

SERFF Tracking Number: ICCI-127387067 State: District of Columbia  
 Filing Company: Humana Insurance Company State Tracking Number:  
 Company Tracking Number: HIC-ACC-TDR-4/11  
 TOI: H02I Individual Health - Accident Only Sub-TOI: H02I.000 Health - Accident Only  
 Product Name: Humana Total Disability Injury Only Rider  
 Project Name/Number: Humana Total Disability Injury Only Rider/Humana Total Disability Injury Only Rider

## Rate/Rule Schedule

Schedule Item Status:	Document Name:	Affected Form Numbers: (Separated with commas)	Rate Action:	Rate Action Information:	Attachments
	rate manual	HIC-ACC-POL 7/09	New		Actuarial Memorandum - Humana Rider HIC-ACC-TDR-INJURY ONLY.pdf

**Humana Insurance Company**  
Actuarial Memorandum  
Rider Form: HIC-ACC-TDR-INJURY ONLY

**1. Scope and Purpose of Filing**

This is a new filing of this form. The purpose of this filing is to demonstrate that the anticipated loss ratio of this form meets the minimum requirement of your state. This filing is not intended to be used for any other purpose.

This form will be attached to a base policy form which provides benefits for accidental death and injuries due to accidents.

**2. Description of the Benefits**

This form provides by rider short term disability benefits for disabilities that result from accidental injuries.

Attached as Appendix A is a complete description of the benefits.

**3. Renewability Clause**

This rider will terminate when coverage terminates under the Policy to which this rider is attached. The base policy to which it will be attached is classified as Guaranteed Renewable until age 70.

**4. Applicability**

This is a new filing of this form.

**5. Morbidity**

Claim costs assumptions for pricing were based on the 85 CIDA table with the following weights by class:

Class 1: 5%  
Class 2: 60%  
Class 3: 30%  
Class 4: 5%

**6. Mortality**

The expected deaths are based on the 75-80 Ultimate table.

**7. Persistency**

The following are the expected lapses by policy year. These lapse rates are in addition to the mortality rates indicated above.

<u>Policy Year</u>	<u>Lapse Rate</u>
1	40.0%
2	30.0%
3	20.0%
4	16.0%
5	14.0%
6+	12.0%

**8. Expense Assumptions**

The expense assumptions including profit used in pricing this form are as follows:

Percent of Premium all years - 50.0%

**9. Marketing Method**

This form will be marketed through agents on either 1) a payroll deduction basis or 2) an individual basis.

**10. Underwriting**

This form will be underwritten using simplified underwriting.

**11. Premium Classes**

Premium rates for payroll deduction sales do not vary by age or gender. For individual sales, sex-distinct, age-banded rates will be used. The annual premiums are attached as Appendix B.

**12. Issue Age Range**

This form will be available up to issue age 69.

**13. Area Factors**

The pricing of this form did not incorporate any area factors. The premiums for this form do not vary by geographic area.

**14. Average Annual Premium**

The expected average annual premium for insureds that select this rider is \$122.91. The expected average total annual premium for this form and the associated base policy form and riders is \$389.13.

The above average premium figures assumes a distribution of sales and selected policy benefits as shown in Item (21) below

**15. Premium Modalization Rules**

The following are the premium modalization rules for this form:

Monthly Direct	0.08333 * Annual
Semi-Annual Direct	0.52 * Annual
Quarterly Direct	0.265 * Annual

**16. Claim Liability and Reserves**

This is a new filing of this form; therefore, there are no claim liabilities and reserves at this time.

The claim reserve at any point in time will consist of (a) incurred but unreported claims and (b) unpaid claims which have been reported and are in the course of settlement.

These claim reserves will be determined using a "claim lag" methodology whereby a history of claims paid by incurral date will be maintained and such "claim run-off" will then be used to estimate the level of claim reserves.

**17. Active Life Reserves**

Statutory reserves for this form will be calculated using the two-year full preliminary term method. The interest rate used will be consistent with the NAIC Model Regulation on Minimum Reserve Standards for Individual and Group Health Insurance Contracts, which means that the rate used will be a rate permitted by law for the valuation of whole life insurance issued on the same date. Currently, this rate is 4.0%.

