

A background graphic featuring a bar chart with varying bar heights and several percentage symbols scattered across the upper half of the page.

# 5th Annual

ISSUE 1

2017 SUN LIFE STOP-LOSS RESEARCH REPORT

Top 10 catastrophic claims conditions  
and million-dollar+ claimants



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This year, in celebration of our fifth anniversary of publication, we'll be issuing a series of research reports. Stay tuned for Issue 2, coming later in the year.



## Executive summary

This is the fifth year that Sun Life has published a research report about stop-loss catastrophic claims data. Combined, these reports provide a unique data perspective, based on a total of 53,000 claimants and \$4.5B in stop-loss reimbursements (covering information from 2009 through 2016). In this year's report, we will augment our standard four-year timeframe with some longer views to see how things have changed over time. We remain committed to providing educational insights for the self-funded community based on our analysis of claims data.

The total of all Sun Life Stop-Loss claims reimbursements from 2013 to 2016 was \$2.7 billion. If those stop-loss claims reimbursements are added to first-dollar catastrophic claims costs (the amount that employers pay before reaching the stop-loss deductible), the overall cost for catastrophic conditions was \$6.1 billion. The study included claims data from Sun Life Stop-Loss policyholders that range in size from approximately 50 to over 100,000 employees and that are located across the U.S.

Here are the key findings:

- The top 10 **costliest claims conditions** comprised over half (51.7%) of the \$2.7 billion in claims that Sun Life reimbursed to stop-loss policyholders from 2013 to 2016.
- **Cancer** continues to be the most costly catastrophic illness. Costs increased and represented over one quarter (26.7%) of all stop-loss claims reimbursements during the four-year period.
- **Kidney disease** held at #3, but average costs continued to drop.
- The **top 4 conditions** remained relatively steady; the movement in the remaining conditions was most likely a result of standard fluctuation.
- Although **transplants** went up only one position when compared to last year's report, as a condition it is climbing overall—it was only #11 in the 2015 report (covering 2011–2014 data).
- **Million-dollar+ claimants** were up 26% compared to 2012–2015. In 2016, this group represented only 2.2% of claimants but accounted for 23% of all stop-loss claims reimbursements.





# NATIONAL CATASTROPHIC TOP 10 claims conditions

Rank	Medical condition	Value of stop-loss claims reimbursements 2013–2016	Percentage of total stop-loss claims reimbursements 2013–2016	Change* (compared to 2012–2015)	Percentage of employers with at least one stop-loss claim for this condition
1	Malignant neoplasm (cancer)	\$487.4M	18.4%	↓	48.7%
2	Leukemia/lymphoma/multiple myeloma (cancers)	\$219.2M	8.3%	↑	17.6%
3	Chronic/end-stage renal disease (kidneys)	\$148.3M	5.6%	↓	16.4%
4	Congenital anomalies (conditions present at birth)	\$108.9M	4.1%	No material change	10.8%
5	Transplant	\$81.6M	3.1%	↑	6.9%
6	Disorders relating to short gestation and low birth weight (premature birth)	\$75.9M	2.9%	↓	7.0%
7	Septicemia (infection)	\$69.7M	2.6%	↑	9.9%
8	Complications of surgical and medical care	\$62.9M	2.4%	↑	13.5%
9	Cerebrovascular disease (brain blood vessels)	\$58.8M	2.2%	↓	10.9%
10	Pulmonary collapse/respiratory failure (lungs)	\$57.4M	2.2%	↓	10.6%
<b>Total payments</b>					
<b>Top 3 conditions</b>					
<b>32.3%</b>					
<b>51.7%</b>					
<b>of all catastrophic claims were top 10 conditions</b>					
<b>Top ten total</b>		<b>\$1.4B</b>	<b>51.7%</b>	<b>↓ 1.3%</b>	<b>70.0%</b>

\*In percentage of total stop-loss claims reimbursements

Source: 2013-2016 Sun Life Stop-Loss claims reimbursements that Sun Life provided to its policyholders.

Figure 1



## The top 10 across time and industry

The national top 10 catastrophic claims conditions represented 51.7% of all stop-loss claims reimbursements. During 2013–2016, conditions remained generally consistent in the top four positions, but there was movement in the remaining six slots, compared to last year’s study covering 2012–2015.

Cancer continued its leading position, accounting for 26.7% of all the total stop-loss claims and totaling \$707 million in stop-loss reimbursements. Chronic/end-stage renal disease (kidneys) retained its #3 position. Transplants continued its upward trend, moving up one spot and pushing disorders relating to short gestation and low birthweight (premature birth) down a spot. Congestive heart failure dropped out of the top 10 from #7 to #11. Septicemia (infection) moved up three spots. Cerebrovascular disease (brain blood vessels) and pulmonary collapse/respiratory failure (lungs) each

dropped down one spot. Complications of surgical and medical care moved up three spots.

These data mirror what we have seen in the past eight years. Cancer is dominant through time, across industries, and over geographic regions. Transplants have increased. Kidney disease has dropped in cost but remains strong in incidence. The rank of the remaining conditions varies slightly and seems to be largely a function of normal fluctuation rather than an indication of a consistent trend.

As this is the fifth year we’re publishing a research report, we’re taking a deeper look across the study periods and industries. We’ll delve into breast cancer (showing a geographic perspective) and provide highlights about kidney disease and transplants. Next, we’ll share expanded information about million-dollar+ claimants.

