTION

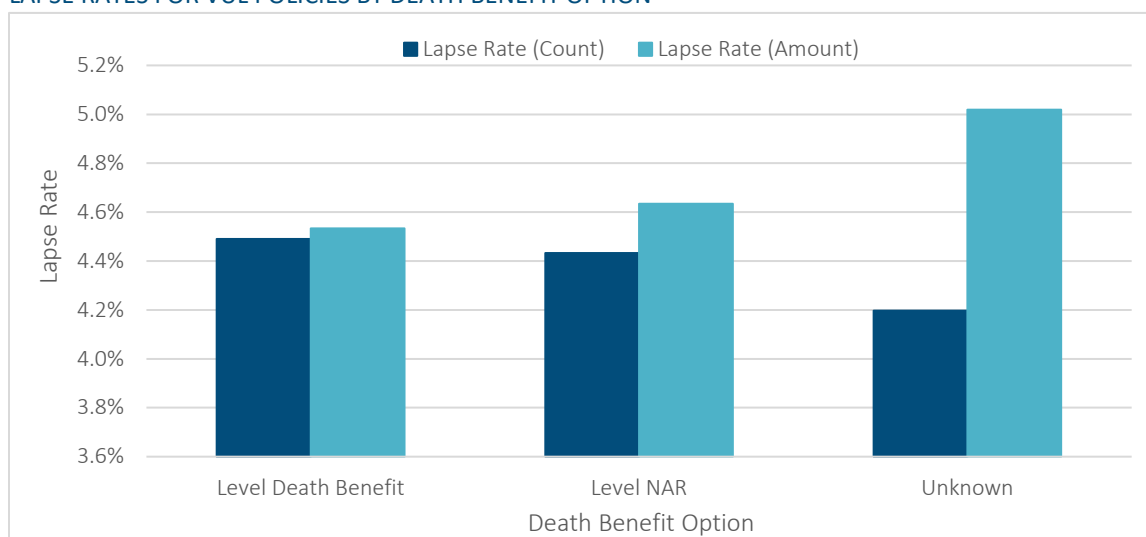
The VM-51 data format allowed for two different death benefit options, Level Death Benefit or Level Net Amount at Risk, along with an Unknown option. The Unknown option was most likely used for any non-standard options such as level death benefit plus return of premium.

In total, lapse rates based on count were lowest for policies with an Unknown death benefit option (figure 8.7.1). Comparing between Level Death Benefit and Level Net Amount at Risk, lapse rates based on count were similar and lapse rates based on amount were slightly higher for policies with a Level Net Amount at Risk.

Approximately 17% of the exposure based on count was from the Unknown death benefit option. This was the largest percentage of Unknown for any product type and may be driven by non-standard death benefit options.

Figure 8.7.1

LAPSE RATES FOR VUL POLICIES BY DEATH BENEFIT OPTION

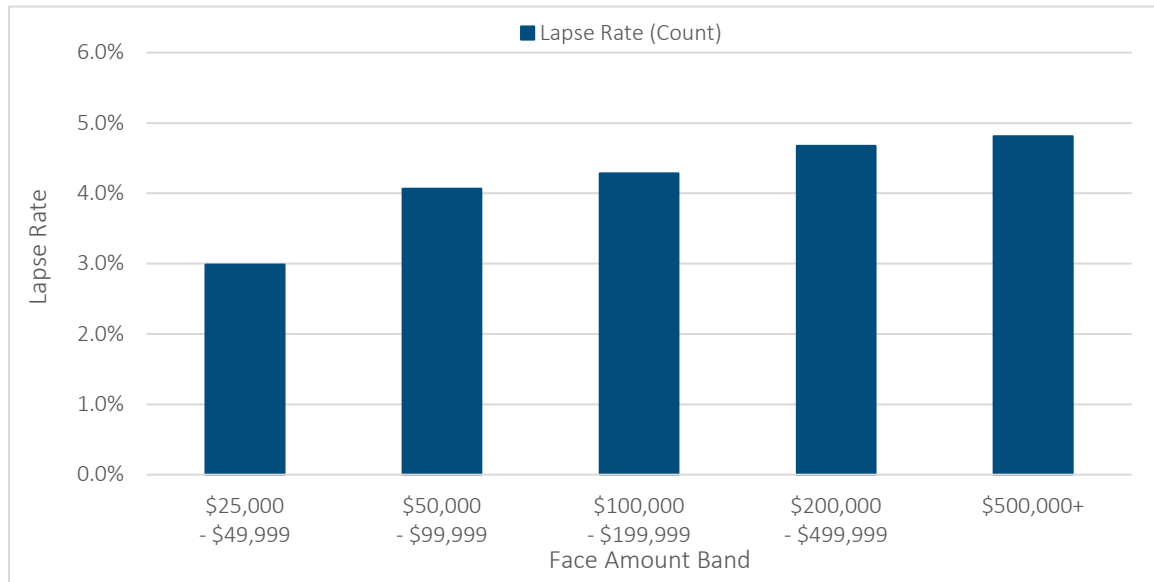


8.8 LAPSE RATES BY FACE AMOUNT BAND

Lapse rates based on count increased as face amount band increased (figure 4.8.1). This might be a result of the accumulation-focused design of many VUL policies.

Figure 8.8.1

LAPSE RATES BASED ON COUNT FOR VUL POLICIES BY FACE AMOUNT BAND



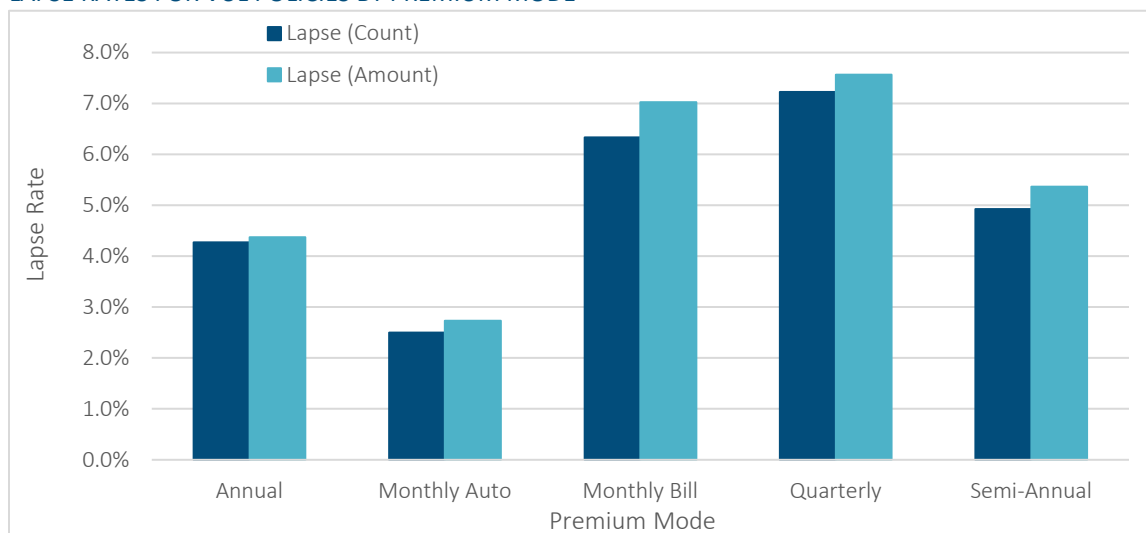
8.9 LAPSE RATES BY PREMIUM MODE

Lapse rates based on both count and amount were lowest for policies under a monthly automatic payment premium mode (figure 8.9.1). Lapse rates by count were less than lapse rates by amount for all premium modes.

It is worth noting that, since universal life policies allow for flexible premiums, the mode of the premium payment might be less impactful on the lapse rates than for a more traditional product, like whole life or term insurance.

Figure 8.9.1

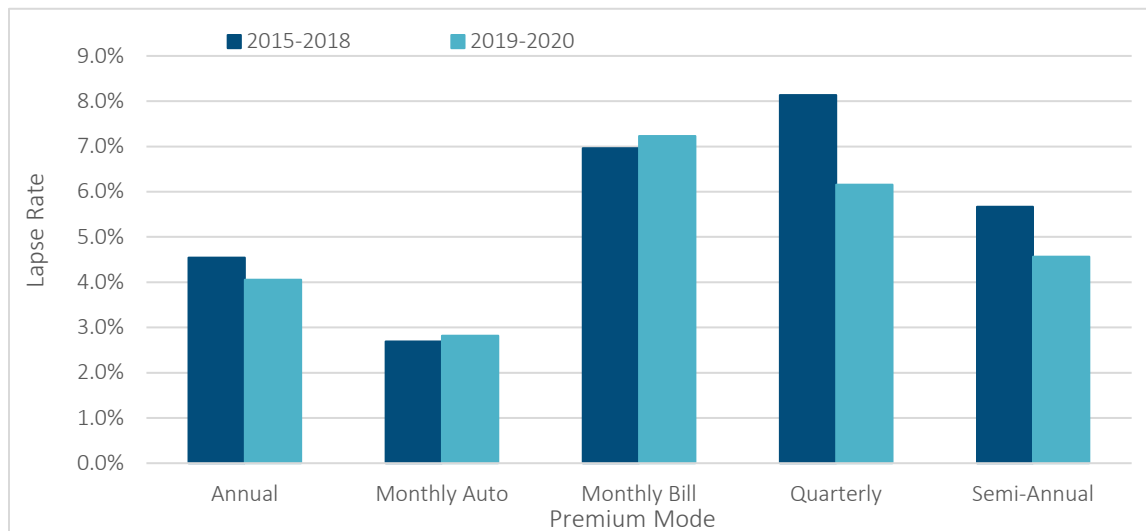
LAPSE RATES FOR VUL POLICIES BY PREMIUM MODE



Lapse rates based on amount were lower during the pandemic study years (2019-2020) than pre-pandemic study years for all premium modes except Monthly Bill and Monthly Auto (figure 8.9.2).

Figure 8.9.2

LAPSE RATES BASED ON AMOUNT FOR VUL POLICIES BY PREMIUM MODE AND STUDY YEAR



Section 9: Variable Universal Life with a Secondary Guarantee

Twenty companies provided data for Variable Universal Life with a Secondary Guarantee (VULSG).

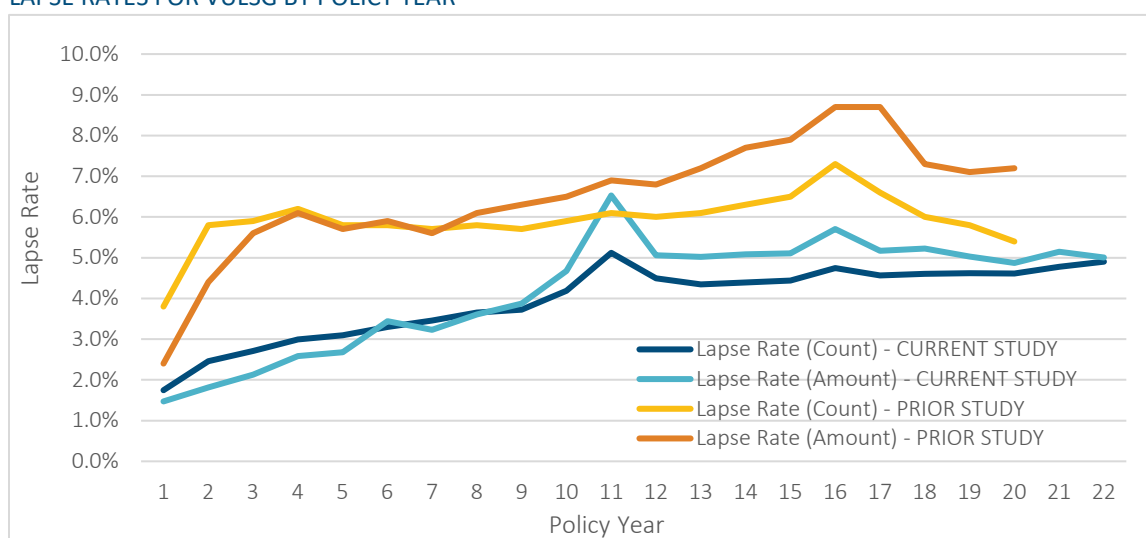
9.1 LAPSE RATES BY POLICY YEAR

In most policy years, lapse rates based on both count and amount decreased notably from the prior study covering years 2009 through 2013 (figure 9.1.1). The spikes in policy years 11, 16, and 21 might be related to the runoff of surrender charge schedules.

In the early policy years, lapse rates based on count were generally higher than amount, but the pattern switched starting around policy year 9 when lapse rates based on amount were higher.

