

ASHK Evening Session

**Hong Kong Assured Lives Critical Illness
Experience Study 2005 - 2009**

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Today's Agenda

1. Objective and Background
2. Summary of Data
3. Critical Illness Experience
4. Cause of Claim Study
5. Lapse Experience
6. Use of this Report
7. Questions and Answers

Objective and Background

Objective:

To review industrial critical illness experience for industrial reference.

Background:

- 1) It includes industrial critical illness experience data from 2005 to 2009.
- 2) Majority of industrial players (18 insurance companies) have participated into this study.
- 3) It includes only standard individually underwritten life insurance instead of group policies and substandard cases for easy benchmarking.



Big “Thank You” for all of you..

AIA International Limited	Hang Seng Insurance Co Ltd
American Family Life Assurance Company of Columbus	Hong Kong Life Insurance Ltd
Aviva Life Insurance Co Ltd	HSBC Insurance (Asia) Ltd
AXA (Hong Kong) Life Insurance Co Ltd	Manulife (International) Ltd
BOC Group Life Assurance Co Ltd	MassMutual Asia Ltd
CIGNA Worldwide Life Insurance Co Ltd	Prudential Assurance Co Ltd
Chubb Life Insurance Company Ltd.	Sun Life Financial (Hong Kong) Ltd
FTLife Insurance Company Limited	Tahoe Life Insurance Company Limited
FWD Life Insurance Company (Bermuda) Limited	Zurich Life Insurance Company Ltd

Data

- It involves data from 1 Jan 2005 to 31 Dec 2009 (5 years).
- From these 18 companies' data, it represents 92% of the individual life policies in-force in Hong Kong at the end of 2009.

Data Requested – Policy Data

Policy Data Requested

- Gender
- Date of Birth
- Issue Age
- Policy Issue Date
- Smoking Status
- Sum Assured

Data Requested – Claim Data

Claim Data Requested

- Date of CI Diagnosis
- Date of Claim Reported
- Cause of CI (*if available*)

(To minimize Incurred But Not Reported (IBNR) impact, the majority of data is extracted in 2011 or 2012 for those claimed incurred before 2009.)

The data was restricted to individual policies that were fully underwritten (i.e. excluding group policies) issued at standard rates.