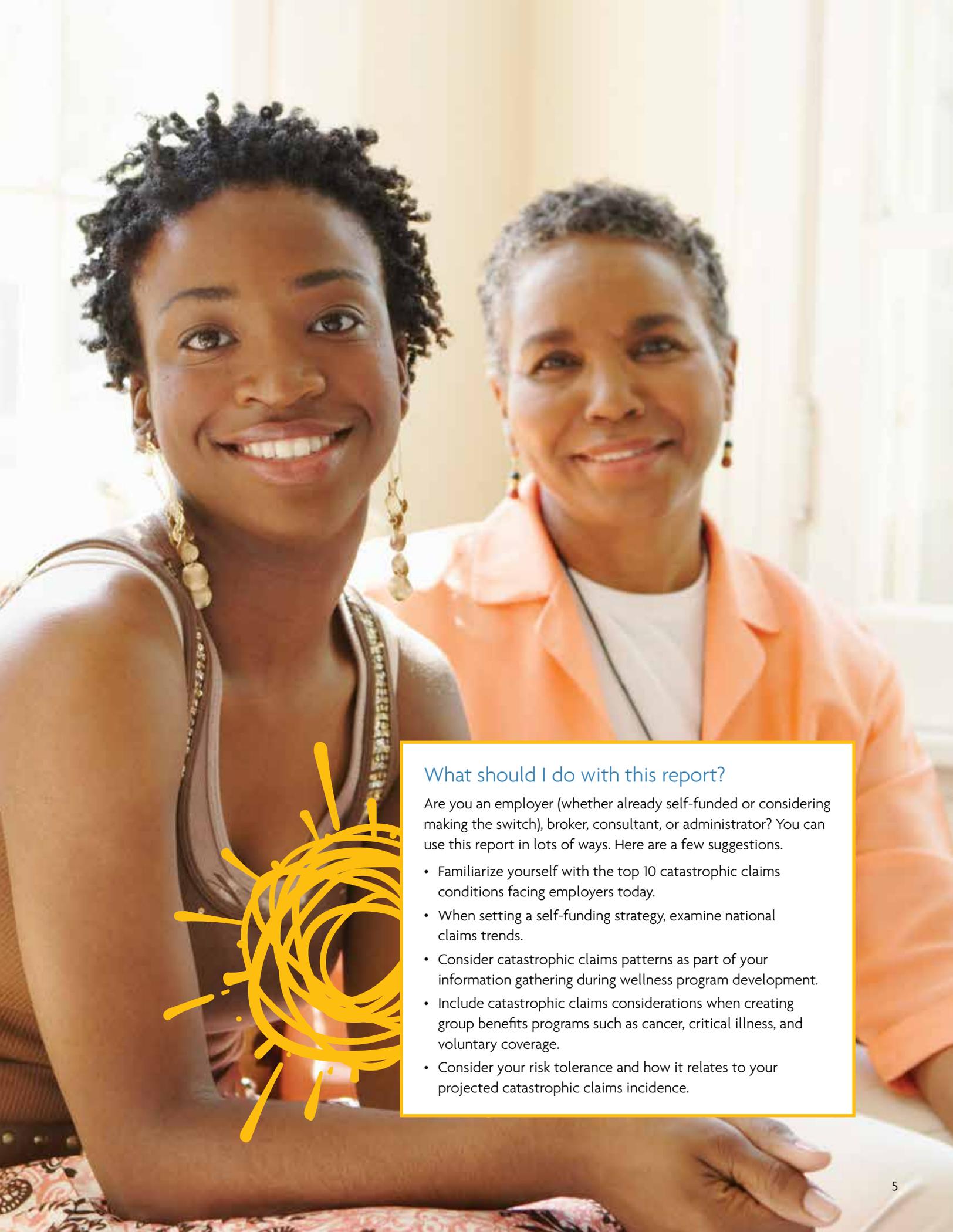
## Eight years of catastrophic claims conditions

### Conditions over time

Based on stop-loss reimbursements, all conditions in the current national top 10 list have appeared in the top 20 catastrophic claim conditions over the past eight years. We have collected data from all of our past research reports to show how some conditions remain constant and some move over time.

Medical condition	2009	2010	2011	2012	2013	2014	2015	2016	2013–2016
Malignant neoplasm (cancer)	1	1	1	1	1	1	1	1	1
Leukemia, lymphoma, and/or multiple myeloma (cancers)	2	3	3	3	2	2	2	2	2
Chronic/end-stage renal disease (kidneys)	3	2	2	2	3	3	3	3	3
Congenital anomalies (conditions present at birth)	6	5	4	4	4	4	5	4	4
Transplant	5	11	15	17	10	5	4	5	5
Disorders relating to short gestation and low birthweight (premature birth)	4	4	5	6	5	6	6	13	6
Septicemia (infection)	13	9	12	10	11	7	7	6	7
Complications of surgical and medical care	12	6	6	13	13	9	12	8	8
Cerebrovascular disease (brain blood vessels)	8	8	7	7	7	10	8	10	9
Pulmonary collapse/respiratory failure (lungs)	11	7	11	8	9	8	10	14	10
Congestive heart failure	9	15	8	5	6	11	11	17	11
Hemophilia/bleeding disorder	21	21	13	12	17	15	9	9	12
Liveborn (newborn)	14	18	9	9	20	14	13	7	13
Dorsopathies (spine)	7	10	10	14	14	13	17	11	14
Diseases of the blood and blood-forming organs	18	12	16	11	8	17	14	15	15
Other metabolic and immunity disorders	26	22	22	27	18	16	16	12	16
Cystic fibrosis	29	28	18	20	15	12	15	19	17
Respiratory distress syndrome, fetus or newborn (lungs)	23	26	25	25	12	18	22	21	18
Coronary atherosclerosis (heart)	10	14	17	15	16	23	21	22	19
Other respiratory conditions of fetus and newborn (lungs)	20	13	20	23	25	19	23	18	20

Figure 2



### What should I do with this report?

Are you an employer (whether already self-funded or considering making the switch), broker, consultant, or administrator? You can use this report in lots of ways. Here are a few suggestions.

- Familiarize yourself with the top 10 catastrophic claims conditions facing employers today.
- When setting a self-funding strategy, examine national claims trends.
- Consider catastrophic claims patterns as part of your information gathering during wellness program development.
- Include catastrophic claims considerations when creating group benefits programs such as cancer, critical illness, and voluntary coverage.
- Consider your risk tolerance and how it relates to your projected catastrophic claims incidence.

### Each industry has its own top 10

You can see in the tables below that each industry had its own list of top 10 catastrophic conditions, based on stop-loss reimbursements. Note that certain conditions appear in a particular industry and not another. In addition, you can see that there are conditions that do not appear in the national top 10—such as hemophilia and other bleeding disorders—that do appear in the top 10 of particular industries including educational services, engineering services, holding and other investment offices, and wholesale trade—durable goods.

The appearance of a claim category within an industry's top 10 list is a result of many factors. Those factors can include the tendency of certain diagnoses to be more prevalent in certain industries, the mix of employers within Sun Life's portfolio, and the variability of severity inherent in catastrophic claims.

The top 10 participating industries all shared some conditions with the national list of catastrophic conditions. Usually, those conditions showed up in a different rank. There was one notable exception. Across the top 10 participating industries in the study, malignant neoplasm (cancer) was #1.

