

U.S. Individual Life COVID-19 Reported Claims Analysis – 4Q 2022 Update JUNE | 2023



















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CONTENTS

Section 1: Introduction		
Section 2: Executive Summary	5	
Section 3: Methodology	6	
Section 4: Results	7	
4.1 By Attained Age	10	
Section 5: Reliance and Limitations	11	
Section 6: Acknowledgments	12	
Section 7: List of Participating Companies	13	
About Reinsurance Group of America	14	
About TAI	14	
About LIMRA	14	
About The Society of Actuaries Research Institute	15	

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Section 1: Introduction

LIMRA, Reinsurance Group of America (RGA), the Society of Actuaries Research Institute (SOA), and TAI have collaborated on an ongoing effort to analyze the impact of COVID-19 on the individual life insurance industry's mortality experience and share the emerging results with the insurance industry and the public. The Individual Life COVID-19 Project Work Group (Work Group) was formed as a collaboration of LIMRA, RGA, the SOA Research Institute, and TAI to design, implement, and create the study and to produce and distribute a variety of analyses.

This report documents a high-level analysis of the claims that have been reported through December 31, 2022. This report is different from the excess mortality reports as there is significant lag between the time data is collected for a given period and the time we are able to release the final results for that period.

This report focuses instead on a comparison of the claims that have been reported through specific quarter-end dates during the pandemic as compared to claims reported through those same periods in years prior to the pandemic. This approach allows for a comparison of all data that we have available through the end of December 2022. While this report does not offer a look at mortality rates themselves, it could provide a leading indicator of the mortality results to come in the next six months based on the change in pattern of claims reported.

The results presented here are based on data from 28 companies representing approximately 69% of the individual life insurance in force for the experience period of the study. Not all companies were able to provide claim reported date.

As a basis of additional comparison, results from the most recent SOA Research Institute Group Life Insurance COVID-19 Mortality Survey research are referenced. Unless otherwise noted, all references to data, claims, and any analysis results in this report refer to the individual life mortality experience.

Section 2: Executive Summary

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

- Ratios of claims reported by quarter during the pandemic as compared to the average for the same quarters from the three years prior to the pandemic (2017-2019) ranged from 98%-122% for individual life on a count basis for fully underwritten business.
- By amount, the ratios for individual life fully underwritten business needed to be adjusted for the natural upward trend that results from a combination of the aging of business and inflation in the size of death benefits purchased over time. This is a material factor for individual life business averaging between 5%-7% per year at an industry level and, for that reason, figures in this report are shown both with and without the adjustment for this trend. Ratios of individual life reported claims by quarter on an amount basis during the pandemic versus prior years ranged from 109%-149% before the adjustment for trend and 93%-129% after adjustment for trend.
- Due to the Delta and Omicron variants, in the third quarter of 2021, the ratios of reported claims to historical average began to increase more at the younger ages, most notably at attained ages under 60 on both a count and amount basis. This continued through the first quarter of 2022.
- Starting in the second quarter of 2022, ratios by both count and amount appear to be settling in at levels slightly elevated over the pre-pandemic trend.

Section 3: Methodology

LIMRA, RGA, TAI and the SOA Research Institute jointly collected the data supporting the results of this report. Both claims and inforce/termination data were collected from a group of 28 individual life insurance companies. The data used in this report focuses only on fully underwritten business and covers calendar years 2016 through the fourth quarter of 2022, representing approximately 2.0 million claims.

This report focuses on report dates only as this allows for including data through the end of the reporting period. Claim counts and amounts reported are examined by calendar quarter starting in the first quarter of 2016. For each quarter during the pandemic, reported claims by quarter are compared to the average for the same quarter over the period 2017-2019. Only fully underwritten business is included for this analysis.

In addition, for individual life business, results by amount needed to be adjusted for the natural upward trend that occurs due to a combination of the aging of business and inflation in the size of death benefits purchased over time. This is a material factor for individual life business and, for that reason, figures in this report are shown both with and without the adjustment for this trend. Based on the data received from participants in the analysis, the trend varies by quarter and by company but, on average, it is in the range of 5%-7% per year.