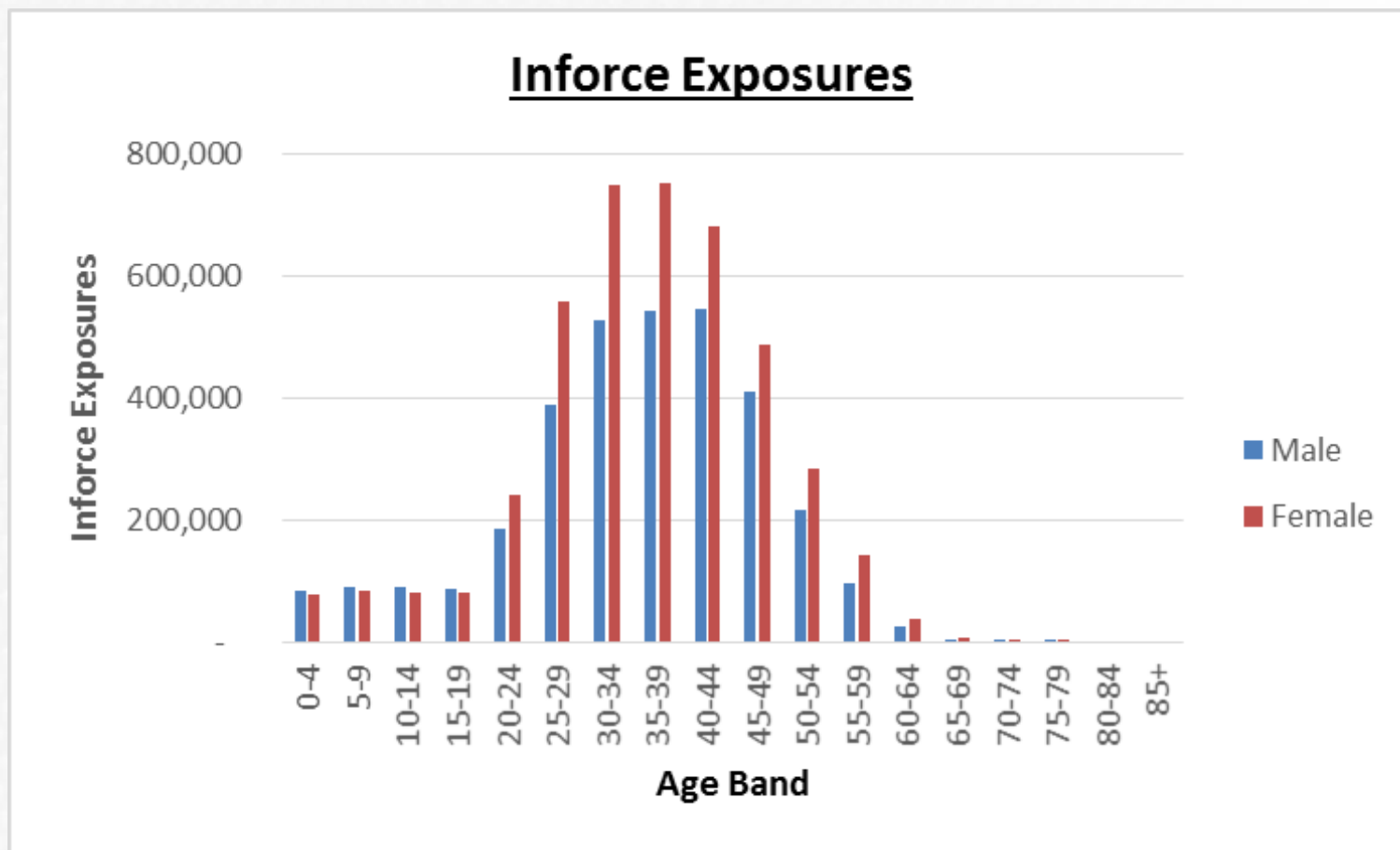
Data Volume

Below shows the data comparison with last experience study.

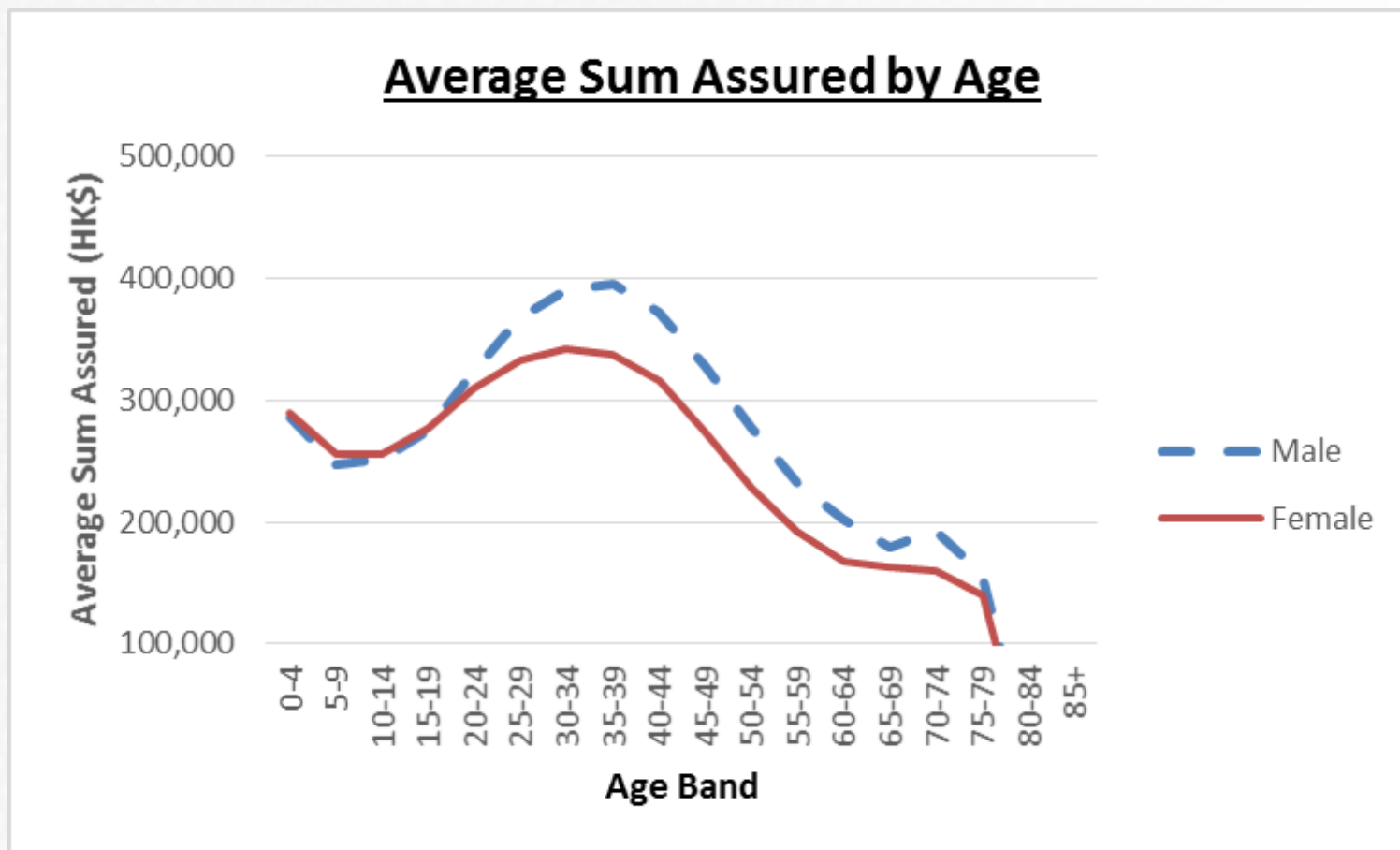
All CI	Data Volume			
	Inforce Exposures		CI Claims	
Gender	ASHK08	ASHK11	ASHK08	ASHK11
Male	2,489,527	3,299,991	2,850	4,574
Female	3,188,186	4,274,302	4,840	7,472
Total	5,677,714	7,574,293	7,690	12,046