### The interplay of national top 10 versus industry top 10

- A national top 10 catastrophic condition
- An industry top 10 catastrophic condition

Industry rank	Health services	Educational services	Engineering services	Executive, legal, general, government	Retail
1	Malignant neoplasm	Malignant neoplasm	Malignant neoplasm	Malignant neoplasm	Malignant neoplasm
2	Leukemia, lymphoma, and/or multiple myeloma	Leukemia, lymphoma, and/or multiple myeloma	Leukemia, lymphoma, and/or multiple myeloma	Leukemia, lymphoma, and/or multiple myeloma	Diseases of the blood and blood-forming organs
3	Congenital anomalies	Chronic/end-stage renal disease	Hemophilia/bleeding disorder	Chronic/end-stage renal disease	Leukemia, lymphoma, and/or multiple myeloma
4	Chronic/end-stage renal disease	Congenital anomalies	Transplant	Congenital anomalies	Chronic/end-stage renal disease
5	Disorders relating to short gestation and low birthweight	Transplant	Chronic/end-stage renal disease	Disorders relating to short gestation and low birthweight	Respiratory distress syndrome, fetus or newborn
6	Transplant	Hemophilia/bleeding disorder	Congenital anomalies	Septicemia	Symptoms, signs, and abnormal clinical and laboratory findings
7	Cerebrovascular disease	Septicemia	Disorders relating to short gestation and low birthweight	Complications of surgical and medical care	Other respiratory conditions of fetus and newborn
8	Pulmonary collapse/respiratory failure	Cystic fibrosis	Complications of surgical and medical care	Pulmonary collapse/respiratory failure	Acute myocardial infarction
9	Septicemia	Congestive heart failure	Septicemia	Cerebrovascular disease	Congenital anomalies
10	Liveborn	Complications of surgical and medical care	Liveborn	Dorsopathies	Congestive heart failure

Figure 3a



Industry rank	Holding and other investment offices	Wholesale trade—durable goods	Wholesale trade—nondurable goods	Business services—computer services	Manufacturing—electrical and electronic
1	Malignant neoplasm	Malignant neoplasm	Malignant neoplasm	Malignant neoplasm	Malignant neoplasm
2	Chronic/end-stage renal disease	Leukemia, lymphoma, and/or multiple myeloma	Leukemia, lymphoma, and/or multiple myeloma	Leukemia, lymphoma, and/or multiple myeloma	Leukemia, lymphoma, and/or multiple myeloma
3	Leukemia, lymphoma, and/or multiple myeloma	Chronic/end-stage renal disease	Hemophilia/bleeding disorder	Congenital anomalies	Septicemia
4	Hemophilia/bleeding disorder	Transplant	Chronic/end-stage renal disease	Congestive heart failure	Diseases of the blood and blood-forming organs
5	Chronic pulmonary heart disease	Septicemia	Pulmonary collapse/respiratory failure	Liveborn	Chronic/end-stage renal disease
6	Congenital anomalies	Diseases of the blood and blood-forming organs	Complications of surgical and medical care	Disorders relating to short gestation and low birthweight	Congenital anomalies
7	Septicemia	Dorsopathies	Other metabolic and immunity disorders	Respiratory distress syndrome, fetus or newborn	Pulmonary collapse/respiratory failure
8	Disorders relating to short gestation and low birthweight	Acute myocardial infarction	Septicemia	Transplant	Disorders relating to short gestation and low birthweight
9	Complications of surgical and medical care	Pneumonia	Diseases of the blood and blood-forming organs	Chronic/end-stage renal disease	Cerebrovascular disease
10	Dorsopathies	Cerebrovascular disease	Respiratory distress syndrome, fetus or newborn	Cerebrovascular disease	Burns

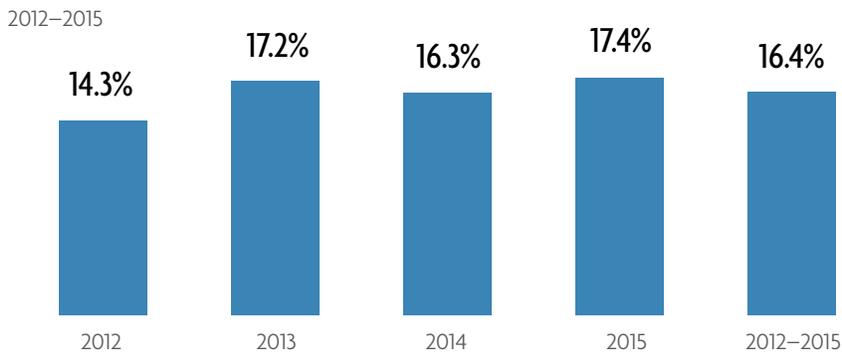
Figure 3b

# Breast cancer prevalence

Since 2013, breast cancer has been the leading malignant neoplasm diagnosis every year we've published a report (the 2013 report covered data going back to 2008). During the 2015 policy year, 17.4% percent of employers across the country had a plan member with a breast cancer diagnosis.



## Percentage of employers that had at least one breast cancer claimant



Methodology note: Because employer reimbursement incidence reporting requires calculating claims on a policy year basis, employer reimbursement incidence is based on stop-loss claims reimbursements attributable to stop-loss policy years from 2012 through 2015.