Please note that not all companies in the study provided claim reported date and that historical claim data can change due to corrections, additions, or other normal process changes. These changes may have a more material effect on the Reported Claims study than the Excess Mortality study due to the lower number of claims with a claim reported date. As additional quarters are added, the reports will be updated with the new information provided for both current and earlier quarters.

Section 4: Results

Table 1 below shows the ratios of individual life insurance claims for each quarter since the start of the pandemic as compared to the average for the same quarter in 2017-2019. Note that results from the most recent group life COVID-19 survey are also included in order to allow for a comparison to individual life insurance.

Table 1

REPORTED CLAIMS – RATIO OF REPORTED CLAIMS BY QUARTER TO HISTORICAL AVERAGE (2017-2019)

BY CLAIM COUNT AND CLAIM AMOUNT, INDIVIDUAL LIFE FULLY UNDERWRITTEN ONLY

Quarter Reported	Group Life*	Individual Life	Individual Life (adjusted for trend)				
CLAIM COUNT							
2020 Q1	99%	100%	n/a				
2020 Q2	111%	114%	n/a				
2020 Q3	114%	116%	n/a				
2020 Q4	122%	122%	n/a				
2021 Q1	129%	118%	n/a				
2021 Q2	111%	101%	n/a				
2021 Q3	124%	115%	n/a				
2021 Q4	132%	116%	n/a				
2022 Q1	123%	112%	n/a				
2022 Q2	102%	98%	n/a				
2022 Q3	107%	107%	n/a				
2022 Q4	103%	104%	n/a				
	CLAIM	AMOUNT					
2020 Q1	100%	109%	101%				
2020 Q2	115%	132%	120%				
2020 Q3	Q3 126%		111%				
2020 Q4	0 Q4 132%		119%				
2021 Q1	138%	145%	127%				
2021 Q2	123%	119%	102%				
2021 Q3	148%	149%	129%				
2021 Q4	154%	138%	120%				
2022 Q1	138%	138%	114%				
2022 Q2	111%	116%	93%				
2022 Q3	2 Q3 121%		104%				
2022 Q4	114%	123%	101%				

^{*}The results for group life insurance were obtained from the SOA Research Institute Group Life Insurance COVID-19 Mortality Survey Report (May 2023 report for 2022 results, February 2022 report for prior results).

The charts below show a summary of the ratios of reported claims to the average prior to the pandemic by quarter since the start of the pandemic. Note that Figure 1 shows results on a count basis and Figure 2 examines results on an amount basis (unadjusted for normal trend of claim amounts over time). Figure 3 provides results by amount that were adjusted for trends in amount of claims reported over time.

Figure 1
RATIOS OF INDIVIDUAL LIFE INSURANCE TOTAL CLAIM COUNTS REPORTED COMPARED TO 2017-2019 AVERAGE

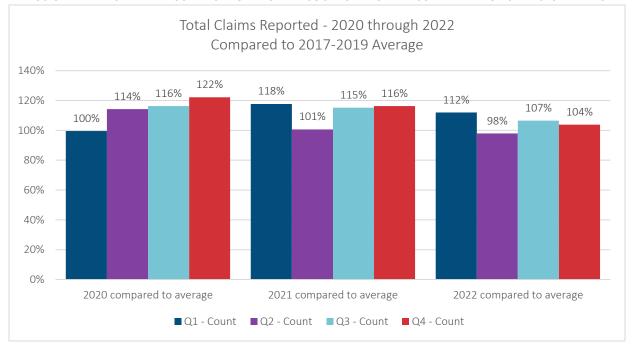


Figure 2
RATIOS OF INDIVIDUAL LIFE INSURANCE TOTAL CLAIM AMOUNTS REPORTED COMPARED TO 2017-2019 AVERAGE,
UNADJUSTED FOR CLAIM AMOUNT TREND