No negative reserves will be held for any one policy. In all circumstances, reserves will be in accordance with the Standard Valuation Law.

**18. Trend Assumptions – Medical and Insurance**

No trend factors were assumed in pricing this policy.

**19. Minimum Required Loss Ratio**

The minimum loss ratio for this policy form is 50% based on the NAIC Model Regulations for indemnity products and loss of income products. The projected policy year loss ratios are shown in Appendix C. These projections use all of the assumptions discussed previously.

**20. Anticipated Loss Ratio**

Gross premiums were calculated to conform with the loss ratio requirements for your state. For both pricing and for the calculation of the Anticipated Loss Ratio, premiums, claims and other items were projected for 30 years. Present values were calculated using

a discount rate equal to the expected earned interest rate using in pricing, which was 4.0% for all durations.

The Anticipated Loss Ratio for this form is 50.0%. This is computed as the present value of future benefits divided by the present value of future premiums over the entire future lifetime of the policy form. All assumptions used for this calculation are consistent with those used for pricing. This calculation assumes no future premium schedule changes and is consistent with benefit projections and medical trend. If any future premium schedule changes were expected, they would have been used in the calculation.

Appendix C shows the Anticipated Loss Ratio for the policy years applicable to the Entire Future Lifetime of this form. Appendix D shows the calculation of the Anticipated Loss Ratio for this rider combined with the policy and riders to which it is attached. These loss ratios do not include the change from year to year in the Active Life Reserve.

## 21. Assumed Distribution of Business

Age			
	Under 30		20.6%
	30-34		13.6%
	35-39		14.1%
	40-44		13.3%
	45-49		13.3%
	50-54		11.8%
	55-59		7.9%
	Over 59		5.4%
			100%
Sex			
	Female		45%
	Male		55%
Payroll			
By tier	By tier		
	Ind		72%
	Ind + SP		8%
	Ind + Ch		4%
	Ind + Fam		16%
Benefits			
		Average	% of
		Units	Sales
	Base Policy	1.9	100%
	ABR Rider	1.0	90%
	Wellness Rider	1.5	10%
	Disability Rider	6.0	30%

**22. Contingency and Risk Margins**

This form is expected to produce, based upon the expected claims, an overall contingency margin of approximately 5%.

**23. Experience on the Form**

This is a new filing of this form; therefore, there is no experience on the form.

**24. Lifetime Loss Ratio**

This is a new filing of this form; therefore, the Lifetime Loss Ratio equals the Anticipated Loss Ratio described in Section 20 above.

**25. History of Rate Adjustments**

This is a new filing of this form; therefore, it does not have any history of rate adjustments.

**26. Number of Policyholders**

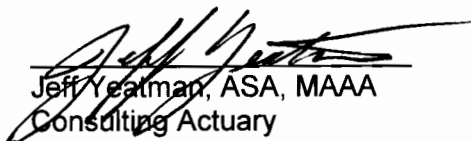
Currently there are no policies in force in your state.

**27. Proposed Effective Date**

This is a new filing of this form; therefore, the proposed effective date of implementation is immediately upon regulatory approval.

**28. Actuarial Certification**

I, Jeff Yeatman, ASA, MAAA, am an actuary for G.P. Monnin Consulting, Inc. I am a member of the American Academy of Actuaries and am qualified in the area of health insurance. I certify that, to the best of my knowledge and judgment, the entire rate filing is in compliance with the applicable laws of your state and the rules of the Department of Insurance, and complies with Actuarial Standard of Practice Number 8, "Regulatory Filing for Rates and Financial Projections for Health Plans", as adopted by the Actuarial Standards Board, December, 2005, and that the benefits provided are reasonable in relation to the proposed premiums.

  
Jeff Yeatman, ASA, MAAA  
Consulting Actuary

Date 8/18/11

## **Appendix A**

## **Benefit Description**

(APPLICABLE TO INSURED PERSON ONLY - NOT AVAILABLE TO DEPENDENTS)

If the Insured Person satisfies the criteria for Accident Total Disability, we will pay the Monthly Benefit Amount as selected by you. You may select in \$100 increments from [\$300 to \$4000] per month benefit. Benefit selected cannot exceed 60% of monthly salary.