Figure 4



## Breast cancer rank among all cancer categories based on stop-loss deductible



Deductible ranges

Figure 5



## What does it cost?

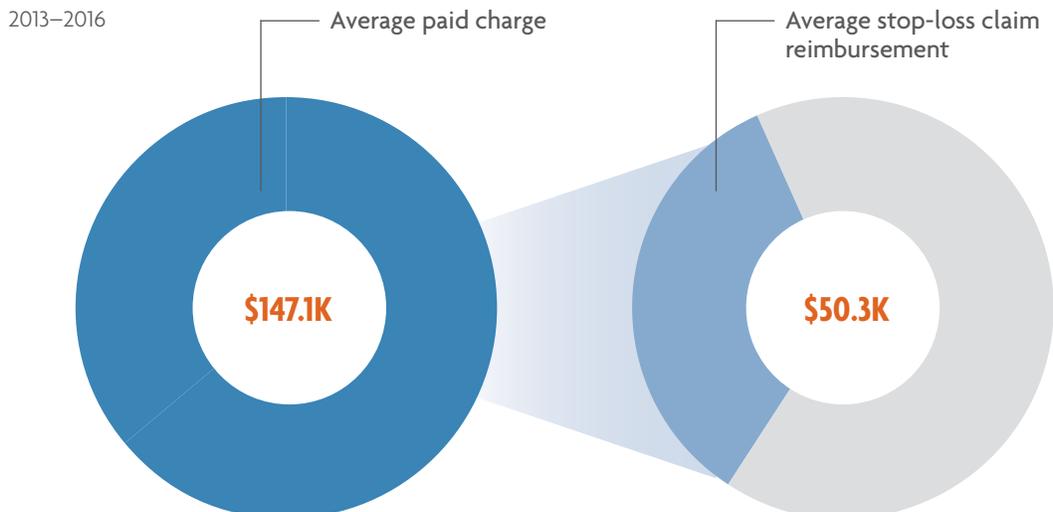


Figure 6

## Breast cancer, the leading malignant neoplasm condition across the nation

This map shows the breast cancer ranking in each region

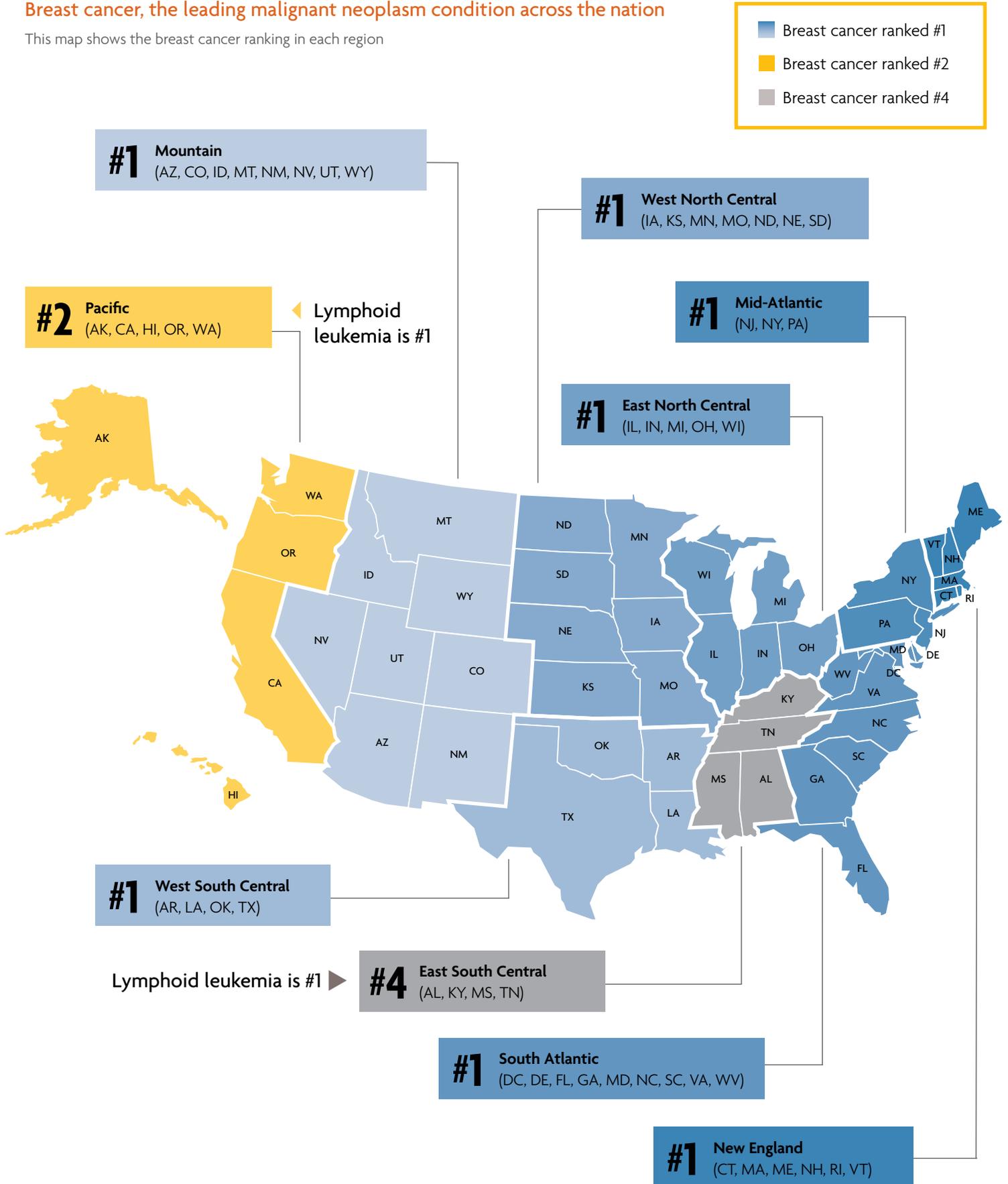


Figure 7

## Some breast cancer facts<sup>1</sup>

- Each year in the United States, about 220,000 cases of breast cancer are diagnosed in women and about 2,000 in men.
- About 40,000 women and 400 men in the U.S. die each year from breast cancer.
- Over the last decade, the risk of getting breast cancer has not changed for women overall, but the risk has increased for black women and Asian and Pacific Islander women.
- Black women have a higher risk of death from breast cancer than white women.
- The risk of getting breast cancer goes up with age.
- In the United States, the average age when women are diagnosed with breast cancer is 61.
- Men who get breast cancer are diagnosed usually between 60 and 70 years old.

1. Centers for Disease Control and Prevention website, Breast Cancer section, February 20, 2017, [https://www.cdc.gov/cancer/breast/basic\\_info/index.htm](https://www.cdc.gov/cancer/breast/basic_info/index.htm).



## Breast cancer in 2016<sup>2</sup>



2. National Institutes of Health website, National Cancer Institute, "Cancer Stat Facts: Female Breast Cancer," February 20, 2017, <https://seer.cancer.gov/statfacts/html/breast.html>.

# Kidney disease costs vary widely but drop overall

## Leads top 10 in difference between billed and paid charges

Compared to the rest of the top 10 catastrophic claims conditions, kidney disease shows the biggest difference—over 200%—among diseases with the highest spreads between billed and paid charges. It’s probable that there was a wide range in costs for two reasons: the variety of treatments for kidney disease—such as dialysis and kidney transplant—and the costs of those treatments. Both the treatment variety and the costs of treatment are in flux. During policy years 2012 through 2015, 16.4% of employers had a stop-loss kidney disease claimant covered in the medical plan.

## Costs trending downward

As a percentage of total stop-loss reimbursements, kidney disease cost is trending downward—it was 8.1% in 2009–2012 and 5.6% in 2013–2016. So, while kidney disease remains common and held its position as the #3 catastrophic claims condition, the average treatment cost for a catastrophic claim has gone down by 25% over the last four years.

Because a significant portion of the American population is at risk for this disease—one in three<sup>3</sup>—it seems likely that it will continue to produce a high number of claims.

## Average medical charges across the U.S., 2013–2016

Rank	Condition	Average paid charge	Average discount %	Percent of claims billed at 200% or more of paid charges
1	Malignant neoplasm (cancer)	\$135K	37%	26%
2	Leukemia/lymphoma/multiple myeloma (cancers)	\$221K	34%	20%
3	<b>Chronic/end-stage renal disease (kidneys)</b>	<b>\$205K</b>	<b>48%</b>	<b>41%</b>
4	Congenital anomalies (conditions present at birth)	\$179K	36%	22%
5	Transplant	\$270K	40%	26%
6	Disorders relating to short gestations and low birthweight (premature birth)	\$255K	33%	19%
7	Septicemia (infection)	\$174K	41%	32%
8	Complications of surgical and medical care, not elsewhere classified	\$99K	41%	29%
9	Cerebrovascular diseases (brain blood vessels)	\$122K	42%	28%
10	Pulmonary collapse/respiratory failure (lungs)	\$123K	42%	29%

**Billed charges:** The initial amount that a health care provider (such as a hospital) charges

**Paid charges:** The amount paid to the health care provider (such as a hospital) after discounts and other adjustments are applied

3. National Kidney Foundation website, “Kidney Disease: The Basics,” <https://www.kidney.org/news/newsroom/factsheets/KidneyDiseaseBasics>.

