



The Penn Mutual Life Insurance Company Variable Life Insurance Fund Performance

The funds listed below are the underlying investment vehicles for the separate account funding Penn Mutual's variable universal life insurance products and are not available to the public for direct investment. The performance results shown below reflect fund level fees and expenses, and reinvestment of dividends and distributions. Returns do not include any policy fees or expenses, which include premium loads, cost of insurance, policy administrative fees and charges, mortality and expense risk charges, surrender charges, or any other charges that may be incurred under the policy. Returns would have been lower after all policy fees and expenses are deducted. Policy fees and expenses vary by product, and some fees and expenses, such as cost of insurance, will vary according to insured's age, sex distinct or unisex rates, smoking status, face amount, and any applicable substandard rating.

This information should be preceded or accompanied by a prospectus for the relevant life insurance contract and its underlying investment options. Please refer to the prospectus for detailed information. Your personalized illustration, which reflects the effect of policy fees and expenses with a hypothetical rate of return, and is available from your registered representative. The performance data quoted is past performance and is not indicative of future results. The investment return and principal value of the investment options will fluctuate so that units, if redeemed, may be worth more or less than their original cost. For current month-end performance of all investment options available through Penn Mutual's variable universal life insurance products, see www.pennmutual.com.

Fund	Adviser/Sub-Adviser	Inception Date	For Period Ending 8/31/2019									For Quarter Ending 6/30/2019			
			Percent Change			Average Annual Total Returns						Average Annual Total Returns			
			1 Mth	3 Mth	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception	1 Yr	5 Yr	10 Yr	Since Inception	
† Aggressive Allocation Fund	Penn Mutual Asset Management, LLC	8/25/2008	-2.11%	3.80%	13.24%	-0.61%	7.26%	5.35%	9.24%	6.48%	5.23%	6.00%	10.65%	6.82%	
† Moderately Aggressive Allocation Fund	Penn Mutual Asset Management, LLC	8/25/2008	-1.64%	3.86%	12.97%	0.69%	7.17%	5.40%	8.64%	6.91%	5.85%	5.91%	9.84%	7.18%	
† Moderate Allocation Fund	Penn Mutual Asset Management, LLC	8/25/2008	-0.75%	3.88%	12.14%	2.67%	6.43%	5.09%	7.52%	5.96%	6.23%	5.35%	8.38%	6.12%	
† Moderately Conservative Allocation Fund	Penn Mutual Asset Management, LLC	8/25/2008	0.24%	3.67%	10.71%	4.95%	5.44%	4.52%	6.17%	5.18%	6.77%	4.55%	6.71%	5.23%	
† Conservative Allocation Fund	Penn Mutual Asset Management, LLC	8/25/2008	0.97%	3.25%	8.93%	6.28%	4.33%	3.71%	4.59%	4.20%	6.58%	3.55%	4.82%	4.15%	
¹ Penn Series Large Growth Stock Fund	T. Rowe Price	6/1/1983	-1.95%	6.02%	19.82%	2.59%	17.01%	12.47%	15.27%	8.53%	8.42%	13.47%	16.36%	8.61%	
² Penn Series Large Core Growth Fund	Morgan Stanley Investment Management	8/25/2008	-2.28%	4.78%	26.15%	9.28%	19.30%	12.58%	14.35%	9.91%	16.79%	13.50%	15.73%	10.29%	
³ Penn Series Large Cap Growth Fund	MFS Investments	5/1/2002	-0.84%	9.04%	26.65%	13.01%	16.87%	12.79%	11.82%	5.84%	19.63%	12.79%	12.74%	5.85%	
Penn Series Large Core Value Fund	Eaton Vance	8/25/2008	-2.56%	5.79%	17.63%	2.25%	9.95%	6.77%	10.23%	6.82%	11.78%	7.57%	11.62%	7.11%	
⁴ Penn Series Large Cap Value Fund	AllianceBernstein, LP	3/1/1987	-3.09%	3.77%	11.17%	-2.02%	7.54%	5.15%	9.44%	8.42%	6.37%	6.19%	11.04%	8.57%	
⁵ Penn Series Mid Cap Growth Fund	Ivy Investment Management	5/1/2000	-3.26%	8.64%	26.99%	5.09%	16.90%	10.75%	13.07%	4.66%	14.19%	11.20%	14.77%	4.74%	
Penn Series Mid Cap Value Fund	Neuberger Berman	5/1/2000	-6.15%	1.71%	7.79%	-13.77%	4.53%	3.64%	10.58%	8.07%	-4.71%	5.25%	13.23%	8.49%	
⁶ Penn Series Mid Core Value Fund	American Century	5/1/2002	-2.79%	4.37%	15.39%	-3.36%	6.38%	7.01%	12.09%	7.56%	3.39%	7.88%	13.67%	7.78%	
⁷ Penn Series SMID Cap Growth Fund	Goldman Sachs	8/25/2008	-1.47%	7.34%	27.24%	4.62%	15.91%	10.11%	13.84%	11.04%	13.84%	10.65%	15.16%	11.39%	
Penn Series SMID Cap Value Fund	AllianceBernstein, LP	8/25/2008	-5.16%	1.07%	7.86%	-13.46%	4.63%	4.25%	11.38%	8.93%	-5.39%	5.42%	13.65%	9.65%	
⁸ Penn Series Small Cap Growth Fund*	Janus Capital	5/1/1997	-4.25%	2.96%	20.46%	-3.74%	12.84%	10.65%	11.18%	9.14%	6.87%	11.43%	12.60%	9.41%	
⁹ Penn Series Small Cap Value Fund*	Goldman Sachs	3/1/1995	-5.19%	1.99%	-5.25%	-10.82%	5.82%	5.34%	11.93%	9.77%	-2.00%	6.08%	13.99%	10.07%	
Penn Series Flexibly Managed Fund	T. Rowe Price	7/23/1984	-0.34%	4.94%	17.64%	10.06%	10.95%	9.82%	11.91%	12.20%	15.38%	10.18%	12.79%	12.28%	
† Penn Series Balanced Fund	Penn Mutual Asset Management, LLC	8/25/2008	0.09%	5.71%	14.64%	5.61%	8.81%	7.25%	9.40%	7.98%	9.44%	7.48%	10.14%	8.05%	
¹⁰ Penn Series Index 500 Fund	State Street Global Advisors	5/1/2000	-1.63%	6.77%	18.10%	2.59%	12.32%	9.72%	13.07%	5.50%	10.59%	10.49%	14.40%	5.60%	
Penn Series Small Cap Index Fund*	State Street Global Advisors	8/25/2008	-4.99%	2.22%	11.30%	-13.37%	7.17%	5.69%	10.91%	7.72%	-4.25%	6.40%	12.76%	8.32%	
Penn Series Developed International Index Fund**	State Street Global Advisors	8/25/2008	-1.88%	1.68%	9.17%	-3.75%	5.16%	1.21%	4.46%	2.69%	1.90%	1.61%	6.37%	3.15%	
Penn Series International Equity Fund**	Vontobel Asset Management	11/1/1992	0.08%	6.44%	19.16%	5.65%	7.90%	5.14%	8.43%	8.04%	6.82%	5.19%	9.08%	8.10%	
¹¹ Penn Series Emerging Markets Equity Fund**	Morgan Stanley Investment Management	8/25/2008	-3.42%	0.84%	4.92%	-3.40%	2.89%	-0.61%	3.49%	1.67%	1.78%	0.95%	5.07%	2.18%	
¹² Penn Series Real Estate Securities Fund***	Cohen & Steers	5/1/2002	5.73%	10.05%	30.97%	19.20%	8.49%	10.13%	13.79%	9.71%	14.97%	10.13%	13.79%	9.71%	
† Penn Series Money Market Fund****	Penn Mutual Asset Management, LLC	7/15/1983	0.14%	0.43%	1.19%	1.72%	0.57%	0.34%	0.17%	3.51%	1.45%	0.29%	0.15%	3.52%	
<i>The Penn Series Money Market Fund 7-day yield was 1.74%. The yield more closely reflects the current earnings of the Money Market Fund than the 1-year total return.</i>															
† Penn Series Limited Maturity Bond Fund	Penn Mutual Asset Management, LLC	5/1/2000	0.90%	1.59%	4.32%	5.01%	2.55%	2.10%	1.78%	3.16%	4.37%	1.89%	1.78%	3.13%	
† Penn Series Quality Bond Fund	Penn Mutual Asset Management, LLC	3/1/1987	2.75%	4.27%	9.89%	10.27%	3.96%	3.91%	4.03%	6.12%	7.72%	3.42%	3.95%	6.05%	
¹³ Penn Series High Yield Bond Fund*****	Penn Mutual Asset Management, LLC	7/23/1984	1.09%	4.03%	12.34%	8.63%	6.59%	4.98%	7.99%	8.26%	9.13%	4.61%	8.54%	8.25%	