Figure 9.1.1

LAPSE RATES FOR VULSG BY POLICY YEAR



When comparing lapse rates for Variable Universal Life with Secondary Guarantees (VULSG) against lapse rates for Variable Universal Life (VUL), it is interesting to note that earlier policy year lapse rates based on both count and amount were lower for VULSG (figures 9.1.2 and 9.1.3). However, the pattern based on count switched in policy year 12 and in policy year 10 based on amount.

Figure 9.1.2

LAPSE RATES BY POLICY YEAR BASED ON COUNT FOR VUL WITH AND WITHOUT A SECONDARY GUARANTEE

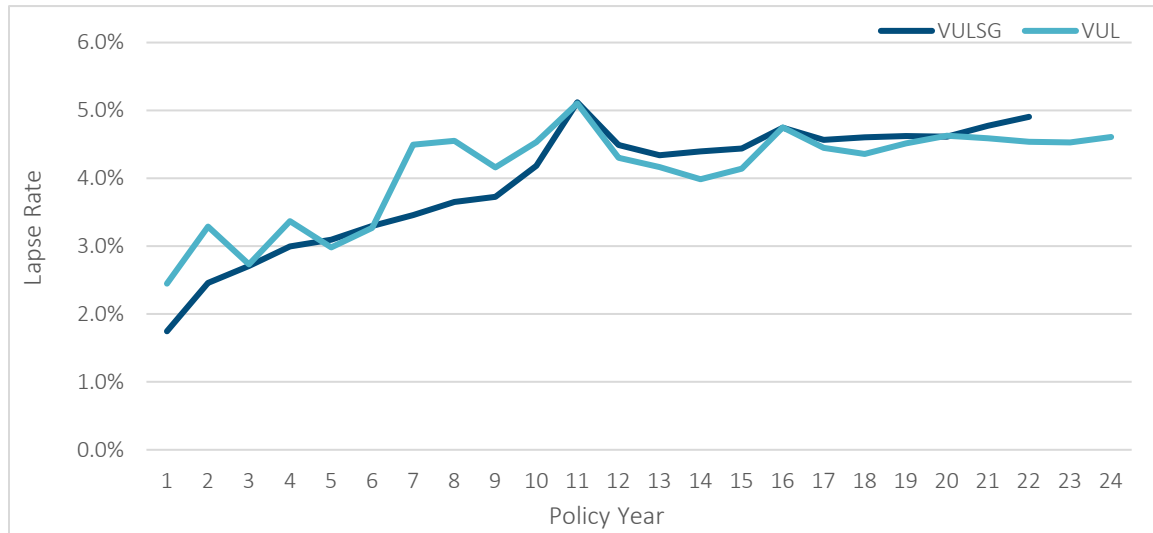
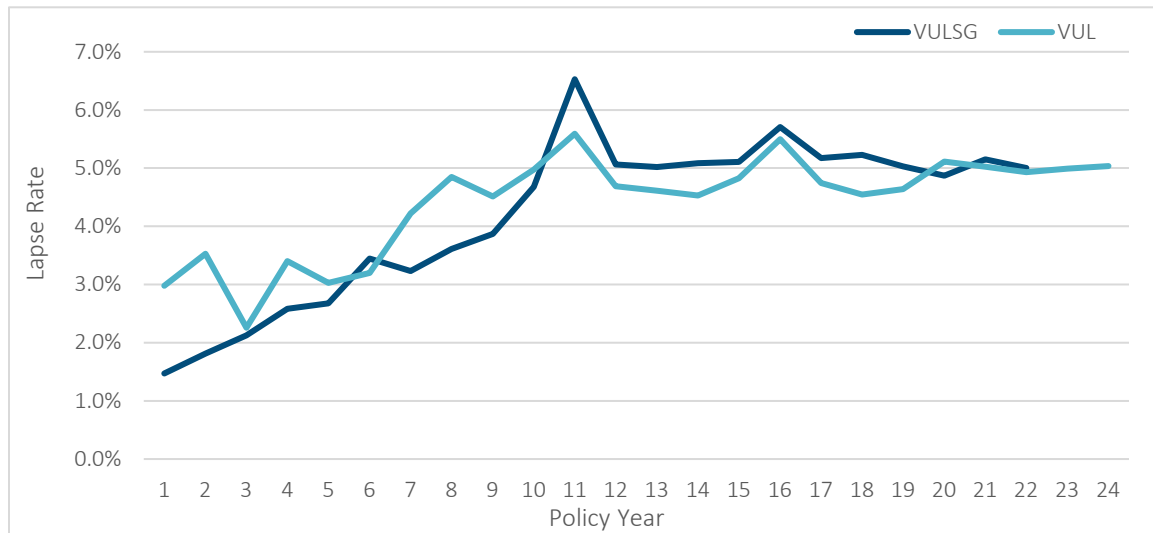


Figure 9.1.3

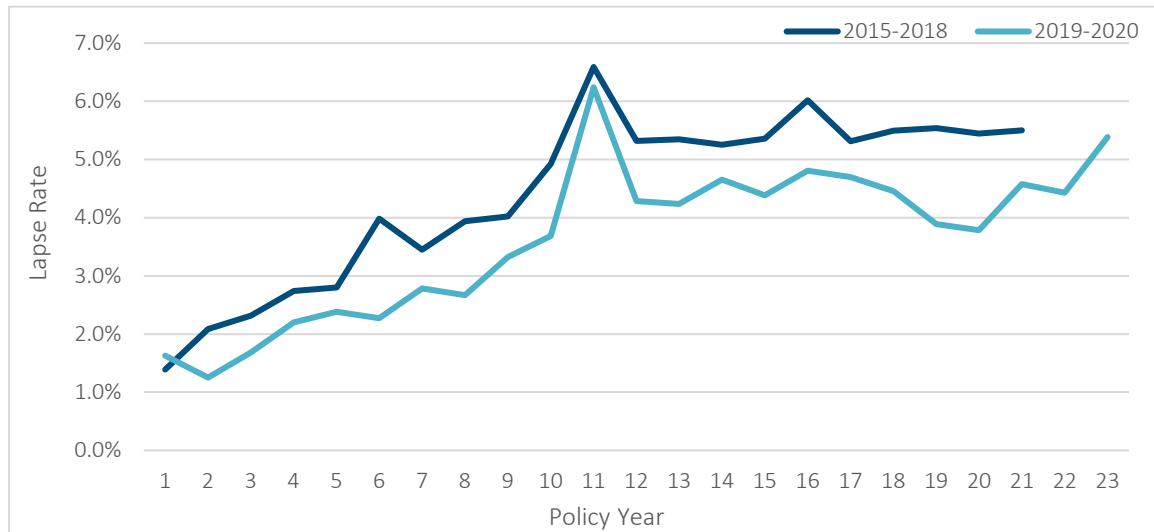
LAPSE RATES BY POLICY YEAR BASED ON AMOUNT FOR VUL WITH AND WITHOUT A SECONDARY GUARANTEE



VULSG lapse rates based on amount during the pandemic study years (2019-2020) were less than pre-pandemic study years (2015-2018) for almost all policy years (figure 9.1.4).

Figure 9.1.4

LAPSE RATES BASED ON AMOUNT FOR VULSG BY POLICY YEAR AND STUDY YEAR

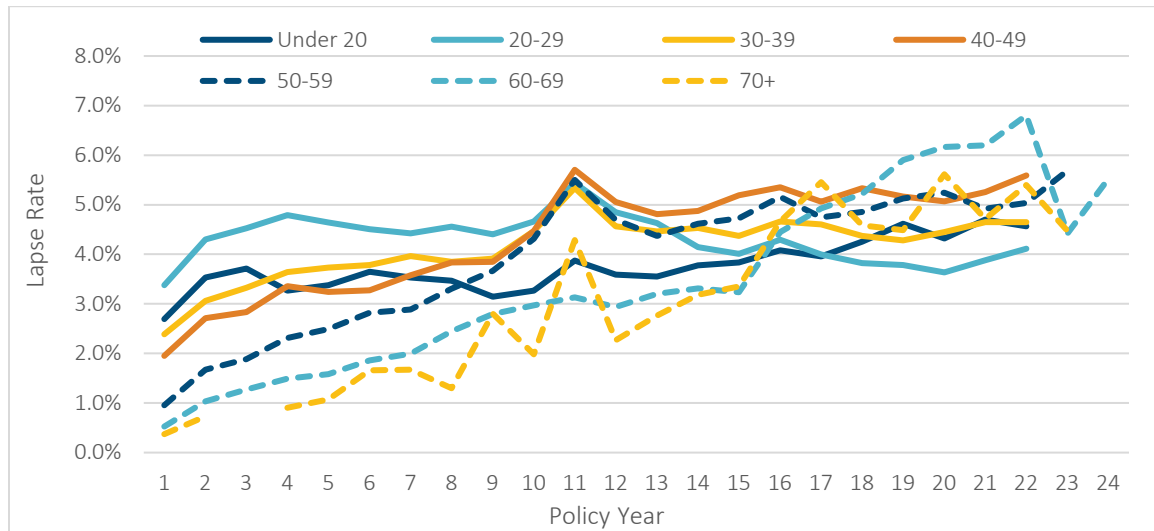


9.2 LAPSE RATES BY ISSUE AGE GROUP

With the exception of the youngest age group, lapse rates tended to have a decreasing pattern by issue age group in the early policy years (figure 9.2.1). However, the pattern by issue age group began to reverse for many groups around policy year 15 and, by policy year 18, issue ages 60-69 had the highest lapse rate based on count. Note there are fewer than 1,000 exposures starting in policy year 23 for issue age group 60-69, and in policy year 18 for issue age group 70+.

Figure 9.2.1

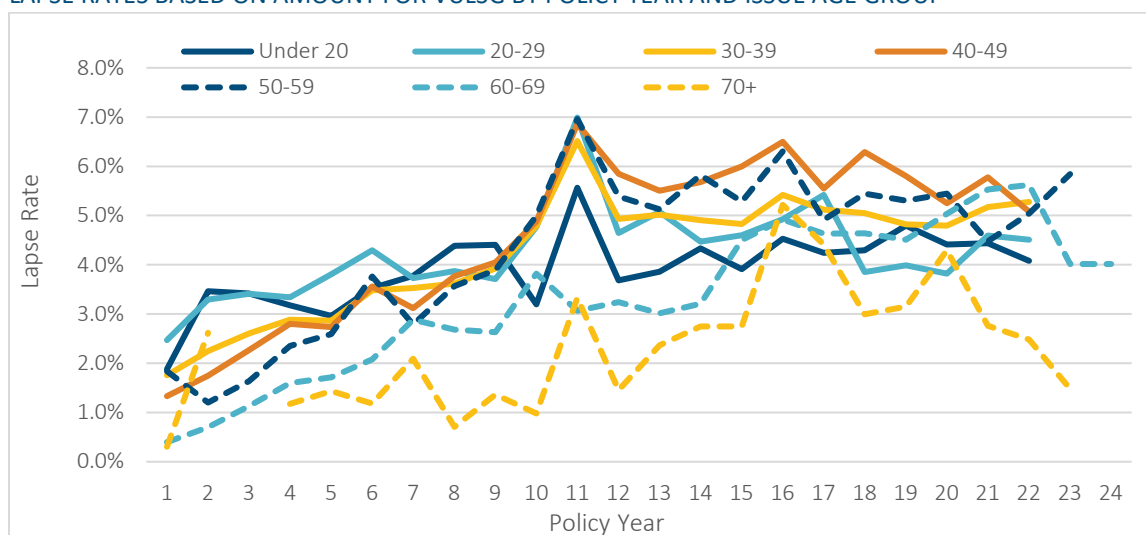
LAPSE RATES BASED ON COUNT FOR VULSG BY POLICY YEAR AND ISSUE AGE GROUP



The pattern based on amount is more volatile and less clear than the pattern based on count (figure 9.2.2). Generally, the oldest issue age group (70+) had the lowest lapse rates based on amount.