Figure 9

# Transplants keep climbing

Transplants continues its climb. There was a 78% increase in employers with transplant claimants from 2008 to 2015. The share of total stop-loss claims reimbursements for transplants rose from 2.7% in 2012–2015 to 3.1% in 2013–2016. Increases ranged from 8% for kidney transplants to approximately 30% each for lung and bone marrow/stem cell transplants.

Transplant claimants as a percentage of total claimants held fairly steady at around 2%. For 2013–2016, the average paid charge for transplants was \$270,000 (including first-dollar claims and stop-loss claims reimbursements), which was 13% higher than in 2012–2015.

In general, Sun Life study data seemed to reflect the increase in transplants in the U.S. overall. The Organ Procurement and Transplantation Network (OPTN) reported that “[o]rgan transplants performed in the United States in 2016 reached a new record high for the fourth consecutive year, according to preliminary data.” It further noted that in 2016, “33,606 transplants

were reported, representing an 8.5% increase over the 2015 total and an increase of 19.8% since 2012.”<sup>4</sup> OPTN reported a host of reasons why transplants have risen over recent years, including an increase in deceased donors, expanded criteria of organ donors, and quality process improvements.

## There are always additional costs with transplants

It’s important to note that all transplants—no matter what type—can include additional expenses. A few are listed below.

- Evaluation in order to be listed to receive a transplant
- Pre-transplant care and monitoring
- Unplanned pre-transplant hospitalization for acute care needs
- Post-transplant monitoring (such as diagnostic workups and additional office visits)
- Complications

## Transplant costs, 2013 to 2016

- Average stop-loss claims reimbursements
- Average paid charges
- Average billed charges

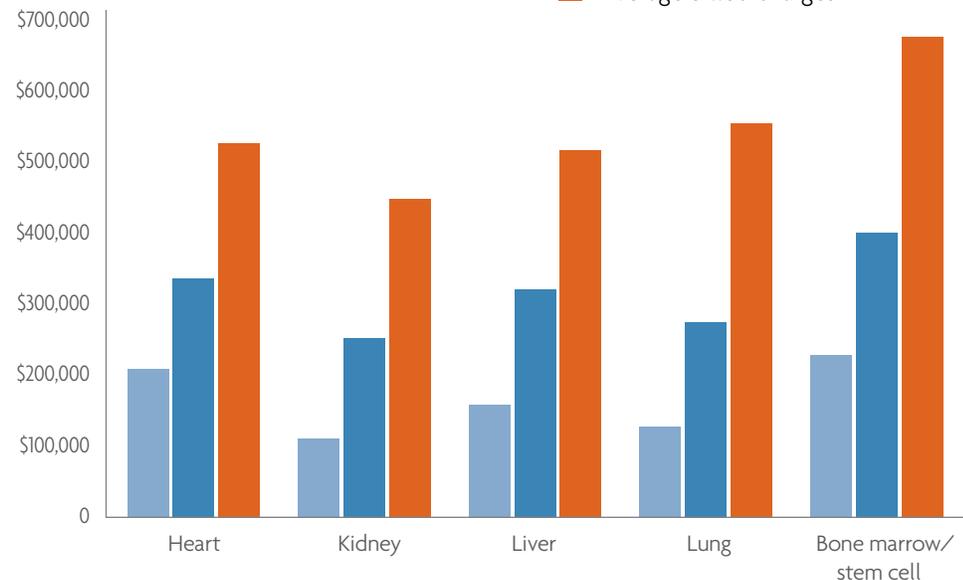
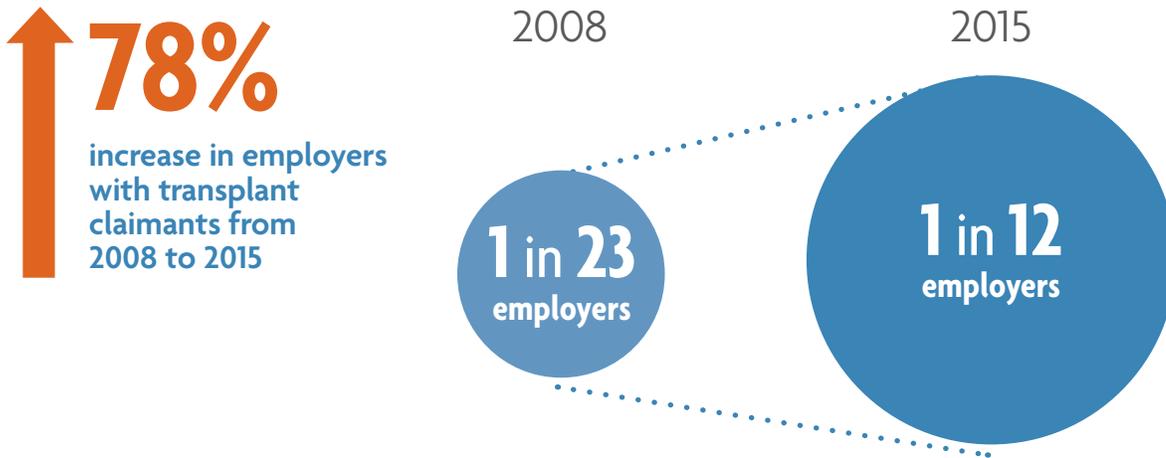


Figure 10

**Did you know?**  
The majority of bone marrow/stem cell transplants are used for cancer therapy.

4. U.S. Department of Health and Human Services, Organ Procurement and Transplantation Network website, News section, “US organ transplants and deceased donors set new records in 2016,” January 9, 2017, <https://optn.transplant.hrsa.gov/news/us-organ-transplants-and-deceased-donors-set-new-records-in-2016>.