† Fund manager became known as Penn Mutual Asset Management, LLC on 7/1/16. ¹ Fund manager changed to T. Rowe Price Associates on 8/1/04. Large Growth Stock's name, prior to 8/25/08 was Growth Stock. ² Fund manager changed to Morgan Stanley Investment Management on 12/1/16. ³ Fund manager changed to MFS Investments on 5/1/13. ⁴ Fund manager changed to Loomis Sayles on 5/1/13, and changed to AllianceBernstein, LP on 10/1/18. ⁵ Fund manager changed to Ivy Investment Management on 5/1/14. ⁶ Fund manager changed to American Century on 5/1/13. Prior to 8/25/08, the Mid Core Value Fund was known as the Strategic Value Fund. ⁷ Fund manager changed to Goldman Sachs Asset Management, LP, on 12/1/16. ⁸ Fund manager changed to Janus Capital on 5/1/13. ⁹ Fund manager changed to Goldman Sachs Asset Management, LP, on 8/1/04. ¹⁰ Fund manager changed to State Street Global Advisors on 8/25/08. ¹¹ Fund manager became known as Morgan Stanley Investment Management on 5/1/10. ¹² Fund manager changed to Cohen & Steers Capital Management on 5/1/2011. Prior to 5/1/2011, the Real Estate Securities Fund was known as the REIT Fund. ¹³ Fund manager changed to Penn Mutual Asset Management, LLC on 5/1/18.

These returns assume that the investment portfolios were available under the contract since their respective inception dates.

*Investing in small companies involves greater risk than is customarily associated with more established companies, due to increased volatility, less liquidity and less publicly available information.

**International investing involves certain risks including political and economic uncertainties, in addition to currency price fluctuations not inherent in domestic investing.

***REITs involve risks such as refinancing, economic impact on industry, changes in property values, dependency on management skills and risks similar to small company investing.

****An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

*****High-yield bonds are subject to greater fluctuations in value and risk of loss of income and principal.

Penn Mutual's variable products are primarily offered through Hornor, Townsend & Kent, Inc. (HTK), Registered Investment Advisor, Member FINRA/SIPC, 600 Dresher Road, Horsham, PA 19044, 215-957-7300. HTK is a wholly owned subsidiary of The Penn Mutual Life Insurance Company.