Figure 9.2.2

LAPSE RATES BASED ON AMOUNT FOR VULSG BY POLICY YEAR AND ISSUE AGE GROUP

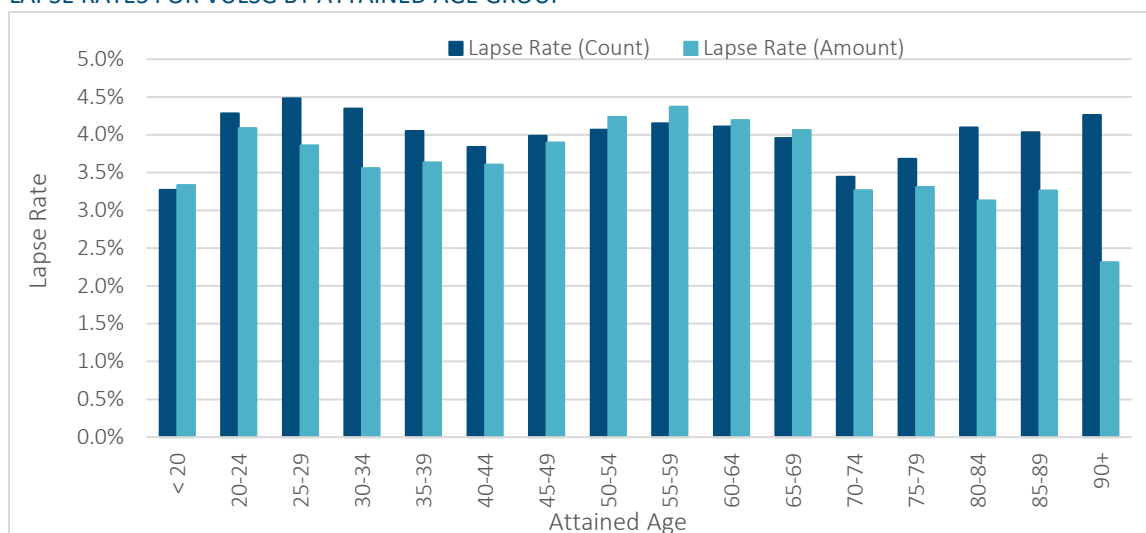


9.3 LAPSE RATES BY ATTAINED AGE GROUP

Similar to VUL, for attained age groups 70 and older, VULSG lapse rates based on amount were lower than count (figure 9.3.1). However, for attained age groups less than 70, the opposite pattern of lapse rates based on amount higher than lapse rates based on count was not as consistent for VULSG compared to VUL.

Figure 9.3.1

LAPSE RATES FOR VULSG BY ATTAINED AGE GROUP



Lapse rates based on count and amount were both lower during the pandemic study years than the study years prior to the pandemic across all but the oldest attained age groups (figures 9.3.2 and 9.3.3).

Figure 9.3.2

LAPSE RATES BASED ON COUNT FOR VULSG BY ATTAINED AGE GROUP AND STUDY YEAR

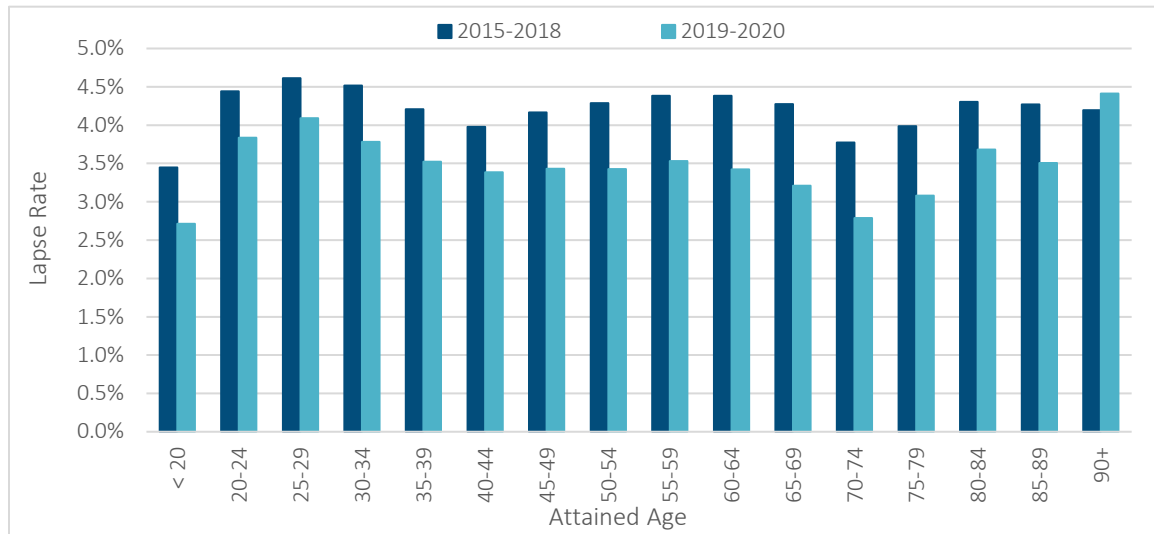
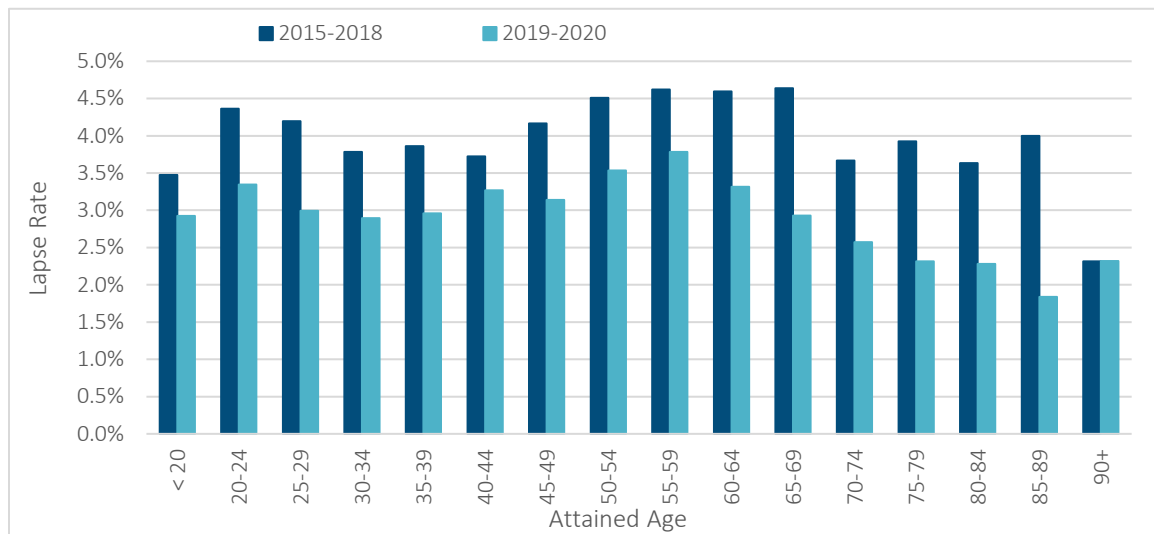


Figure 9.3.3

LAPSE RATES BASED ON AMOUNT FOR VULSG BY ATTAINED AGE GROUP AND STUDY YEAR

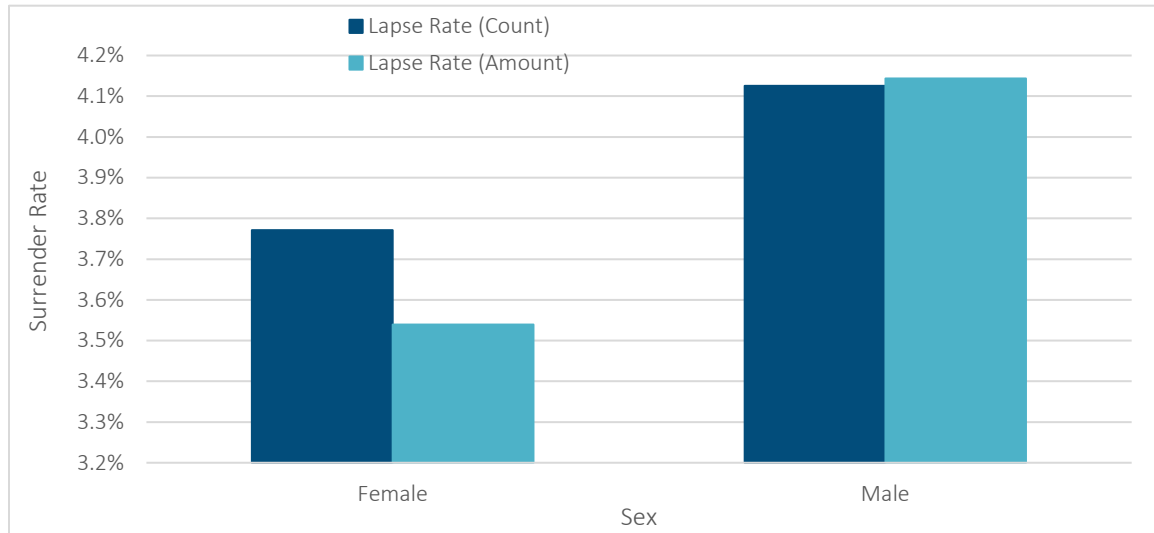


9.4 LAPSE RATES BY SEX

In total, male lapse rates were higher than female lapse rates on both a count and amount basis (figure 9.4.1). For females, lapse rates based on count were higher than lapse rates based on amount. For males, lapse rates based on count and amount were similar.

Figure 9.4.1

LAPSE RATES FOR VULSG BY SEX



The pattern of higher lapse rates for males based on both count and amount held for most policy years, especially after policy year 8 (figures 9.4.2 and 9.4.3).

Figure 9.4.2

LAPSE RATES BASED ON COUNT FOR VULSG BY POLICY YEAR AND SEX

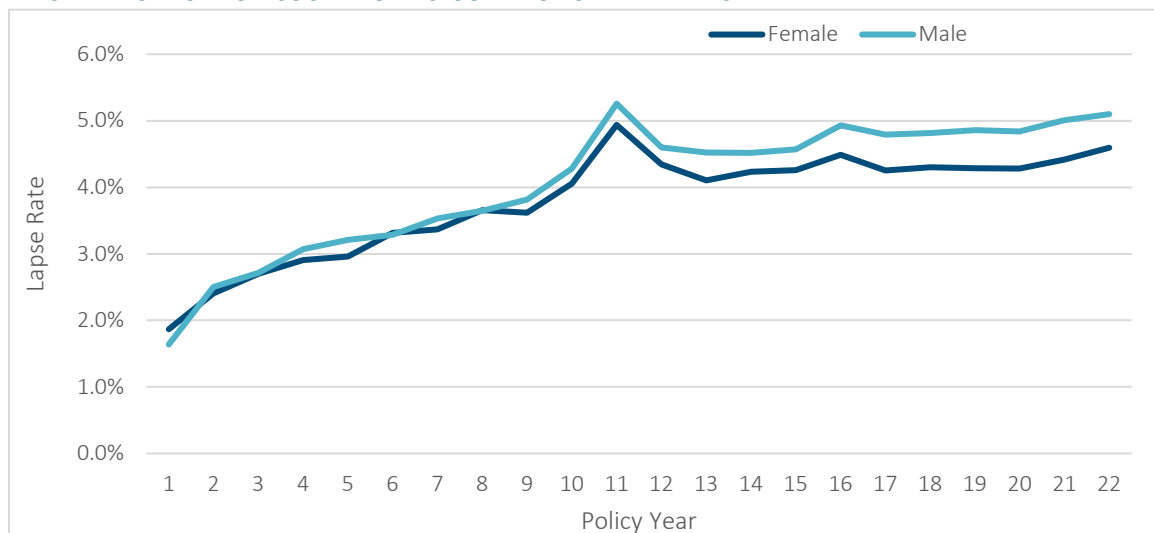
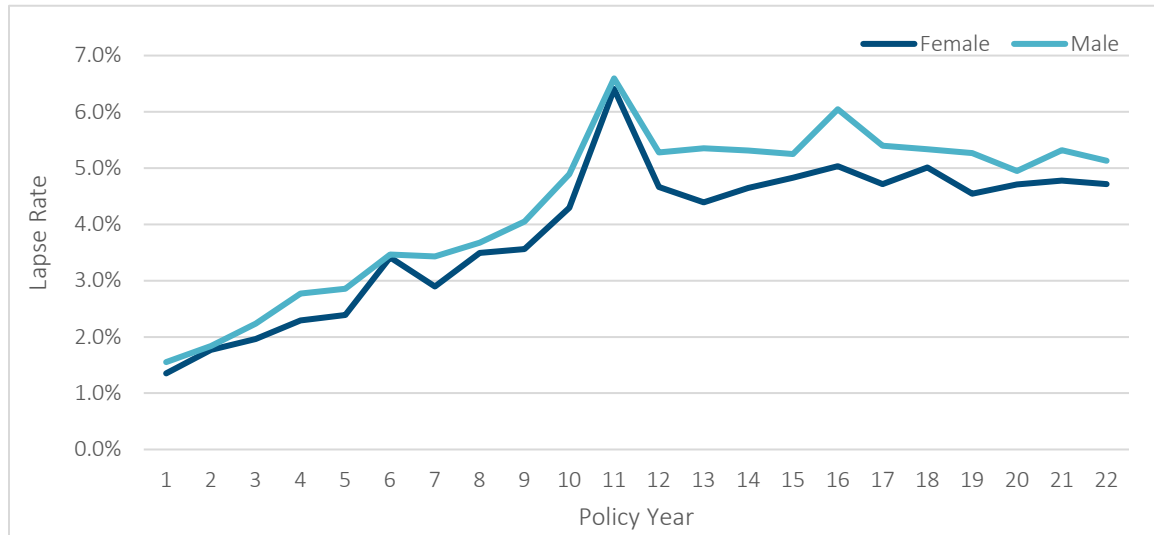


Figure 9.4.3**LAPSE RATES BASED ON AMOUNT FOR VULSG BY POLICY YEAR AND SEX****9.5 LAPSE RATES BY RISK CLASS AND SMOKER STATUS**

For Non-Smokers and Smokers, lapse rates based on amount were similar to or lower than lapse rates based on count, except for the Standard risk class (figure 9.5.1). Interestingly, Smoker Standard lapse rates based on count were lower than Best Preferred lapse rates.