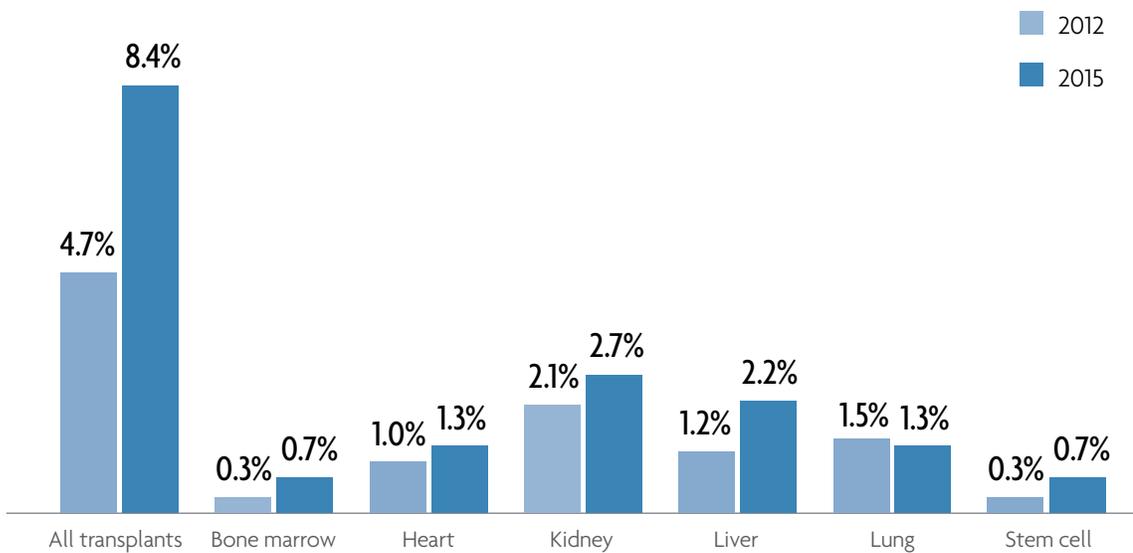
## Employers with at least one stop-loss transplant claimant



Methodology note: Because employer reimbursement incidence reporting requires calculating claims on a policy year basis, employer reimbursement incidence is based on stop-loss claims reimbursements attributable to stop-loss policy years from 2012 through 2015.

Figure 11

## Percentage of employers with particular types of transplant claimants from 2012 to 2015



Methodology note: Because employer reimbursement incidence reporting requires calculating claims on a policy year basis, employer reimbursement incidence is based on stop-loss claims reimbursements attributable to stop-loss policy years from 2012 through 2015.

Figure 12

# Million-dollar+ claimants up

The number of million-dollar+ claimants increased by 68% during the four-year study period of 2013–2016. In 2016, million-dollar+ claimants were only 2.2% of total claimants, but they accounted for 23% of total stop-loss claims reimbursements, which represented \$192.5M.

## Key markers within million-dollar+ claimants

The increase of high-dollar claims during the 2013–2016 timeframe could be due to a combination of the change to unlimited coverage, a mix of highest-cost conditions, employer size, claimant age, and high-cost intravenous medications’ paid charges. Here’s what we found:

- **Change to unlimited coverage**  
Before the Affordable Care Act (ACA) was signed into law in 2010, many Sun Life Stop-Loss policyholders had medical plans that included lifetime benefits limits. The ACA phased out annual dollar maximums and eliminated lifetime

limits for essential benefits on employer-sponsored medical coverage. Prior to this change, individuals experiencing catastrophic medical situations could exceed their benefits limit and lose their medical coverage. Now, due to the ACA provisions, covered members are able to continue to access the care they need.

Since 2009, Sun Life Stop-Loss policyholders have experienced an increase in claims of \$1 million or more. Although this increase was a result of several factors, including standard medical trend and innovations in health care, changes in medical plan attributes related to ACA requirements have also contributed. Looking at Sun Life data between 2009 and 2013, we found that the frequency of claimants with annual medical costs greater than \$1 million had more than doubled. Approximately 3.5% of the paid amount (first-dollar claims and stop-loss reimbursements) from

## From limited to unlimited coverage

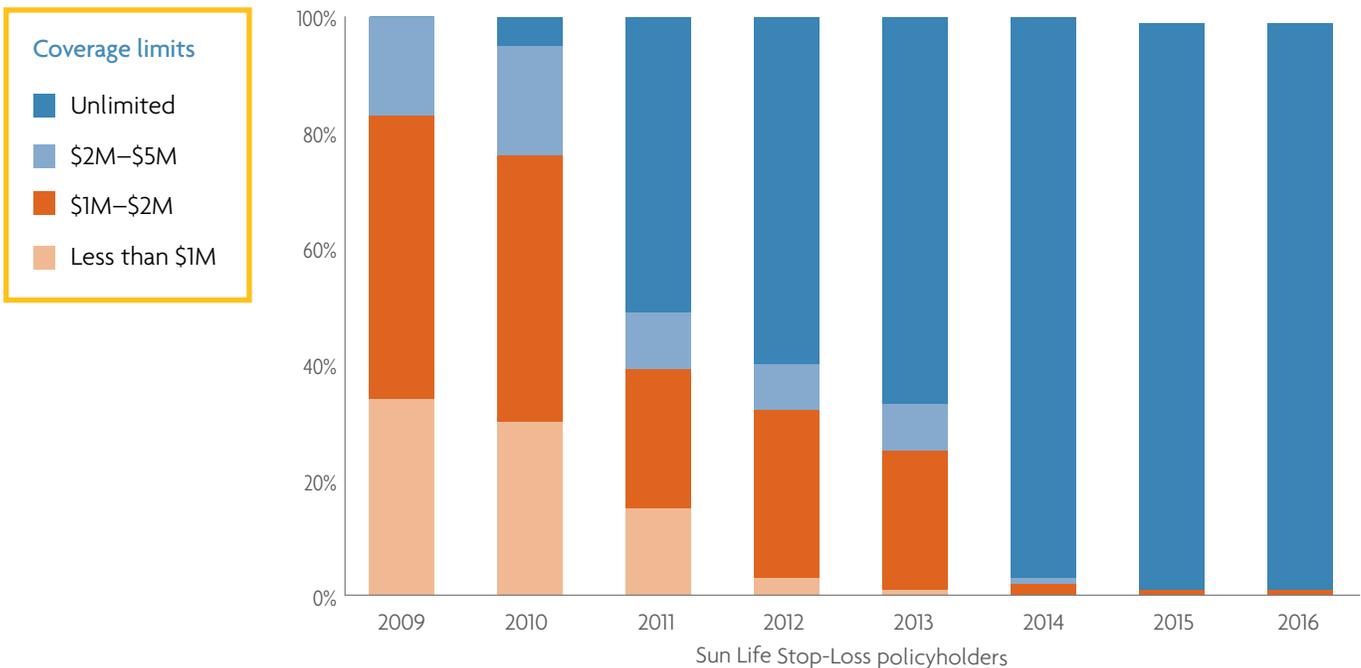


Figure 13

2013 to 2016 was attributable to claimants with \$2 million+ in annual claims. With the increased frequency of million-dollar claims, stop-loss insurance remains an important part of the self-funded employer's risk management strategy.

• **Mix of highest-cost conditions in common**

Highest-cost million-dollar+ medical conditions appeared in the national top 10 catastrophic claims conditions list. During 2013–2016, the top 3 highest-cost million-dollar claimant conditions were 1) leukemia, lymphoma, and/or multiple myeloma (cancers), 2) congenital anomalies (conditions present at birth), and 3) malignant neoplasm (cancer). These three conditions were #2, #4, and #1 in the national top 10 list. The higher frequencies associated with those conditions increased the overall likelihood that they would produce million-dollar+ reimbursements. It is important to note, however, that lower

frequency, higher-cost conditions (such as hemophilia) produced million-dollar+ stop-loss claims reimbursements. The top 3 million-dollar+ claimant conditions represented over 27.3% of all million-dollar claimant conditions and over \$228 million in paid charges.