The Accident Total Disability must:

- a) result from Injury;
- b) must begin within 90 days of the accident;
- c) continue for three (3) full consecutive days; and
- d) require the regular care of a legally qualified physician other than the Insured Person, unless the Insured Person's physician states that further treatment will not improve the Insured Person's condition.

After the third day of disability, benefits are payable for the first three days and every additional day for up to 6 months.

We will not pay for more than one accident during any period of accident total disability.

For Accident Total Disability of less than one full month, one-thirtieth of the Monthly Benefit amount will be payable for each day of Accident Total Disability.



## **Appendix B**

**Annual Premium Rates - Payroll Deduction Basis**

Note: Dependents are not covered under this rider

	<u>Per \$100 Coverage</u>
Individual	20.49
Ind + Spouse	20.49
Ind + Child(ren)	20.49
Family	20.49

### **Annual Premium Rates - Direct Sales**

Per \$100 of Coverage

<u>Ages</u>	<u>Male</u>	<u>Female</u>
Under 30	24.04	16.09
30-34	23.54	17.12
35-39	22.70	17.95
40-44	21.67	18.78
45-49	20.63	19.75
50-54	19.70	21.04
55-59	18.93	22.68
60+	18.35	24.41

**G. P. MONNIN CONSULTING, INC.**

Accident Policy - Blended Rates for Actuarial Memo - Accident DI Rider.xls For Memo - Individual

## **Appendix C**

### Projection of Loss Ratios

#### Rider Form HIC-ACC-TDR-INJURY ONLY

Policy Year	Premium	Claims	Loss Ratio
1	93.36	46.55	49.9%
2	57.31	28.60	49.9%
3	40.74	20.35	49.9%
4	31.91	15.95	50.0%
5	25.95	12.98	50.0%
6	21.59	10.81	50.1%
7	18.18	9.11	50.1%
8	15.31	7.68	50.1%
9	12.25	6.14	50.1%
10	10.31	5.17	50.2%
11	8.68	4.36	50.2%
12	7.30	3.67	50.2%
13	6.14	3.09	50.3%
14	4.78	2.40	50.2%
15	4.02	2.02	50.2%
16	3.38	1.70	50.3%
17	2.84	1.43	50.3%
18	2.38	1.20	50.4%
19	1.76	0.88	50.0%
20	1.48	0.74	50.1%
21	1.24	0.62	50.2%
22	1.04	0.52	50.3%
23	0.88	0.44	50.3%
24	0.62	0.31	49.9%
25	0.52	0.26	50.0%
26	0.44	0.22	50.1%
27	0.37	0.18	50.3%
28	0.31	0.15	50.4%
29	0.21	0.10	50.0%
30	0.17	0.09	50.1%
Present Value at 4.0%	375.48	187.74	50.0%

## **Appendix D**

## Projection of Loss Ratios

### Base Policy and Additional Riders Included

Policy Year	Premium	Claims	Loss Ratio
1	295.57	142.52	48.2%
2	181.48	88.20	48.6%
3	129.05	63.10	48.9%
4	101.10	49.92	49.4%
5	82.22	40.99	49.9%
6	68.43	34.42	50.3%
7	57.65	29.57	51.3%
8	48.56	25.37	52.2%
9	38.88	19.87	51.1%
10	32.75	16.99	51.9%
11	26.32	13.72	52.1%
12	22.07	12.02	54.4%
13	18.56	10.52	56.7%
14	14.51	7.83	53.9%
15	12.21	6.65	54.5%
16	9.80	5.31	54.2%
17	8.20	4.64	56.7%
18	6.88	4.06	59.0%
19	5.10	2.76	54.1%
20	4.29	2.35	54.9%
21	3.41	1.86	54.6%
22	2.86	1.65	57.7%
23	2.40	1.46	60.6%
24	1.70	0.91	53.4%
25	1.43	0.78	54.7%
26	1.20	0.67	55.9%
27	1.00	0.60	60.0%
28	0.84	0.54	64.1%
29	0.57	0.32	55.2%
30	0.48	0.27	56.6%
Present Value at 4.0%	1,179.52	589.85	50.0%

