

Performance Update

As of October 31, 2021

The Blue Chip Company's
Variable Universal Life (BCVUL)
variable life insurance

- Not a bank or credit union deposit or obligation
- Not insured by any federal government agency
- Not FDIC or NCUA-insured
- Not guaranteed by any bank or credit union
- May go down in value

The Blue Chip Company's Variable Universal Life (BCVUL)

The Blue Chip Company's Variable Universal Life ("BCVUL") is a permanent life insurance policy that combines death benefit protection with the opportunity to accumulate policy value through investments in a separate account with underlying investment funds, and a guaranteed principal account. This report gives information only about the performance of the investment options available through the policy. It does not give, and should not be understood to give, information about the overall performance of any BCVUL policy. **It is strongly urged that you request a current illustration of policy values from your financial representative to see how policy charges can impact the performance of your policy.** The illustration will reflect the deduction of mortality and expense risk charges, premium expense charges, surrender charges, and the monthly administrative, face amount, and insurance charges as well as any applicable rider charges specific to your policy. To request an illustration, simply contact your personal financial representative.

The investment performance figures in this report are based on actual historical performance of the investment options for the periods shown, including for those time periods that begin prior to this policy's availability date. In most states, the policy first became available on October 25, 1994. For periods of one year or less, the total return is not annualized. For periods greater than one year, the average annual total return for the time periods is shown.

Past performance is no indication of future results. This update contains the most recent month-end performance. Since performance changes daily, the current performance may be lower or higher than the performance reflected in this update. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. For the most recent month-end performance information, visit our website at www.massmutual.com or call the MassMutual Customer Service Center at (800) 688-9906, 7:30 a.m. to 5:00 p.m. (CST).

Investing involves risk, including the loss of principal. Each investment choice underlying the policy has broad risks that apply to all investment choices, such as market risk, as well as specific risks inherent in particular types of investment choices that may subject your policy to greater risk and volatility than the general market.

This material must be preceded or accompanied by the [current prospectuses \(or summary prospectuses, if available\) for the BCVUL underlying investment funds](#). The funds' prospectuses contain more information about the funds' charges, expenses, risks and investment objectives. Please read the prospectuses carefully before investing or sending money. If you wish to receive additional prospectuses, request them from your personal financial representative or call the MassMutual Customer Service Center at (800) 688-9906, 7:30 a.m. to 5:00 p.m. (CST). Please note that BCVUL is closed to new business. Existing policy owners, however, may continue to make premium payments under existing policies.

Market Indices as of October 31, 2021

	YTD	1 Year	3 Years	5 Years	10 Years
S&P 500 Index	24.04%	42.91%	21.48%	18.93%	16.21%
MSCI ACWI Ex USA NR USD	8.43%	29.66%	12.00%	9.77%	6.66%
Russell 2000 Total Return Index	17.19%	50.80%	16.47%	15.52%	13.50%
Bloomberg U.S. Aggregate Bond Index	-1.58%	-0.48%	5.63%	3.10%	3.00%

Market indices have been provided for informational purposes only; they are unmanaged and reflect no fees or expenses. Individuals cannot invest directly in an index.

The Standard & Poor's 500 Index is an unmanaged measure of common stock total return performance in the U.S.

The Russell 2000 Total Return Index is a broad based, unmanaged index comprised of 2000 of the smallest U.S. domiciled company common stocks (on the basis of capitalization) that are traded in the United States on the New York Stock Exchange, the American Stock Exchange, and NASDAQ.

The Bloomberg U.S. Aggregate Bond Index is an unmanaged index of U.S. corporate bond issues, U.S. Government Securities and mortgage-backed securities.

Total Return Rates — Investment Funds

Total Returns for each fund are the actual historical rates and are net of all fund management fees and other operating expenses. **These returns do not reflect the Separate Account Mortality and Expense Risk Charges or policy charges.** Policy charges include: premium expense charges, surrender charges, and the monthly administrative, face amount, and insurance charges. If these charges were deducted, the returns would be significantly lower.

Asset Category	Investment Fund	Fund Inception Date	Endnotes	Cumulative YTD	Average Annual			
					1 Year	3 Years	5 Years	10 Years
Money Market	Fidelity® VIP Government Money Market (Initial Class) <i>7-day yield: 0.01%</i>	4/1/1982	1	0.01%	0.01%	0.89%	0.94%	0.51%
Fixed Income	Fidelity® VIP High Income (Initial Class)	9/19/1985		3.68%	8.93%	5.85%	5.18%	5.54%
	Invesco V.I. Core Bond (Series I)	4/3/1985	**	-1.40%	0.27%	6.34%	3.71%	4.32%
Balanced	Invesco V.I. Conservative Balanced (Series I)	2/9/1987	**	9.68%	17.19%	12.94%	8.95%	8.22%
Large Cap Blend	Invesco V.I. Main Street (Series I)	7/5/1995	**	24.12%	40.35%	19.88%	16.36%	14.89%
International / Global	Fidelity® VIP Overseas (Initial Class)	1/28/1987		-14.81%	-14.81%	1.76%	0.07%	6.48%

1 An investment in the Fund is neither insured nor guaranteed by the Federal Deposit Insurance Corporation or by any other government agency. Although the Fund seeks to maintain a stable net asset value per share, it is possible to lose money by investing in the Fund.

The yield quotation more closely reflects the current earnings of the Fund than the total return quotation. It is an annualized rate based on results over the last seven days of the period.

** Formerly known as Invesco Oppenheimer V.I. Total Return Bond Fund.

** Formerly known as Invesco Oppenheimer V.I. Conservative Balanced Fund.

** Formerly known as Invesco Oppenheimer V.I. Main Street Fund.

The Blue Chip Company's Variable Universal Life (BCVUL) (Policy Form VUL-94 in most states and VUL-94NC in North Carolina) was issued by Massachusetts Mutual Life Insurance Company (MassMutual) in all states. BCVUL is no longer sold.

Principal Underwriters:

MML Investors Services, LLC
MML Strategic Distributors, LLC

Subsidiaries of Massachusetts Mutual Life Insurance Company, 1295 State Street, Springfield, MA 01111-0001

© 2021 Massachusetts Mutual Life Insurance Company. All rights reserved.