• **Employer size**

Larger employers experience more million-dollar+ claims. While only 5.7% of employers had a million-dollar+ claimant, 33% of employers with 5,000+ covered lives had one. Conversely, less than 1% of employers with under 100 lives experienced a million-dollar+ claimant.

These data demonstrate that the larger the population an employer has, the greater the probability that there will be a million-dollar claimant.

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**Claimants with \$1 million+ claims**

	2013	2014	2015	2016
\$1–\$1.5M	71	80	107	130
\$1.5–\$2M	17	13	25	39
\$2–\$3M	20	10	16	16
\$3M+	6	1	5	7
<b>Total</b>	<b>114</b>	<b>104</b>	<b>153</b>	<b>192</b>
% of total claimants	1.9%	1.7%	1.9%	2.2%
<b>Paid stop-loss claims</b>	<b>\$129.8M</b>	<b>\$83.5M</b>	<b>\$146.3M</b>	<b>\$192.5M</b>
% of total paid stop-loss claims	23.6%	15.3%	20.3%	23.2%

Figure 14

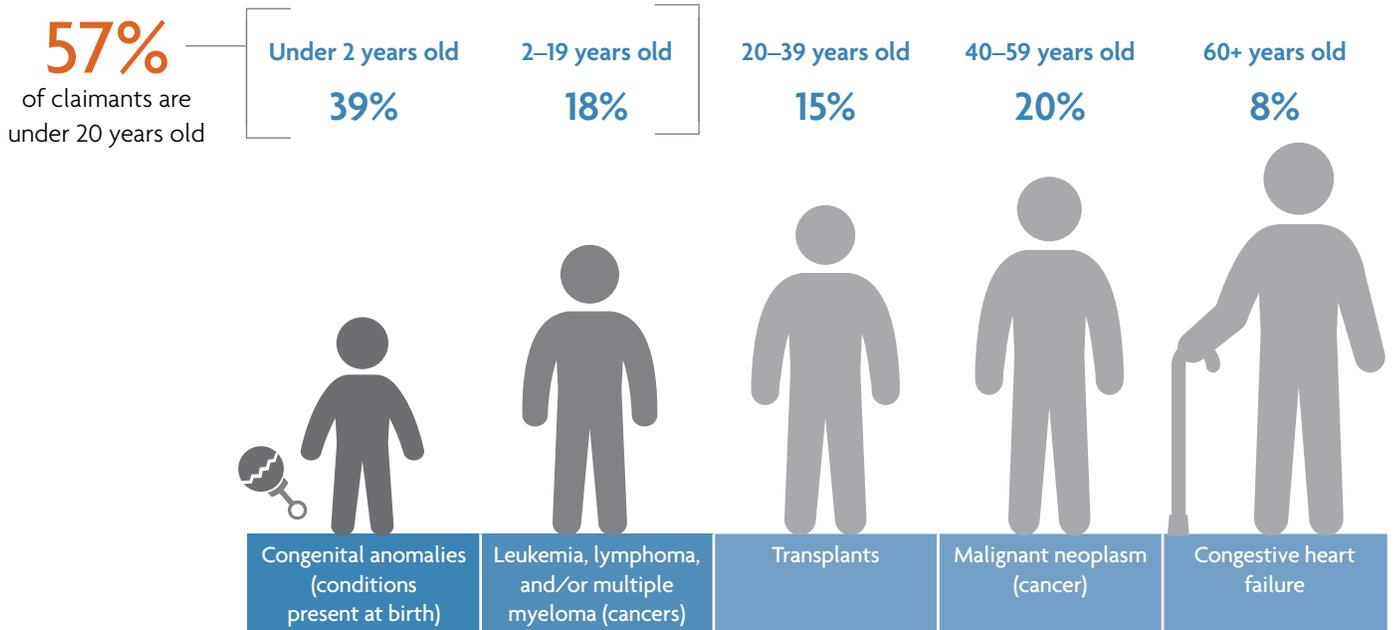
- Claimant age**  
 A significant portion of million-dollar+ claimants were children. Thirty-nine percent of million-dollar+ claimants were under age two, with 57% under age 20. For those under age two, the leading catastrophic condition was congenital anomalies (conditions present at birth). For those from age 2 to 19, the leading catastrophic condition was leukemia, lymphoma, and/or multiple myeloma (cancers). Only 8% of the million-dollar+ claimants were over age 60. For that age range, the leading catastrophic condition was congestive heart failure. It's probable that the overall number of catastrophic claimants over age 62 is reduced because members have reached the age when they are eligible to retire and can enroll in Medicare.
- High-cost intravenous medications**  
 High-cost intravenous medications can be a significant factor in the overall cost of million-

dollar+ claimants' medical bills. Often there are co-morbidities—multiple conditions occurring at the same time—that all require treatment and can require complex medical treatment plans. In addition, sometimes a rare condition might require specialty medications.

Forty-eight percent of the total paid charges of the top five highest-cost claimants were attributable to high-cost intravenous medications. Note that charges are the cost of first-dollar claims (claims that were below the stop-loss deductible) and the amount of the stop-loss claims reimbursements.

Of those paid million-dollar+ charges, the average first-dollar costs were over \$1.48 million, and the average stop-loss claims reimbursement was approximately \$981,000 per claimant, leaving an average net payment by employers of \$502,000 per million-dollar claimant.

Percentage of paid claims for million-dollar+ claimants by age



Leading catastrophic claims condition

Figure 15



## Some “million-dollar” facts

- Seven of the 10 highest-cost claimants were age 19 or under.
- For million-dollar+ claimants, birth-related conditions accounted for 19.8% of the paid claim costs in the study period but totaled only 8.7% in the national top 10 catastrophic list of paid claims.
- Of the 563 million-dollar+ claimants in the 2013–2016 study period, 45 of them generated more than \$1 million+ in high-cost intravenous medications.
- For million-dollar+ claimants, the drug with the highest average paid charges was Soliris at \$1.3M. Soliris is typically used to treat blood disorders.

### Million dollar+ claimants increase

	2013	2016
Number of million-dollar+ claimants	<b>114</b>	<b>192</b>
Number of million-dollar+ claimants with million-dollar+ prescription costs	<b>7</b>	<b>23</b>

Million-dollar+ claimants were up 26% compared to 2012–2015.

In 2016, this group represented only 2.2% of claimants but accounted for 23% of all stop-loss claims reimbursements.