SERFF Tracking Number: ICCI-127387067 State: District of Columbia  
Filing Company: Humana Insurance Company State Tracking Number:  
Company Tracking Number: HIC-ACC-TDR-4/11  
TOI: H02I Individual Health - Accident Only Sub-TOI: H02I.000 Health - Accident Only  
Product Name: Humana Total Disability Injury Only Rider  
Project Name/Number: Humana Total Disability Injury Only Rider/Humana Total Disability Injury Only Rider

## Supporting Document Schedules

	Item Status:	Status Date:
<b>Satisfied - Item:</b> Actuarial Justification <b>Comments:</b> see rate manual attached to rate/rule schedule		

	Item Status:	Status Date:
<b>Satisfied - Item:</b> Authorization Letter <b>Comments:</b> <b>Attachment:</b> Actuarial Memorandum - Humana Rider HIC-ACC-TDR-INJURY ONLY.pdf		



**Humana Insurance Company**  
Actuarial Memorandum  
Rider Form: HIC-ACC-TDR-INJURY ONLY

**1. Scope and Purpose of Filing**

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**2. Description of the Benefits**

This form provides by rider short term disability benefits for disabilities that result from accidental injuries.

Attached as Appendix A is a complete description of the benefits.

**3. Renewability Clause**

This rider will terminate when coverage terminates under the Policy to which this rider is attached. The base policy to which it will be attached is classified as Guaranteed Renewable until age 70.

**4. Applicability**

This is a new filing of this form.

**5. Morbidity**

Claim costs assumptions for pricing were based on the 85 CIDA table with the following weights by class:

Class 1: 5%  
Class 2: 60%  
Class 3: 30%  
Class 4: 5%

**6. Mortality**

The expected deaths are based on the 75-80 Ultimate table.

**7. Persistency**

The following are the expected lapses by policy year. These lapse rates are in addition to the mortality rates indicated above.

<u>Policy Year</u>	<u>Lapse Rate</u>
1	40.0%
2	30.0%
3	20.0%
4	16.0%
5	14.0%
6+	12.0%

**8. Expense Assumptions**

The expense assumptions including profit used in pricing this form are as follows:

Percent of Premium all years - 50.0%

**9. Marketing Method**

This form will be marketed through agents on either 1) a payroll deduction basis or 2) an individual basis.

**10. Underwriting**

This form will be underwritten using simplified underwriting.

**11. Premium Classes**

Premium rates for payroll deduction sales do not vary by age or gender. For individual sales, sex-distinct, age-banded rates will be used. The annual premiums are attached as Appendix B.

**12. Issue Age Range**

This form will be available up to issue age 69.

**13. Area Factors**

The pricing of this form did not incorporate any area factors. The premiums for this form do not vary by geographic area.

**14. Average Annual Premium**

The expected average annual premium for insureds that select this rider is \$122.91. The expected average total annual premium for this form and the associated base policy form and riders is \$389.13.

The above average premium figures assumes a distribution of sales and selected policy benefits as shown in Item (21) below

**15. Premium Modalization Rules**

The following are the premium modalization rules for this form:

Monthly Direct	0.08333 * Annual
Semi-Annual Direct	0.52 * Annual
Quarterly Direct	0.265 * Annual

**16. Claim Liability and Reserves**

This is a new filing of this form; therefore, there are no claim liabilities and reserves at this time.

The claim reserve at any point in time will consist of (a) incurred but unreported claims and (b) unpaid claims which have been reported and are in the course of settlement.

These claim reserves will be determined using a "claim lag" methodology whereby a history of claims paid by incurral date will be maintained and such "claim run-off" will then be used to estimate the level of claim reserves.

**17. Active Life Reserves**

Statutory reserves for this form will be calculated using the two-year full preliminary term method. The interest rate used will be consistent with the NAIC Model Regulation on Minimum Reserve Standards for Individual and Group Health Insurance Contracts, which means that the rate used will be a rate permitted by law for the valuation of whole life insurance issued on the same date. Currently, this rate is 4.0%.