Figure 9.5.1**LAPSE RATES FOR VULSG BY RISK CLASS AND SMOKER STATUS**

When examining lapse rates by policy year and smoker-distinct risk class individually, the pattern based on count was a bit volatile (figures 9.5.2 and 9.5.3). Generally, lapse rates based on count for the Substandard risk class tended to be the highest for both Smokers and Non-Smokers. For the Smoker risk classes, Standard lapse rates were lower than Best Preferred lapse rates through policy year 12.

Note that there were fewer than 500 exposures for Smoker Standard in all policy years.

Figure 9.5.2

LAPSE RATES FOR NON-SMOKERS BASED ON COUNT FOR VULSG BY POLICY YEAR AND NON-SMOKER RISK CLASS

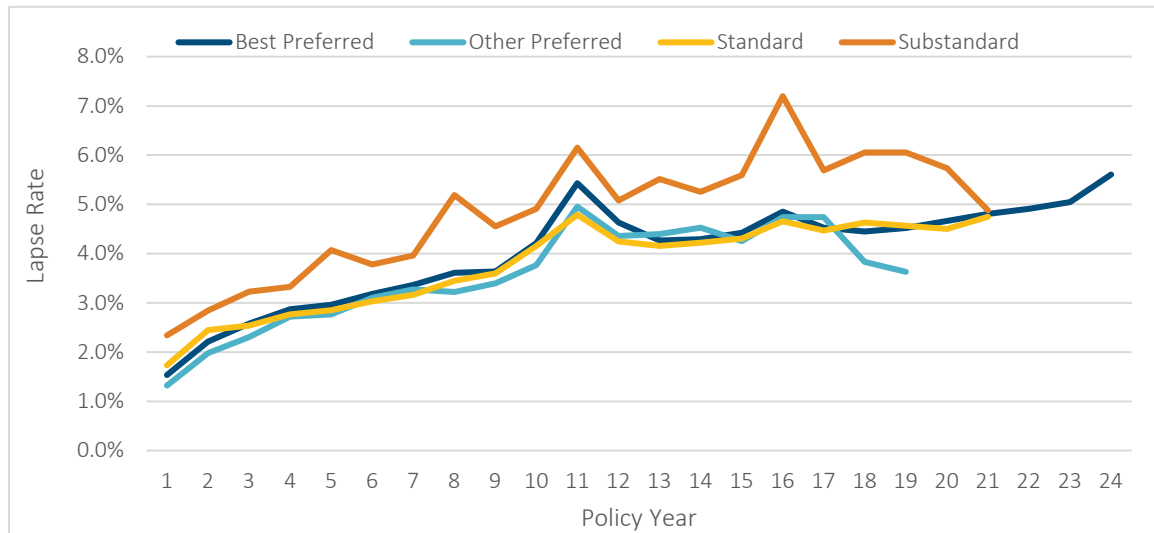
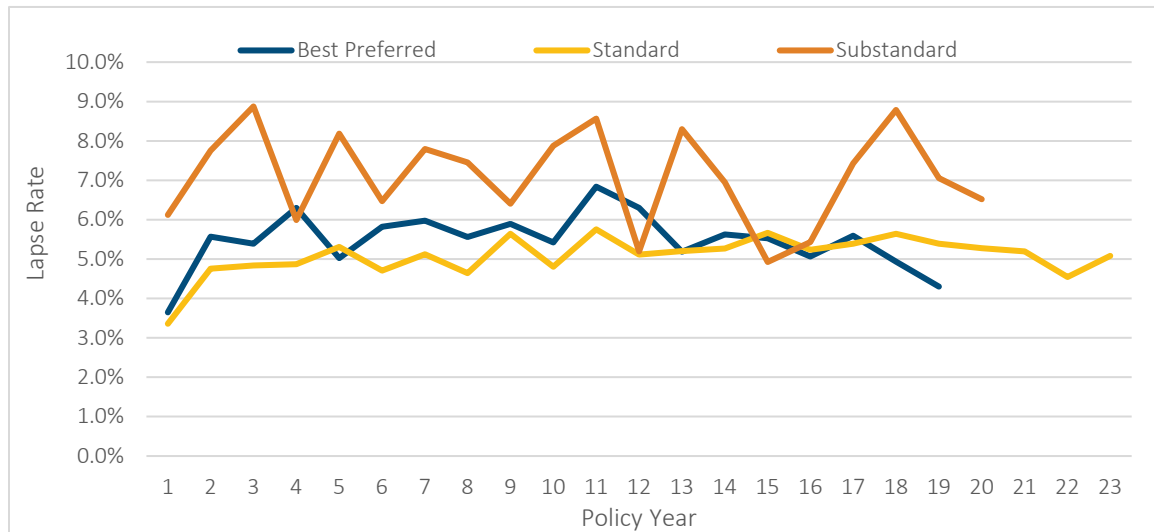


Figure 9.5.3

LAPSE RATES FOR SMOKERS BASED ON COUNT FOR VULSG BY POLICY YEAR AND SMOKER RISK CLASS

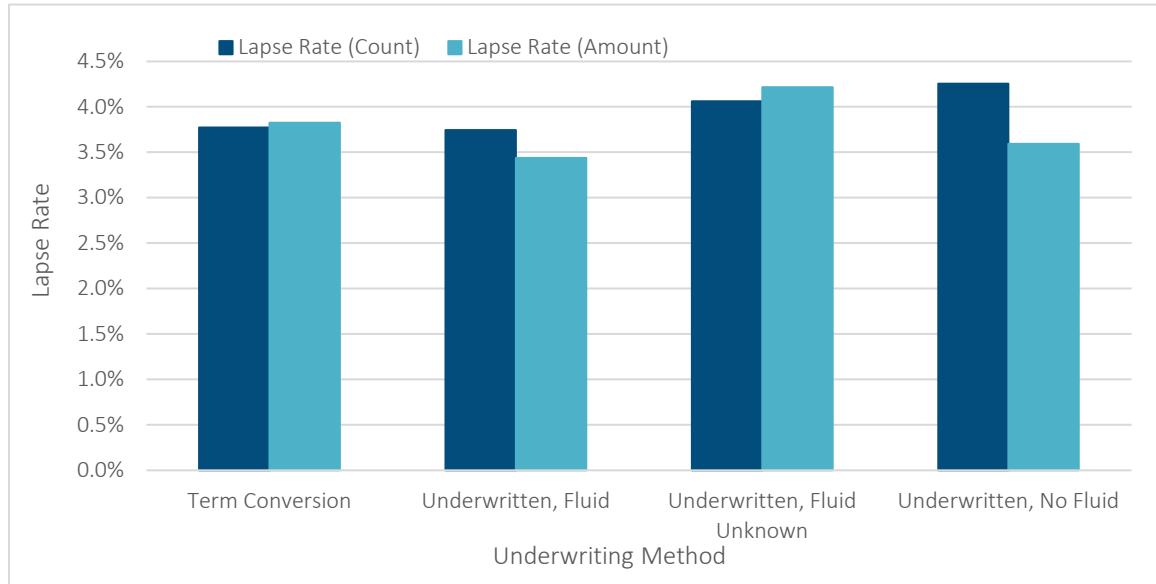


9.6 LAPSE RATES BY UNDERWRITING METHOD

In total, lapse rates based on count and amount were lower for policies that were Underwritten with Fluids compared to those Underwritten without Fluids (figure 9.6.1).

Figure 9.6.1

LAPSE RATES FOR VULSG BY UNDERWRITING METHOD



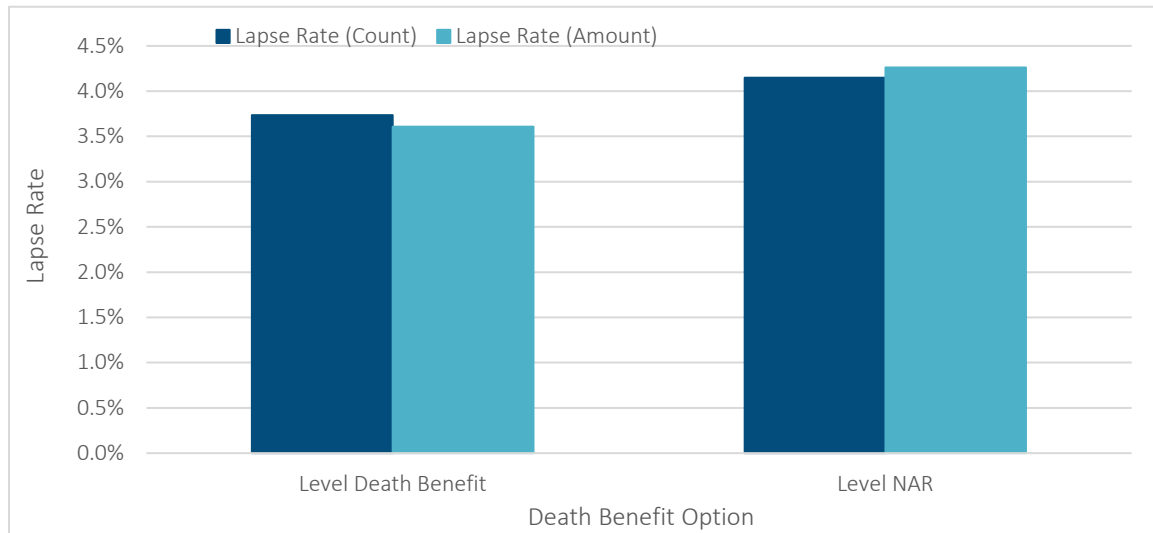
9.7 LAPSE RATES BY DEATH BENEFIT OPTION

The VM-51 data format allowed for two different death benefit options, Level Death Benefit or Level Net Amount at Risk, along with an Unknown option. The Unknown option was most likely used for any non-standard options such as level death benefit plus return of premium.

In total, lapse rates based on count and amount were lower for policies with a Level Death Benefit option compared to a Level Net Amount at Risk option (figure 9.7.1). Lapse rates based on amount were higher than those based on count for policies with the Level Net Amount at Risk option.

Figure 9.7.1

LAPSE RATES FOR VULSG BY DEATH BENEFIT OPTION

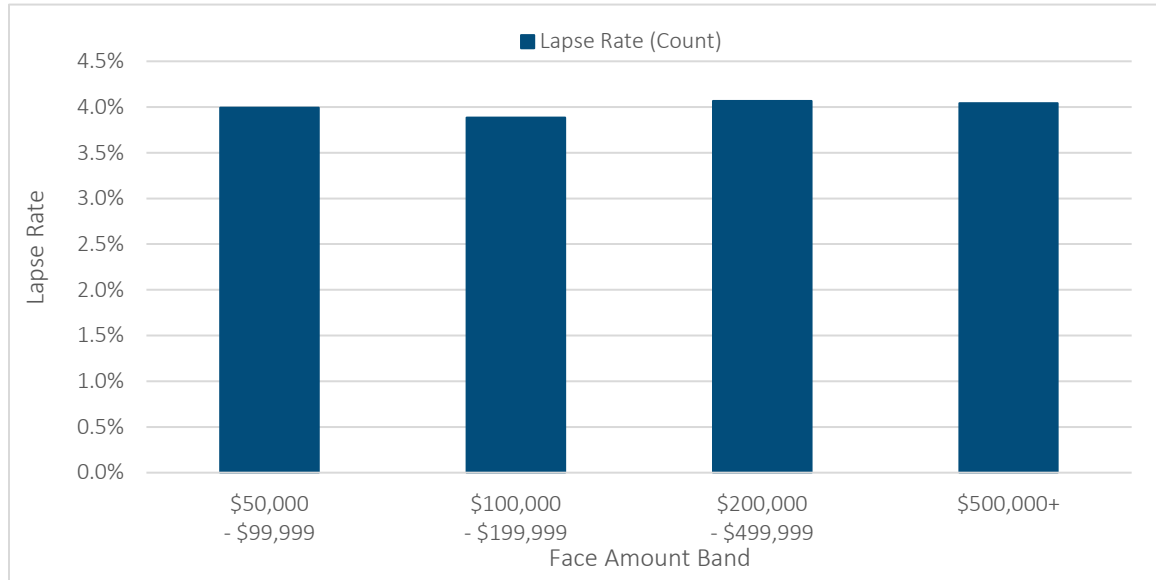


9.8 LAPSE RATES BY FACE AMOUNT BAND

Lapse rates based on count were quite similar by Face Amount Band. Face amounts between \$100,000 and \$199,999 had a slightly lower lapse rate than other face amount bands (figure 9.8.1).