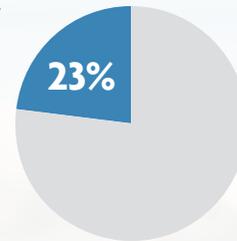


Figure 16



# Recommendations

Consider using any of the recommendations below for the catastrophic claims conditions we've highlighted in this report.

Type of claim	Recommendation
<p>Cancer</p> 	<ul style="list-style-type: none"> <li>• <b>Evaluate</b> the stop-loss coverage and decide if the right deductible levels are in place. Consider risk tolerance and claims experience when thinking about possible changes to deductible levels.</li> <li>• <b>Check</b> with your stop-loss carrier to find out if resources are available to work with your administrators and cost-containment vendors in order to identify opportunities for cost savings. If available, consider using cancer care programs, Rx specialty/pharmacy benefits manager (PBM) services, transplant contracting, and hands-on case management.</li> </ul>
<p>Kidney disease</p> 	<ul style="list-style-type: none"> <li>• <b>Review</b> medical plan language to determine if it allows the plan to leverage other primary payors such as Medicare.</li> <li>• <b>Evaluate</b> the use of alternative pricing to support a financial cap on benefits for kidney disease and consider adding appropriate plan language about it.</li> <li>• <b>Ask</b> your administrators and stop-loss carrier if vendors are available that can provide early detection of—and cost savings for—end-stage renal disease.</li> </ul>
<p>Transplants</p> 	<ul style="list-style-type: none"> <li>• <b>Assess</b> the impact of newly approved medical treatments that include transplantation and determine if you need to make changes to your plan language.</li> <li>• <b>Make sure</b> your administrator and stop-loss carrier are providing you with access to a transplant Center of Excellence with a cost-containment contract.</li> </ul>
<p>Million-dollar+ claimants</p> 	<ul style="list-style-type: none"> <li>• <b>Ask</b> the claims administrator if it reviews and identifies emerging high-cost claims prior to payment for potential intervention opportunities before the claim is processed.</li> <li>• <b>Find out</b> how the claims administrator handles managing common chronic, ongoing, and high-cost conditions.</li> <li>• <b>Ask</b> your administrator and stop-loss carrier what types of vendors and resources they use to support cost containment and high-quality care.</li> <li>• <b>Consider</b> using vendors that provide negotiation services for high-dollar claims.</li> </ul>

## What about your business?

In this report, we've discussed the national top 10 catastrophic claims conditions and corresponding conditions for some industries. To find out about the top 10 catastrophic claims conditions for your particular industry, how your business compares, and what recommendations could work for you, contact your broker or your Sun Life Stop-Loss Specialist.



# About the study

Sun Life conducted an internal aggregate analysis of its stop-loss claims conditions and associated costs from 2013 to 2016.

## Methodology

For all reporting except employer reimbursement incidence, the claims data included Specific stop-loss claims paid as of December 31 for each year from 2013 to 2016. From a data perspective, the impact on the analysis due to policy reimbursement caps or lasering was not significant.

Because employer reimbursement incidence reporting requires calculating claims on a policy year basis, the claims data for employer reimbursement incidence were derived from stop-loss claims reimbursements that applied to the stop-loss policy years beginning with 2012 and ending with 2015.

Claimants who breached the \$1 million threshold were determined using all paid claims dollars (below and above the stop-loss deductible) attributable to that claimant during the calendar year—January 1 to December 31 for each year from 2013 to 2016. Rounding was on a “to nearest” basis.

## Claims conditions categories

To create conditions categories, Sun Life reviewed all claims conditions and combined similar conditions and billing categories.

## Data demographics

The claims data were from Sun Life Stop-Loss policyholders ranging in size from approximately 50 to over 100,000 employees, located across the United States. The case size of these policyholders was determined by counting the number of employee lives covered by the stop-loss policy.

## Top 20 primary industries for participating policyholders

Rank	Industry
1	Health services
2	Educational services
3	Engineering services
4	Executive, legal, general government
5	Retail
6	Holding and other investment companies
7	Wholesale trade—durable goods
8	Wholesale trade—nondurable goods
9	Business services—computer services
10	Manufacturing—electrical and electronic
11	Hotels, rooming houses, camps, etc.
12	Banking
13	Manufacturing, machinery (except electronics)
14	Manufacturing, transportation equipment
15	Business services
16	Motor freight transportation and warehouses
17	Manufacturing food and kindred products
18	Electrical, gas, and sanitary services
19	Apparel and accessories stores retail
20	Credit agency other than banks

Figure 17

## Sun Life Stop-Loss book of business



Data as of year-end 2016.

Figure 18



## Catastrophic claims reach and go beyond \$6 billion for the first time

Overall catastrophic claims costs for self-funded employers added up to **\$6.1 billion**. During the four years of the study, adjusted billed charges from providers for catastrophic conditions were **\$9.9 billion**. After discounts were applied to charges, self-funded employers paid **\$3.4 billion**—over half of the original charges. The stop-loss carrier provided the self-funded employers with a total of **\$2.7 billion** in reimbursements for the catastrophic claims.

### ADJUSTED BILLED CHARGES

Health care providers

**\$9.9B** — **\$3.8B** =

Discounts

### TOTAL PAID

Employer

**\$3.4B** + **\$2.7B** =

Stop-loss carrier

First-dollar claims payments on stop-loss claims only

Stop-loss claims reimbursements

Total amount spent on catastrophic conditions

**\$6.1B**

First-dollar stop-loss claims payments and stop-loss claims reimbursements

# A library of research reports

Want to look back in time? Here are our last four reports.



2013 Stop-Loss  
Research Report



2014 Stop-Loss  
Research Report

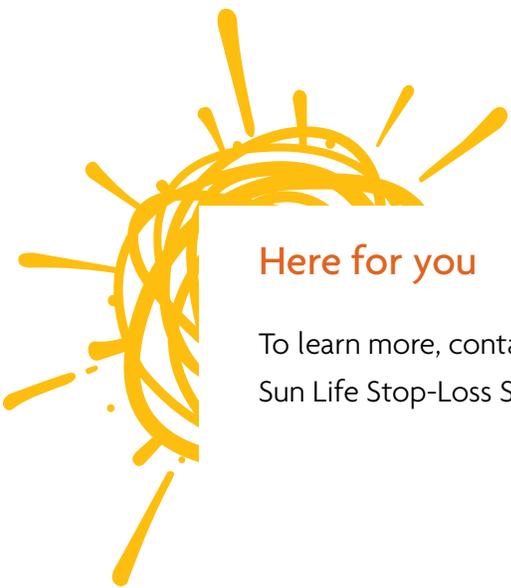


2015 Stop-Loss  
Research Report



2016 Stop-Loss  
Research Report





## Here for you

To learn more, contact your broker or Sun Life Stop-Loss Specialist.



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SLPC 28169 05/17