No negative reserves will be held for any one policy. In all circumstances, reserves will be in accordance with the Standard Valuation Law.

**18. Trend Assumptions – Medical and Insurance**

No trend factors were assumed in pricing this policy.

**19. Minimum Required Loss Ratio**

The minimum loss ratio for this policy form is 50% based on the NAIC Model Regulations for indemnity products and loss of income products. The projected policy year loss ratios are shown in Appendix C. These projections use all of the assumptions discussed previously.

**20. Anticipated Loss Ratio**

Gross premiums were calculated to conform with the loss ratio requirements for your state. For both pricing and for the calculation of the Anticipated Loss Ratio, premiums, claims and other items were projected for 30 years. Present values were calculated using

a discount rate equal to the expected earned interest rate using in pricing, which was 4.0% for all durations.

The Anticipated Loss Ratio for this form is 50.0%. This is computed as the present value of future benefits divided by the present value of future premiums over the entire future lifetime of the policy form. All assumptions used for this calculation are consistent with those used for pricing. This calculation assumes no future premium schedule changes and is consistent with benefit projections and medical trend. If any future premium schedule changes were expected, they would have been used in the calculation.

Appendix C shows the Anticipated Loss Ratio for the policy years applicable to the Entire Future Lifetime of this form. Appendix D shows the calculation of the Anticipated Loss Ratio for this rider combined with the policy and riders to which it is attached. These loss ratios do not include the change from year to year in the Active Life Reserve.

## 21. Assumed Distribution of Business

Age			
	Under 30		20.6%
	30-34		13.6%
	35-39		14.1%
	40-44		13.3%
	45-49		13.3%
	50-54		11.8%
	55-59		7.9%
	Over 59		5.4%
			100%
Sex			
	Female		45%
	Male		55%
Payroll			
By tier	By tier		
	Ind		72%
	Ind + SP		8%
	Ind + Ch		4%
	Ind + Fam		16%
Benefits			
		Average	% of
		Units	Sales
	Base Policy	1.9	100%
	ABR Rider	1.0	90%
	Wellness Rider	1.5	10%
	Disability Rider	6.0	30%

**22. Contingency and Risk Margins**

This form is expected to produce, based upon the expected claims, an overall contingency margin of approximately 5%.

**23. Experience on the Form**

This is a new filing of this form; therefore, there is no experience on the form.

**24. Lifetime Loss Ratio**

This is a new filing of this form; therefore, the Lifetime Loss Ratio equals the Anticipated Loss Ratio described in Section 20 above.

**25. History of Rate Adjustments**

This is a new filing of this form; therefore, it does not have any history of rate adjustments.

**26. Number of Policyholders**

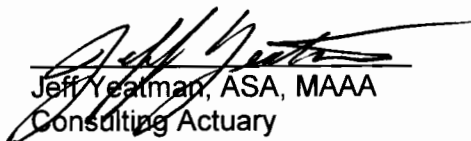
Currently there are no policies in force in your state.

**27. Proposed Effective Date**

This is a new filing of this form; therefore, the proposed effective date of implementation is immediately upon regulatory approval.

**28. Actuarial Certification**

I, Jeff Yeatman, ASA, MAAA, am an actuary for G.P. Monnin Consulting, Inc. I am a member of the American Academy of Actuaries and am qualified in the area of health insurance. I certify that, to the best of my knowledge and judgment, the entire rate filing is in compliance with the applicable laws of your state and the rules of the Department of Insurance, and complies with Actuarial Standard of Practice Number 8, "Regulatory Filing for Rates and Financial Projections for Health Plans", as adopted by the Actuarial Standards Board, December, 2005, and that the benefits provided are reasonable in relation to the proposed premiums.

  
Jeff Yeatman, ASA, MAAA  
Consulting Actuary

Date 8/18/11

## **Appendix A**

## **Benefit Description**

(APPLICABLE TO INSURED PERSON ONLY - NOT AVAILABLE TO DEPENDENTS)

If the Insured Person satisfies the criteria for Accident Total Disability, we will pay the Monthly Benefit Amount as selected by you. You may select in \$100 increments from [\$300 to \$4000] per month benefit. Benefit selected cannot exceed 60% of monthly salary.