Figure 9.8.1

LAPSE RATES BASED ON COUNT FOR VULSG BY FACE AMOUNT BAND

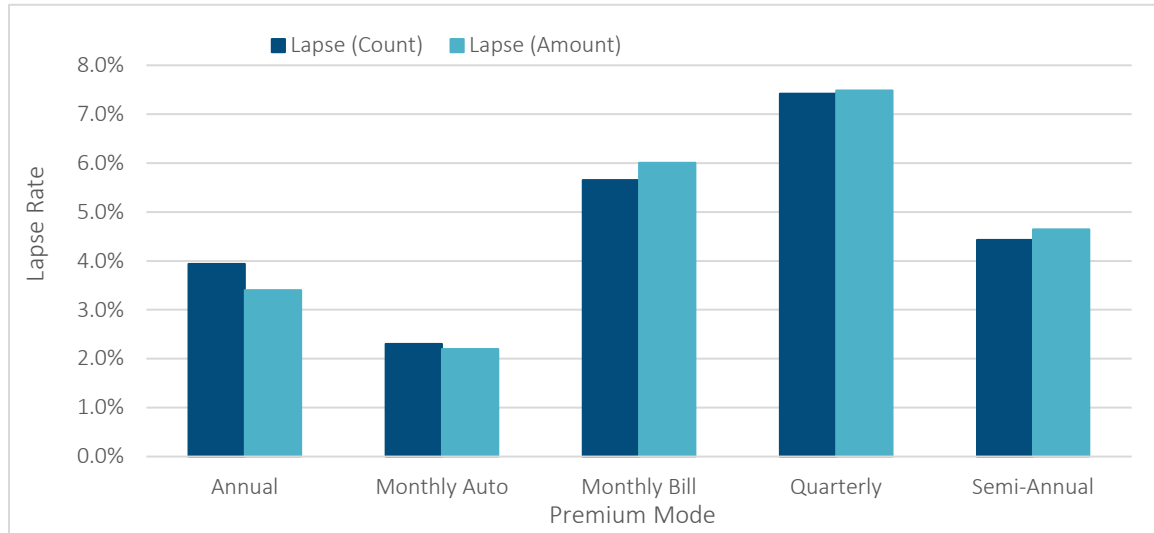


9.9 LAPSE RATES BY PREMIUM MODE

Lapse rates based on both count and amount were lowest for policies under a monthly automatic payment premium mode (figure 9.9.1). It is worth noting that, since universal life policies allow for flexible premiums, the mode of the premium payment might be less impactful on the lapse rates than for a more traditional product, like whole life or term insurance.

Figure 9.9.1

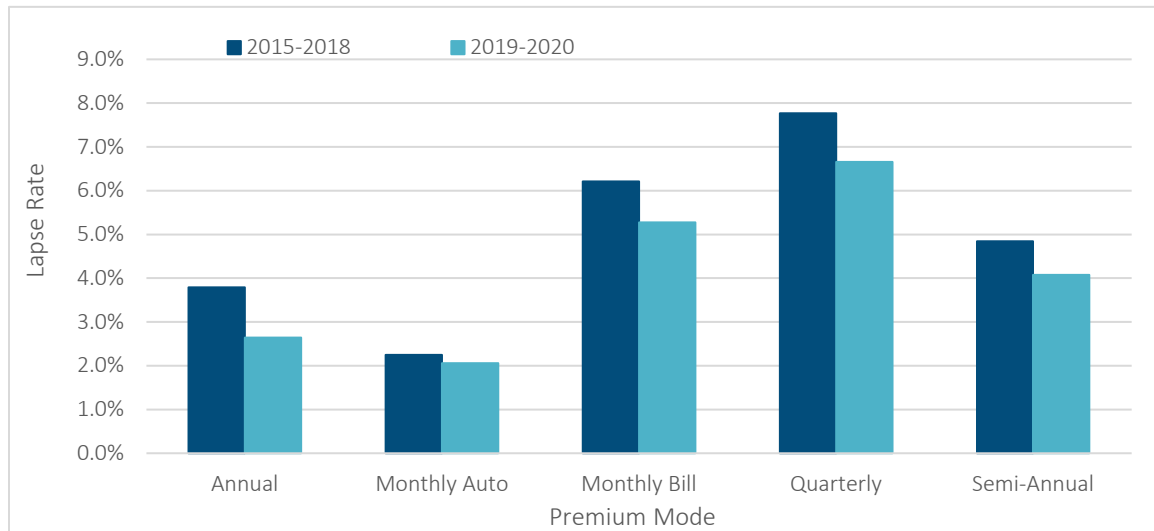
LAPSE RATES FOR VULSG BY PREMIUM MODE



Lapse rates based on amount were lower during the pandemic study years (2019-2020) than pre-pandemic study years for all premium modes (figure 9.9.2).

Figure 9.9.2

LAPSE RATES BASED ON AMOUNT FOR VULSG BY PREMIUM MODE AND STUDY YEAR



Section 10: Secondary Guarantee Length

Throughout this section, the term Lifetime Secondary Guarantee will refer to policies that have a secondary guarantee to age 100 or higher either built into the product or purchased through a rider. The VM-51 data format does not provide a way to identify the length of the secondary guarantee period. To study the difference in lapse rates by length of the secondary guarantee, companies provided a list of policies that had a secondary guarantee to age 100 or higher. For the companies also participating in the upcoming Universal Life Premium Persistency study, the product data variable that indicates a product focuses on the Lifetime Guarantee market was used to identify these policies.

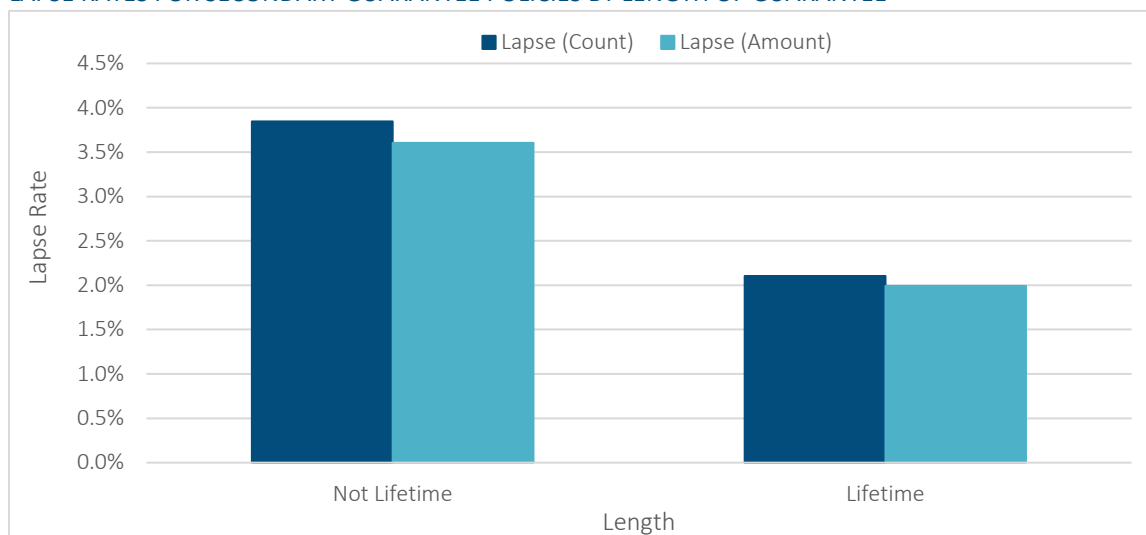
Experience is shown only for product types with a secondary guarantee in this section (ULSG, IULSG and VULSG). Product Type is assigned from the plan codes within the VM-51 data format. Aside from ensuring a policy had the same product type throughout the study, there was no additional work to determine where a company put a policy with a “non-material” secondary guarantee (as defined by VM-01). Based on the guidance in the Valuation Manual, those shorter guarantees are expected to fall into the non-secondary guarantee product type, but it is possible some companies put those into the secondary guarantee product type.

Twenty-three companies provided data for at least one of the secondary guarantee product types, and twenty of the companies had at least some policies identified as Lifetime.

In total for all product types, lapse rates for policies with a Lifetime Secondary Guarantee were 45% lower on both a count and amount basis than for policies with a secondary guarantee that was Not Lifetime.

Figure 10.1

LAPSE RATES FOR SECONDARY GUARANTEE POLICIES BY LENGTH OF GUARANTEE



10.1 LAPSE RATES BY POLICY YEAR

Lapse rates based on both count and amount were lower for policies with a Lifetime Secondary Guarantee relative to those that were Not Lifetime across all policy years (figures 10.1.1 and 10.1.2). The relative difference in experience began to decrease starting around policy year 12 on both a count and amount basis. The increase in lapse rate for Lifetime in policy year 19 might be a result of a substantial decrease in the number of companies with Lifetime in that policy year.

Figure 10.1.1

LAPSE RATES BASED ON COUNT FOR SECONDARY GUARANTEE POLICIES BY LENGTH OF GUARANTEE AND POLICY YEAR

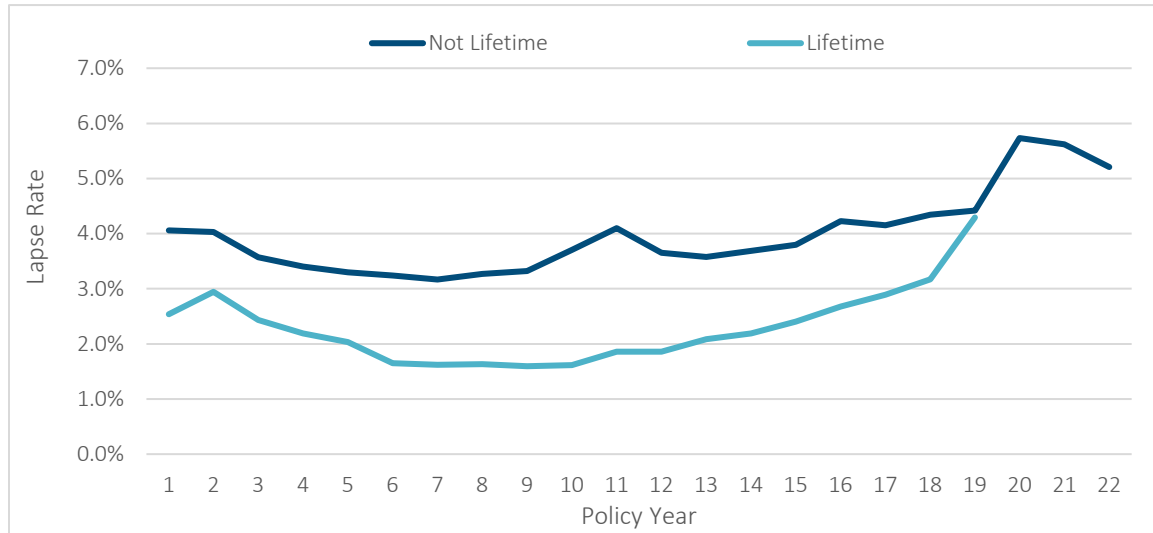
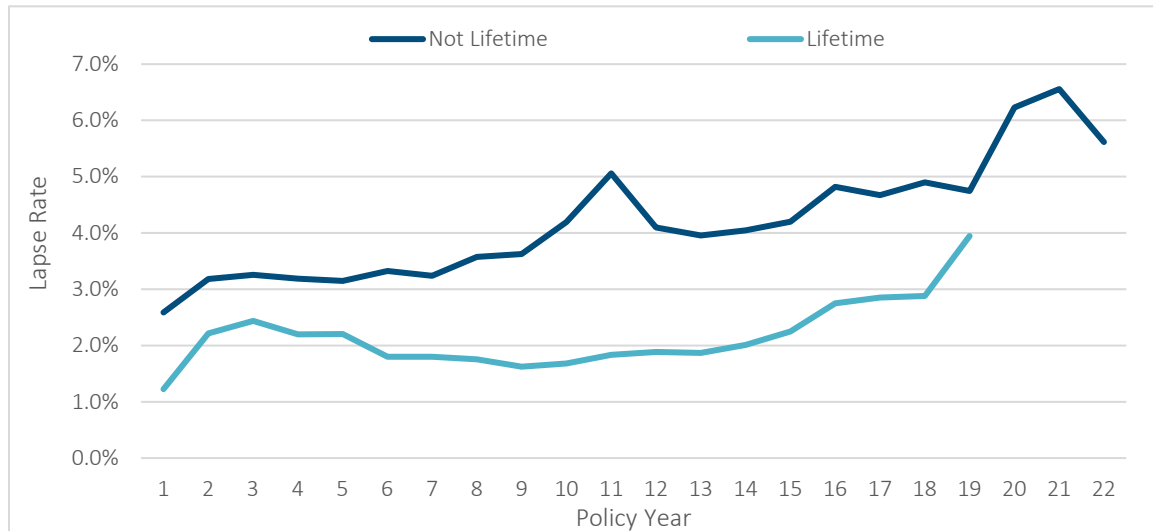