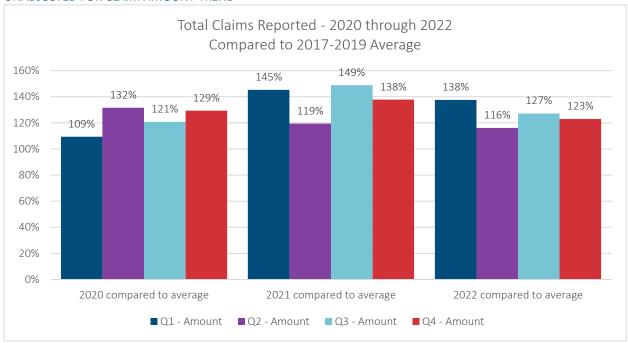
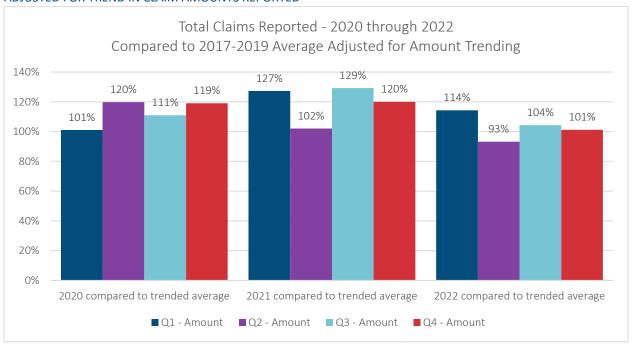


Figure 3
RATIOS OF INDIVIDUAL LIFE INSURANCE TOTAL CLAIM AMOUNTS REPORTED COMPARED TO 2017-2019 AVERAGE,
ADJUSTED FOR TREND IN CLAIM AMOUNTS REPORTED



4.1 BY ATTAINED AGE

The impact of the numerous COVID waves and variants can be seen more clearly when the results are shown by attained age. Early in the pandemic, the ratio of reported claims to the historical average increased more at the older attained ages. However, starting with the Delta variant in the third quarter of 2021, the ratios of reported claims to the historical average increased at the younger ages, most notably at ages under 60. This can be seen by both count and amount adjusted for trend in Tables 2 and 3, respectively.

As the pandemic shifts to an endemic phase, ratios by both count and amount appear to be settling in at levels slightly elevated over the pre-pandemic trend.

Table 2

REPORTED CLAIMS – RATIO OF CLAIMS BY QUARTER AND ATTAINED AGE TO HISTORICAL AVERAGE (2017-2019)

FOR INDIVIDUAL LIFE FULLY UNDERWRITTEN POLICIES BY CLAIM COUNT

Quarter Reported	Under 50	50-59	60-69	70-79	80-89	90+	All Ages
2020 Q1	103%	98%	104%	104%	96%	97%	100%
2020 Q2	111%	108%	113%	118%	112%	117%	114%
2020 Q3	116%	106%	113%	121%	113%	121%	116%
2020 Q4	114%	114%	122%	127%	120%	123%	122%
2021 Q1	114%	117%	123%	132%	113%	110%	118%
2021 Q2	113%	105%	104%	110%	94%	96%	101%
2021 Q3	138%	132%	121%	122%	107%	108%	115%
2021 Q4	130%	126%	125%	125%	111%	107%	116%
2022 Q1	125%	115%	119%	123%	106%	104%	112%
2022 Q2	106%	90%	98%	105%	95%	96%	98%
2022 Q3	111%	91%	102%	114%	105%	107%	107%
2022 Q4	105%	92%	101%	109%	103%	104%	104%

Table 3

REPORTED CLAIMS – RATIO OF CLAIMS BY QUARTER AND ATTAINED AGE TO HISTORICAL AVERAGE (2017-2019)

FOR INDIVIDUAL LIFE FULLY UNDERWRITTEN POLICIES BY AMOUNT, ADJUSTED FOR CLAIM AMOUNT TREND

Quarter Reported	Under 50	50-59	60-69	70-79	80-89	90+	All Ages
2020 Q1	105%	110%	111%	95%	91%	102%	101%
2020 Q2	101%	130%	110%	114%	116%	136%	120%
2020 Q3	101%	109%	105%	119%	105%	119%	111%
2020 Q4	115%	125%	113%	134%	124%	101%	119%
2021 Q1	116%	156%	146%	121%	109%	122%	127%
2021 Q2	100%	125%	97%	106%	94%	96%	102%
2021 Q3	154%	157%	121%	115%	125%	124%	129%
2021 Q4	125%	140%	126%	123%	110%	106%	120%
2022 Q1	122%	157%	136%	113%	97%	90%	114%
2022 Q2	98%	110%	86%	97%	88%	84%	93%
2022 Q3	114%	111%	104%	104%	110%	87%	104%
2022 Q4	99%	113%	95%	114%	107%	79%	101%