The Accident Total Disability must:

- a) result from Injury;
- b) must begin within 90 days of the accident;
- c) continue for three (3) full consecutive days; and
- d) require the regular care of a legally qualified physician other than the Insured Person, unless the Insured Person's physician states that further treatment will not improve the Insured Person's condition.

After the third day of disability, benefits are payable for the first three days and every additional day for up to 6 months.

We will not pay for more than one accident during any period of accident total disability.

For Accident Total Disability of less than one full month, one-thirtieth of the Monthly Benefit amount will be payable for each day of Accident Total Disability.

## **Appendix B**



**Annual Premium Rates - Payroll Deduction Basis**

Note: Dependents are not covered under this rider

	<u>Per \$100 Coverage</u>
Individual	20.49
Ind + Spouse	20.49
Ind + Child(ren)	20.49
Family	20.49

### **Annual Premium Rates - Direct Sales**

Per \$100 of Coverage

<u>Ages</u>	<u>Male</u>	<u>Female</u>
Under 30	24.04	16.09
30-34	23.54	17.12
35-39	22.70	17.95
40-44	21.67	18.78
45-49	20.63	19.75
50-54	19.70	21.04
55-59	18.93	22.68
60+	18.35	24.41

**G. P. MONNIN CONSULTING, INC.**

Accident Policy - Blended Rates for Actuarial Memo - Accident DI Rider.xls For Memo - Individual

## **Appendix C**

### Projection of Loss Ratios

#### Rider Form HIC-ACC-TDR-INJURY ONLY

Policy Year	Premium	Claims	Loss Ratio
1	93.36	46.55	49.9%
2	57.31	28.60	49.9%
3	40.74	20.35	49.9%
4	31.91	15.95	50.0%
5	25.95	12.98	50.0%
6	21.59	10.81	50.1%
7	18.18	9.11	50.1%
8	15.31	7.68	50.1%
9	12.25	6.14	50.1%
10	10.31	5.17	50.2%
11	8.68	4.36	50.2%
12	7.30	3.67	50.2%
13	6.14	3.09	50.3%
14	4.78	2.40	50.2%
15	4.02	2.02	50.2%
16	3.38	1.70	50.3%
17	2.84	1.43	50.3%
18	2.38	1.20	50.4%
19	1.76	0.88	50.0%
20	1.48	0.74	50.1%
21	1.24	0.62	50.2%
22	1.04	0.52	50.3%
23	0.88	0.44	50.3%
24	0.62	0.31	49.9%
25	0.52	0.26	50.0%
26	0.44	0.22	50.1%
27	0.37	0.18	50.3%
28	0.31	0.15	50.4%
29	0.21	0.10	50.0%
30	0.17	0.09	50.1%
Present Value at 4.0%	375.48	187.74	50.0%

## **Appendix D**

## Projection of Loss Ratios

### Base Policy and Additional Riders Included

Policy Year	Premium	Claims	Loss Ratio
1	295.57	142.52	48.2%
2	181.48	88.20	48.6%
3	129.05	63.10	48.9%
4	101.10	49.92	49.4%
5	82.22	40.99	49.9%
6	68.43	34.42	50.3%
7	57.65	29.57	51.3%
8	48.56	25.37	52.2%
9	38.88	19.87	51.1%
10	32.75	16.99	51.9%
11	26.32	13.72	52.1%
12	22.07	12.02	54.4%
13	18.56	10.52	56.7%
14	14.51	7.83	53.9%
15	12.21	6.65	54.5%
16	9.80	5.31	54.2%
17	8.20	4.64	56.7%
18	6.88	4.06	59.0%
19	5.10	2.76	54.1%
20	4.29	2.35	54.9%
21	3.41	1.86	54.6%
22	2.86	1.65	57.7%
23	2.40	1.46	60.6%
24	1.70	0.91	53.4%
25	1.43	0.78	54.7%
26	1.20	0.67	55.9%
27	1.00	0.60	60.0%
28	0.84	0.54	64.1%
29	0.57	0.32	55.2%
30	0.48	0.27	56.6%
Present Value at 4.0%	1,179.52	589.85	50.0%