Figure 10.1.2

LAPSE RATES BASED ON AMOUNT FOR SECONDARY GUARANTEE POLICIES BY LENGTH OF GUARANTEE AND POLICY YEAR

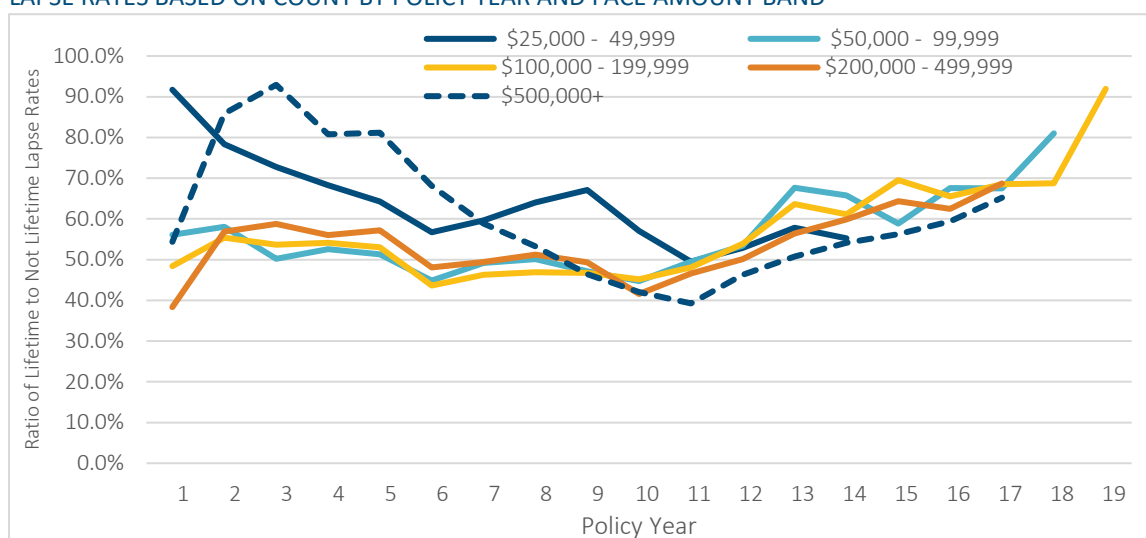


By Policy Year and Face Amount Band

The ratio of the Lifetime lapse rate to the Not Lifetime lapse rate was relatively similar for face amounts between \$50,000 and \$499,999 (figure 10.1.3). The ratio was higher for the lowest and highest face amount groups in the early policy years. The ratio began to increase for most face amount bands starting in policy year 11 or 12.

Figure 10.1.3

RATIO OF LIFETIME SECONDARY GUARANTEE LAPSE RATES TO NOT LIFETIME SECONDARY GUARANTEE LAPSE RATES BASED ON COUNT BY POLICY YEAR AND FACE AMOUNT BAND

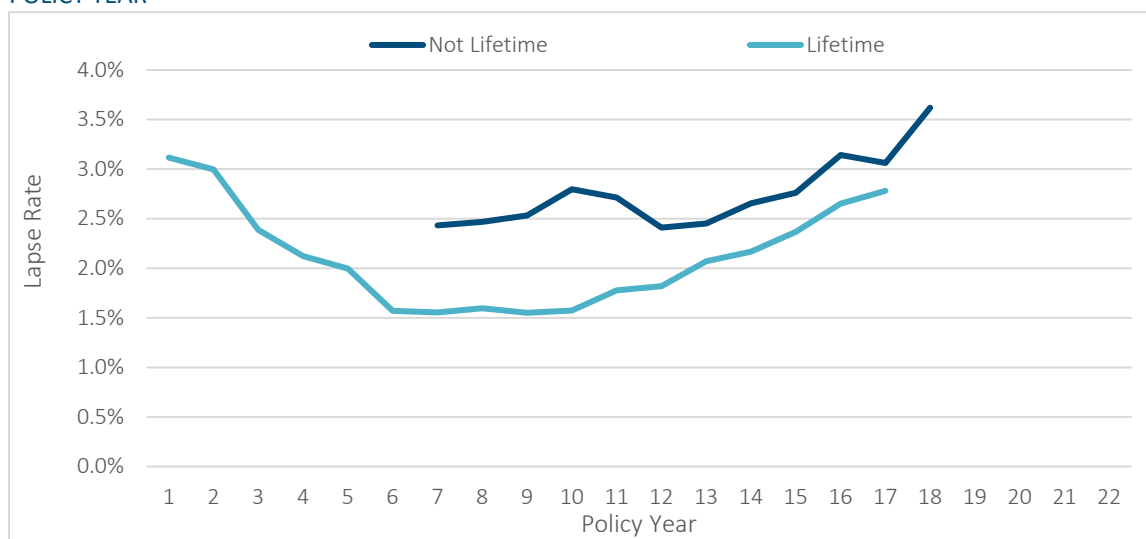


By Policy Year and Product Type

Due to data confidentiality, ULSG was the only product where policy year results could be shown separately by product. Similar to all products combined, the relative difference in lapse rates, on a count basis, began to decrease in policy year 12 (figure 10.1.4).

Figure 10.1.4

LAPSE RATES BASED ON COUNT FOR TRADITIONAL ULSG POLICIES BY LENGTH OF GUARANTEE AND POLICY YEAR

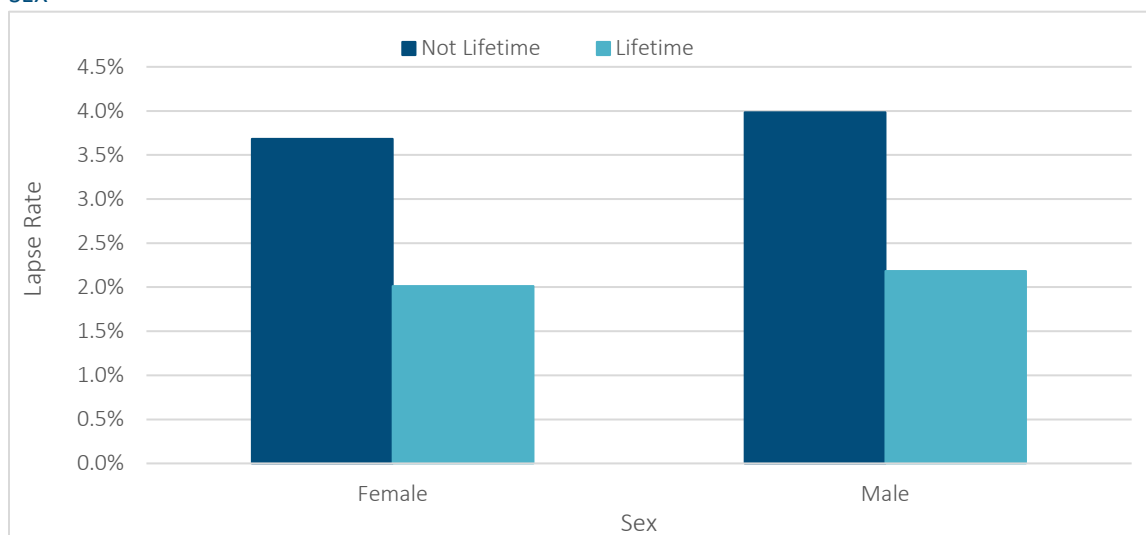


10.2 LAPSE RATES BY SEX

In total, the relative difference between Lifetime and Not Lifetime lapse rates did not appear to vary by Sex (figure 10.2).

Figure 10.2

LAPSE RATES BASED ON COUNT FOR SECONDARY GUARANTEE POLICIES BY LENGTH OF GUARANTEE AND SEX

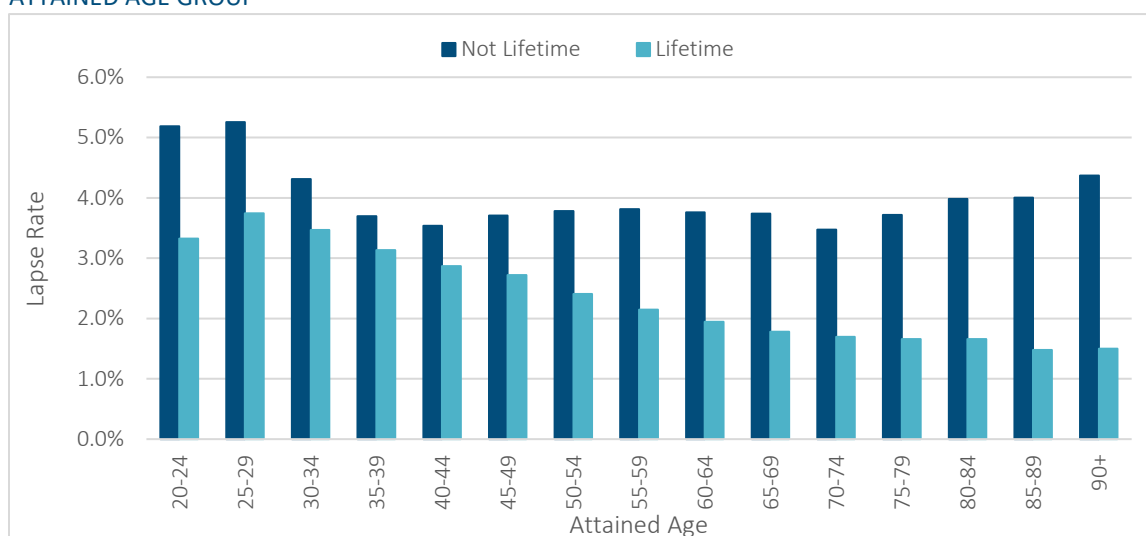


10.3 LAPSE RATES BY ATTAINED AGE GROUP

Lifetime lapse rates by count were lower than Not Lifetime lapse rates for all attained age groups (figure 10.3). The relative difference in lapse rate increased as attained age increased. At the oldest attained age group, the lapse rate on Not Lifetime was almost three times higher than the Lifetime lapse rate.

Figure 10.3

LAPSE RATES BASED ON COUNT FOR SECONDARY GUARANTEE POLICIES BY LENGTH OF GUARANTEE AND ATTAINED AGE GROUP



Section 11: Definitions and Methodology

11.1 GLOSSARY

- **Secondary Guarantee**, as defined by the Valuation Manual, means a conditional guarantee that a policy will remain in force, even if its fund value is exhausted. This is also commonly referred to as a no-lapse guarantee.
- **Product Type** was assigned from the plan codes within the VM-51 data format. Aside from ensuring a policy had the same product type throughout the study, there was no additional work to determine where a company put a policy with a “non-material” secondary guarantee (as defined by VM-01). Based on the guidance in the Valuation Manual, those shorter guarantees were expected to fall into the non-secondary guarantee product type, but it is possible some companies put them into the secondary guarantee product type. There are six product types in this study:
 - **Traditional UL** refers to Universal Life without a Secondary Guarantee
 - **ULSG** refers to Traditional Universal Life with a Secondary Guarantee
 - **IUL** refers to Indexed Universal Life without a Secondary Guarantee
 - **IULSG** refers to Indexed Universal Life with a Secondary Guarantee
 - **VUL** refers to Variable Universal Life without a Secondary Guarantee
 - **VULSG** refers to Variable Universal Life with a Secondary Guarantee
- **Age Terminology**
 - **Issue age** is the age nearest birthday of the insured at the issue date.
 - **Attained age** is the issue age plus the policy year (defined below) minus 1.
- **Policy Year** throughout this report, excluding appendix A, refers to a measure of time since the issue date. This is also commonly referred to as the policy duration.
- **Study Year** is the time between contract anniversaries in calendar year yyyy and contract anniversaries in calendar year yyyy+1.
- **Common Company** refers to a company that provided data for study year 2020 (observation years 2020 and 2021) and at least 1 other study year.
- **Lifetime Secondary Guarantee** is a secondary guarantee on a universal life policy that extends to at least attained age 100 or higher.
- **Lapse** is a termination falling under one of the following termination codes from the VM-51 data format:
 - Type unknown or unable to subdivide
 - Reduced Paid-up
 - Extended Term
 - Voluntary
 - 1035 Exchange
 - Surrender for full cash value
 - Lapse (other than reduced paid-up or extended term)

For simplicity, throughout this study the word “lapse” and the phrase “lapse rates” will include both terminations with value (surrenders) and terminations without value (forfeitures).