Section 5: Reliance and Limitations

The Individual Life COVID-19 Project Work Group would like to stress that, due to delays in the reporting and recording of claim information in the insured data, the more recent data submitted for this research is considered preliminary and will change with subsequent data submissions. Also, historical claim data can change due to other corrections, additions, or normal process changes.

The analyses in this report are based on data submissions from 28 individual life insurance companies with data reported as of December 31, 2022. Not all companies were able to provide claim reported date.







Section 6: Acknowledgments

LIMRA, RGA, the SOA Research Institute, and TAI would like to acknowledge the Individual Life COVID-19 Project Work Group. Without their efforts, this project could not have come to fruition.

Dan Busa (LIMRA) Cynthia MacDonald, FSA, MAAA (SOA)

Justin Clark (LIMRA) Jason McKinley, FSA (RGA)

Korrel Crawford (SOA) Marianne Purushotham, FSA, MAAA (LIMRA)

Kathryn Eubank, FSA, MAAA (SOA) Scott Rushing, FSA, MAAA (RGA)

Mary Kate Hoerichs (LIMRA) Maureen Shaughnessy, FSA, MAAA (LIMRA)

Tao Huang, ASA (RGA) Mike Skelley (TAI)

Section 7: List of Participating Companies

AIG Life

Allstate

Ameritas Life Insurance Corp.

Amica Life

CNO Financial Group

Equitable

Global Atlantic Financial Group

Government Personnel Mutual Life

Kansas City Life

Lincoln Financial

MetLife

Mutual of Omaha

Mutual Trust

Nationwide

New York Life Insurance Company

Northwestern Mutual

OneAmerica

Pacific Life

Pan-American Life

Pavonia Life Insurance Co of MI (Global Bankers)

Principal Financial Group

Protective Life

Prudential Financial

Sammons Financial

SBLI

Securian Financial

State Farm Life

Symetra

The Independent Order of Foresters

Western & Southern

Woodmen Life

About Reinsurance Group of America

Reinsurance Group of America, Incorporated (RGA), a Fortune 500 company, is among the leading global providers of life reinsurance and financial solutions, with approximately \$3.5 trillion of life reinsurance in force and assets of \$84.7 billion as of December 31, 2020. Founded in 1973, RGA today is recognized for its deep technical expertise in risk and capital management, innovative solutions, and commitment to serving its clients. With headquarters in St. Louis, Missouri, and operations around the world, RGA delivers expert solutions in individual life reinsurance, individual living benefits reinsurance, group reinsurance, health reinsurance, facultative underwriting, product development, and financial solutions. To learn more about RGA and its businesses, visit the Company's website at www.rgare.com.

About TAI

Improving Administrative Efficiency While Reducing Operational and Financial Risk

Over 115 clients worldwide and over 90% of the top 50 insurers in North America trust TAI software for their life reinsurance administration.

A dedicated team of reinsurance experts who have performed over 100 engagements to support insurers and reinsurers in full-time administration, identifying treaty data discrepancies, system projects, and analyzing operational processes and compliance.

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, datadriven 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 nongovernmental 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.

Harnessing its peer-reviewed research, leading-edge technologies, new data tools and innovative practices, the Institute seeks to understand the underlying causes of risk and the possible outcomes. The Institute develops objective research spanning a variety of topics with its <u>strategic research programs</u>: aging and retirement; actuarial innovation and technology; mortality and longevity; diversity, equity and inclusion; health care cost trends; and catastrophe and climate risk. The Institute has a large volume of <u>topical research available</u>, including an expanding collection of international and market-specific research, experience studies, models and timely research.

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