11.2 AGE BASIS

The study was performed on an age nearest birthday basis and was calculated using date of birth and issue date from each company’s data submission. If a company could not provide date of birth, age nearest birthday was requested for the issue age basis.

11.3 PRODUCT TYPE AND SECONDARY GUARANTEE LENGTH

Product Type was assigned from the plan codes within the VM-51 data format. Aside from ensuring a policy had the same product type throughout the study, there was no additional work to determine where a company put a policy with a “non-material” secondary guarantee (as defined by VM-01). Based on the guidance in the Valuation Manual, those shorter guarantees were expected to fall into the non-secondary guarantee product type, but it is possible some companies put them into the secondary guarantee product type.

The VM-51 data format does not provide a way to identify the length of the secondary guarantee period. To study the difference in lapse rates by length of the secondary guarantee, companies provided a list of policies that had a secondary guarantee to age 100 or higher. For the companies also participating in the upcoming Universal Life Premium Persistency study, the product data variable that indicates a product focuses on the Lifetime Guarantee market was used to identify these policies.

11.4 EXPOSURE FOR LAPSE RATE CALCULATIONS

Calendar year data were submitted for observation years 2015 through 2021. Exposure prior to the anniversary in 2015 and after the anniversary in 2021 were excluded from this study, creating six complete study years of data in this anniversary-to-anniversary experience study. Please note not all companies were able to submit data for all years requested. However, only complete study years of data were used for each company.

Exposure was determined using the Balducci approach. The policy year that a lapse is assigned to is based on the actual date of lapse.

The calendar year data were split into two portions that corresponded to the two policy years in that calendar year:

B: The period before the anniversary date in the calendar year (Before Anniversary Portion = ‘B’), and

A: The period after the anniversary date in the calendar year (After Anniversary Portion = ‘A’).

For example, a record submitted having a policy year of 10 at the beginning of the observation year would have a Before Anniversary Portion of ‘B’ with a policy year of 10, and the After Anniversary Portion of ‘A’ would have a policy year of 11.

Based on the two Anniversary Portions, Exposure Length for lapses was calculated. Then, the Policy Count Exposed and the Face Amount Exposed were calculated.

The Exposure Length differs between lapse/surrender terminations and non-lapse terminations. The Exposure Length is used to determine the Policy Count Exposed and the Face Amount Exposed.

For In-Force Policies:

The Exposure Length of the Before Anniversary Portion ‘B’ is the fraction of the year from the beginning of the calendar year to the Anniversary Date of the policy in the Observation Year. For After Anniversary Portion ‘A,’ the Exposure Length is the fraction of the year from the anniversary date of the policy during the calendar year to the end of the calendar year.

For Policies Terminated by Lapse:

The calculation of Exposure Length depends upon whether the Lapse occurred before the anniversary date or after the anniversary date:

- If the lapse occurs before the anniversary date, due to the Balducci hypothesis, the exposure length for 'B' is the fraction of the year from the beginning of the calendar year to the anniversary date in the Observation Year. The exposure length for the After Anniversary Portion 'A' would be zero.
- If the lapse occurs after the anniversary date, the exposure length for 'B' is the fraction of the year from the beginning of the calendar year to the anniversary date in the Observation Year. The exposure length for the After Anniversary Portion 'A' would be 1, due to the Balducci hypothesis.

For Non-Lapse Policy Terminations:

The calculation of Exposure Length depends upon whether the non-surrender termination occurred before or after the anniversary date:

- If the non-surrender terminations occur before the anniversary date, the exposure length for the Before Anniversary Portion 'B' is the fraction of the year from the beginning of the calendar year to the Actual Termination Date. The exposure length for the After Anniversary Portion 'A' would be zero.
- If the non-surrender termination occurs after the anniversary date, the exposure length for the Before Anniversary Portion 'B' is the fraction of the year from the beginning of the calendar year to the anniversary date in the Observation Year. The exposure length for the After Anniversary Portion 'A' would be the fraction of the year from the anniversary date to the Actual Termination Date.

Contract Count Exposed is equal to the contract exposure length.

The Face Amount Exposed is calculated as the product of the Exposure Length and the face amount at the beginning of the observation year.

11.5 COMMON COMPANY VIEWS

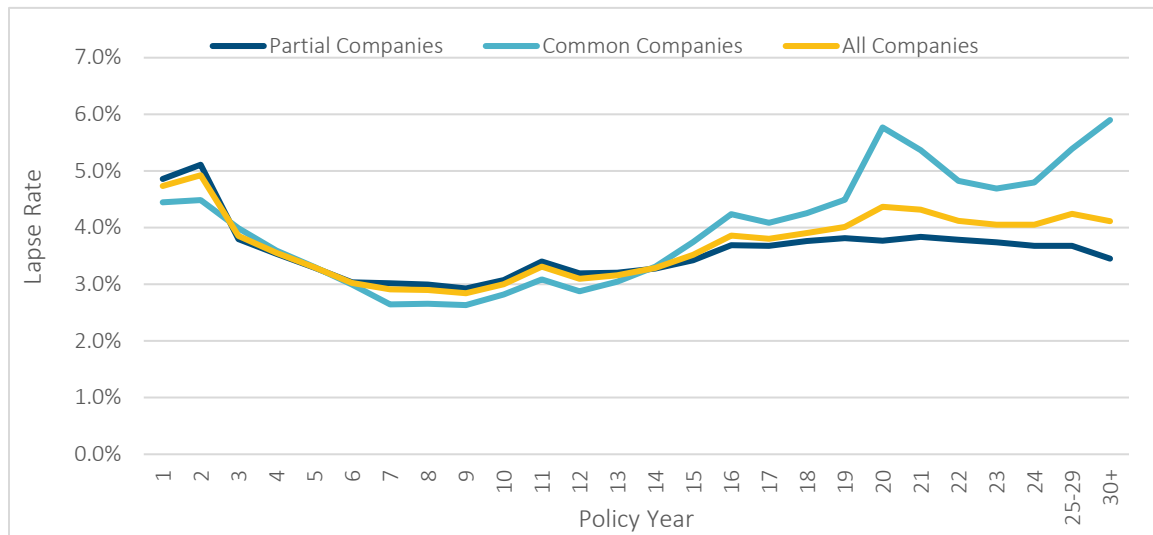
Not all companies were able to provide data for all seven calendar years. Many companies were unable to provide data for observation year 2021 and were, therefore, excluded from the 2020 study year. The report analysis includes all companies for all study years that were provided. A common company view option is provided in the data visualization tool that accompanies the study standard data package.

Figure 11.5.1 shows a comparison of lapse rates for all UL products combined for companies that provided data for the 2020 study year and at least one other study year (Common Companies) with those that did not provide data for the 2020 study year (Partial Companies). There were seven companies classified as Common Companies.

Common Companies showed slightly lower lapse, but similar experience, for most of the first 15 policy years as compared with the results for partial companies. After policy year 15, the Common Companies had consistently higher overall lapse rates.

Figure 11.5.1

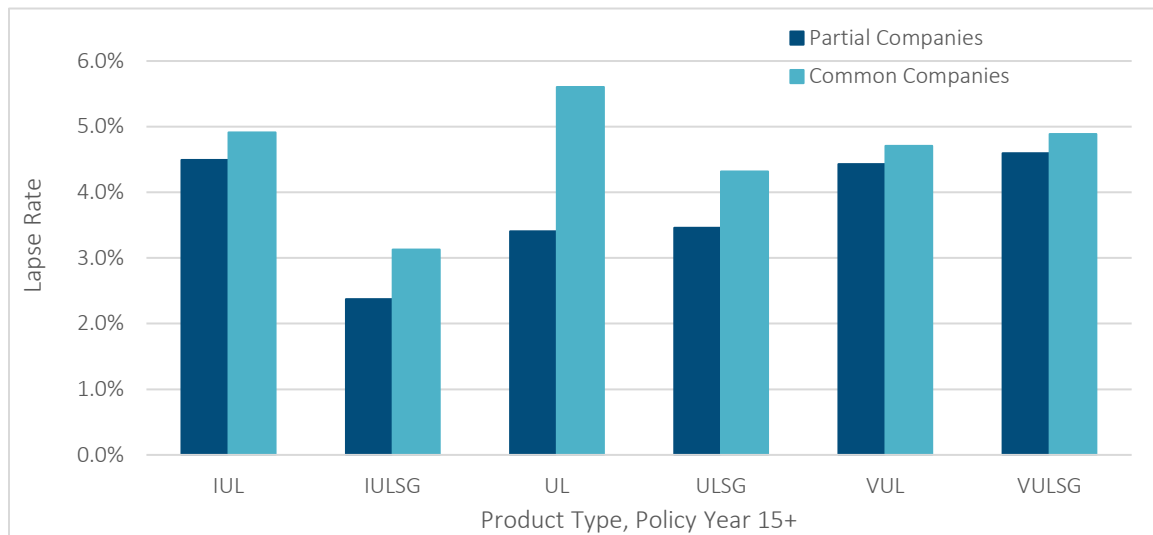
LAPSE RATES BASED ON COUNT FOR COMMON COMPANIES VS PARTIAL COMPANIES BY POLICY YEAR FOR ALL PRODUCT TYPES



The lapse rates for common companies are consistently higher in policy years 15 and later for all study years and all product types (figure 11.5.2). The largest difference was seen in Traditional UL without Secondary Guarantees (UL).

Figure 11.5.2

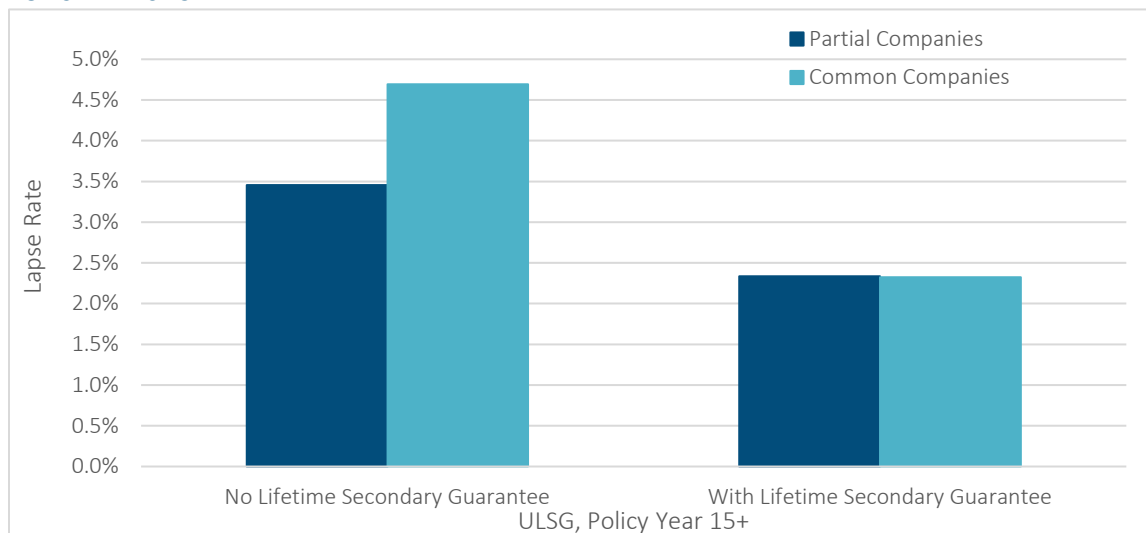
LAPSE RATES BASED ON COUNT FOR COMMON COMPANIES VS PARTIAL COMPANIES BY PRODUCT TYPE FOR POLICY YEARS 15 AND LATER



The second largest difference was seen in the Traditional UL with Secondary Guarantees (ULSG). For these products, one of the drivers might be the percent of exposure with lifetime secondary guarantees. For the common companies, 25% of the exposure based on count for policy years 15 and later represents policies with lifetime secondary guarantees while, for the partial companies, nearly 36% included lifetime secondary guarantees. Note that the experience for the two groups of companies is similar for policies with lifetime secondary guarantees in the later policy years and the difference is seen in the non-lifetime guarantee business (figure 11.5.3).

Figure 11.5.3

LAPSE RATES BASED ON COUNT FOR COMMON COMPANIES VS PARTIAL COMPANIES FOR ULSG FOR POLICY YEARS 15 AND LATER



11.6 ADJUSTMENTS TO COMPANY DATA SUBMISSIONS

Aside from changes arising out of data validation processing, there were two notable adjustments applied to the data submissions.

Premium Mode at Termination

Some companies change the premium mode of a policy at the time of termination in an attempt to conserve the business. This company practice could alter the lapse rate experience of the “true” premium mode that the policy had prior to termination. To adjust for this practice, the premium mode from the prior observation year was used in the year of termination, if available.

This adjustment was applied to all companies.

Date of Termination For Lapses Without Value

During the latter part of the analysis phase of this project, it was discovered that the termination date given in the VM-51 data format for lapses without value was the date the lapse was processed and not the paid-to-date of the policy, as directed in the data submission instructions. Using the process date instead of the paid-to-date could move the termination into the next policy year, causing the observed lapse rates by policy year to be miscalculated, especially in policy year 1.

Company lapse experience was examined within each policy year by days since anniversary, with the expectation that a notable percentage of policies would lapse without value on the policy anniversary (day 365 or 366). Where this pattern was not observed, the grace period plus administration time to process the

lapse was approximated by noting on which day(s) the largest spike in lapses occurred. For most companies affected by this issue, the largest spike occurred between days 61 through 68 and there was not a corresponding spike on the anniversary.

After getting confirmation and sign-off from the affected companies, the company-specific grace period plus administration time to process the lapse was subtracted from the given termination date in an attempt to approximate the true “paid-to-date” of the policy. Using this approach did not necessitate a data re-submission from the affected companies. Some affected companies noted that a paid-to-date is not readily available on universal life policies, as it is for traditional life insurance plans.

The process to subtract the grace period from the given termination date should work well to approximate the paid-to-date in the pre-pandemic years. However, during the COVID emergency, grace periods were increased at the request of the states. Company practices varied significantly during this time, from March 2020 through approximately fall of 2020.

The number of days subtracted from the given termination date was not adjusted during the COVID emergency period, as practices varied considerably and could vary within a company by state and time period. As such, during study year 2019 (anniversary in 2019 through anniversary in 2020) and study year 2020 (anniversary in 2020 through anniversary in 2021) there may be some noise in the lapse rates by policy year.

This issue affected approximately one-third of the companies in this study.

11.7 COMPANY CONFIDENTIALITY PROTECTION

The data submitted by each company were reviewed by exposure count to ensure that no one company’s data dominated the total exposure within a given Product Type. For companies that did dominate within a given Product Type, their experience was scaled down to eliminate the dominance. Lapse counts, lapse amounts, exposure counts, and exposure amounts were adjusted by the same scalar so that each company’s underlying lapse rates by both count and amount remained the same. Due to confidentiality restrictions around the underlying company data, certain views that violate these confidentiality restrictions are suppressed in the Tableau dashboards.

Section 12: Reliance and Limitations

No assessment has been made concerning the applicability of this experience to other purposes. In developing this report, the SOA Research Institute and LIMRA relied upon data and information supplied by the participating company contributors. For each contributor, this information includes, but is not limited to, the data submission for contract owner experience and the responses to follow-up questions.

The results in this report are technical in nature and dependent on certain assumptions and methods. No party should rely upon these results without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals. This report should be distributed and reviewed only in its entirety.



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Section 13: Acknowledgments

The SOA Research Institute and LIMRA's deepest gratitude goes to those without whose efforts this project could not have come to fruition:

The Project Oversight Group members for their diligent work overseeing the data request, research report and Tableau development, and reviewing and editing this report and Tableau dashboards for accuracy and relevance.

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The following staff and contractors at the Society of Actuaries Research Institute and LIMRA were integral in the production of this study:

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Marianne Purushotham, FSA, MAAA (LIMRA)

Mark Rosa, ASA (SOA Contractor)

Maureen Shaughnessy, FSA, MAAA (LIMRA)

Section 14: List of Participating Companies

The Society of Actuaries Research Institute and LIMRA would like to thank the following 24 individual companies who contributed data to this study:

Allianz
Ameritas
Brighthouse Financial
Columbus Life Insurance
Equitable
Everlake
Global Atlantic Financial Group
John Hancock
Lincoln
Mutual Of Omaha
National Life
Nationwide
New England Life Insurance Company
Pacific Life
Penn Mutual
Principal
Protective
Prudential
Sammons
Securian
State Farm
Thrivent
Transamerica
Western & Southern

Appendix A: Data Request Description

The current study focuses on the surrender/lapse experience for all universal life product types. An upcoming study will provide detail regarding premium persistency experience for these products and its impact on lapse results. Data for the two studies was collected simultaneously and this document represents the first of the two reports. For a company to participate in the lapse study, they only had to submit the policy level data.

Request for Data Contributions

The Society of Actuaries Research Institute (SOA) and LIMRA are soliciting surrender/lapse and premium persistency experience for flexible premium universal life (UL) products for calendar years 2015 through 2021.

This document describes the procedures for submitting contract- and product-level data for this study.

Purpose of the Study

The SOA Research Institute and LIMRA are partnering together to complete industry experience studies. Under this partnership, the two organizations plan to complete an update to the Flexible Premium Universal Life Products: Premium Persistency Experience report covering calendar years 2009-2013 that was published in 2018.

The goals of this update are to:

- Provide a detailed analysis of premium persistency and related surrender/lapse activity for all flexible premium universal life business including:
 - Traditional Fixed UL with or without a lifetime secondary guarantee
 - Fixed Indexed UL with or without a lifetime secondary guarantee
 - Variable UL with or without a lifetime secondary guarantee
- Experience will be broken out by several factors, including: age of owner; distribution channel; contract duration; in-the-moneyness of the benefits; and various product and rider features.

Form of Data Contributions

A detailed description of the data request documents can be found in Appendices A-C.

Policy Level Data

The study will collect both policy and product level data. At the policy level, we request companies provide 2 data files. The first, [Policy Level File 1](#), is the VM-51 format file (as prepared for either the New York or the NAIC mandatory data calls) that covers the years 2015-2021.

The mandatory data format for VM-51 is included in as Appendix A of this document – a column has been added to that data format to indicate those fields that are critical for participation in the current premium persistency study. If your company does not currently submit data for the individual life insurance mandatory data calls under VM-51, please provide a file that includes the critical fields associated with that data call as shown in Appendix A of this document.

Then, in addition to the VM-51 format file above, we ask that companies provide an additional file in the format described in Appendix B. This second policy level file, Policy Level File 2, will collect additional fields related to premium activity that will be important for this study.

Product and Rider Level Data

For this study, product and rider level data will also be collected. For each product plan your company includes in this study, whether or not the product is currently being sold, describe the product features by completing the accompanying Excel form (Flexible Premium UL Prod and Rider Info Years 2015-2021.xlsx). Further instructions are contained within the form.

Important Dates

Your timely voluntary data submission is a valuable contribution to this Study. We request your data, as described in the following section, no later than **August 31, 2022**. If you would like to contribute, but find that this timing is challenging, please contact Korrel Crawford at the SOA (). In addition, please reply to Korrel with your decision to supply data for this study by **June 21, 2022**. Once your company's intent to participate has been received, Debbie will send you a confidential company ID code.

Data Transmission Instructions

The SOA Research Institute and LIMRA have partnered to validate, compile and aggregate the data for this effort. When you are ready to submit your data, please send an email to SOADataTransmissions@limra.com and LIMRA will send you a secure link to facilitate the data transmission.

Study Outputs

A report with high level summary results of the study will be made publicly available.

In an effort to align the costs to produce this study with the entities who have the most interest in the results, the SOA Research Institute and LIMRA will offer the detailed outputs of this study for a fee. The following may be included in the outputs available for purchase:

- detailed experience study report with analysis and commentary;
- a set of data visualization dashboards with the ability to filter on and drill down into the detail of the results of the study;
- dataset(s) containing the aggregated experience collected for the purpose of this study. The datasets may be made available in excel files, text files or downloads from the data visualization tool;
- models or other tools developed to support the analyses completed in the study; and
- other outputs as determined by the SOA Research Institute and LIMRA.
- Any output of the study, whether publicly available or available for purchase, will not contain any private information or any confidential contributor level information.

Benefits to Data Contributors

Data contributors will be acknowledged in the study output. Their experience data will be part of a broad industry study that will benefit the industry. The experience data for this study will/may be compared against current industry standard valuation assumptions and significant variance from the current standard may trigger the development of new standards. In such a situation, the data from this study may be used as the basis to develop new valuation standards. Data contributors will benefit from having their company's data be included in the comparison to standard valuation assumptions and from being included in the basis for any new valuation standards.

Data contributors whose data is retained for inclusion in the study and who purchase the available study outputs will also receive the following benefits:

- the purchase fee for data contributors will be discounted relative to the purchase fee for non-data contributors. The data contributors' fee is expected to be at a nominal level;
- the ability to see their own experience results compared to the industry results in any available data visualization dashboards or excel pivot tables;
- the option to choose a set of at least 5 peer companies (all peer companies must agree to be included the selected peer group) from the companies who provided data to the study and compare the results of these peer companies to their own company results;
- the opportunity to have a meeting with the SOA Research Institute and LIMRA researcher(s) who performed the analyses for the study. At this meeting, the contributor will be able to quickly gain deeper insights into the results and questions in specific areas of interest.

Data Access, Ownership and Retention

The SOA Research Institute and LIMRA have partnered together to collect and process experience data for this effort. The data collected under this partnership will be processed and housed within LIMRA's existing study data infrastructure. The agreement between the SOA Research Institute and LIMRA includes provisions to ensure the data is kept secure and confidential. Only SOA Research Institute and LIMRA staff directly involved with the project will have access to the original data. SOA Research Institute volunteers working on the experience analysis and table development will not have access to original contributor-level data. For more information on LIMRA's information security program, please see the LLG (LIMRA) Governing Information Security Policy in the Appendix C.

The SOA Research Institute and LIMRA will create aggregated datasets from the original data contributions for the purpose of completing this effort. These aggregated datasets will not contain any personally identifiable information (PII). All aggregated datasets compiled by the SOA Research Institute and LIMRA from the original data contributions will be the property of the SOA Research Institute and LIMRA. The aggregated datasets may be used for future research, education or other purposes and offerings, as deemed appropriate by the SOA Research Institute or LIMRA. Only SOA Research Institute staff, LIMRA staff, or contracted independent consultants will have access to contributor-level data.

Appendix B: Data Request Layout

Click here to view the data request for this study:

<https://www.soa.org/globalassets/assets/files/resources/experience-studies/2023/15-21-ulls.pdf>

About LIMRA

Established in 1916, LIMRA is a research and professional development not-for-profit trade association for the financial services industry. More than 600 insurance and financial services organizations around the world rely on LIMRA's research and educational solutions to help them make bottom-line decisions with greater confidence. Companies look to LIMRA for its unique ability to help them understand their customers, markets, distribution channels and competitors and leverage that knowledge to develop realistic business solutions.

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About The Society of Actuaries Research Institute

Serving as the research arm of the Society of Actuaries (SOA), the SOA Research Institute provides objective, data-driven research bringing together tried and true practices and future-focused approaches to address societal challenges and your business needs. The Institute provides trusted knowledge, extensive experience and new technologies to help effectively identify, predict and manage risks.

Representing the thousands of actuaries who help conduct critical research, the SOA Research Institute provides clarity and solutions on risks and societal challenges. The Institute connects actuaries, academics, employers, the insurance industry, regulators, research partners, foundations and research institutions, sponsors and non-governmental organizations, building an effective network which provides support, knowledge and expertise regarding the management of risk to benefit the industry and the public.

Managed by experienced actuaries and research experts from a broad range of industries, the SOA Research Institute creates, funds, develops and distributes research to elevate actuaries as leaders in measuring and managing risk. These efforts include studies, essay collections, webcasts, research papers, survey reports, and original research on topics impacting society.

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