* *ASHK08 represents the last CI study we have performed for data from 2002 to 2006.*

Exposure Distributions



Average Sum Assured

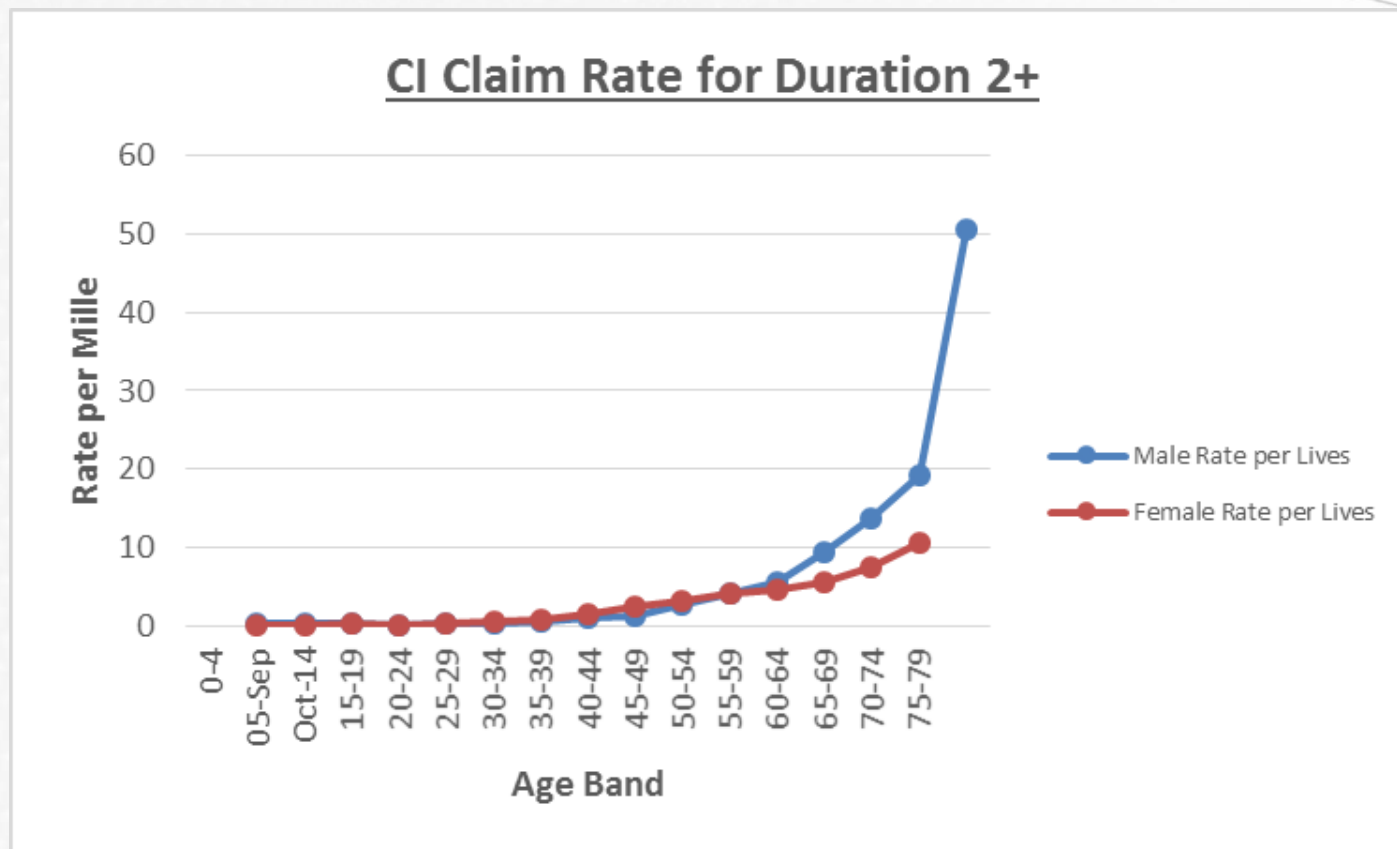


Critical Illness Experience



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Acceleration Critical Illness Claim Rate by Age Band



Female claim rates are higher than male rates for ages 10 to 54 but male one is higher than female one after age 55.

A/E Results – Comparing with ASHK08

CI		
	Male	Female
(1): Crude rates per mille (ASHK 11)	1.52	1.92
(2): Expected Crude rates per mille (ASHK 08)	1.45	1.87
(3): A/E Ratio (1) / (2)	105%	103%

* Note

1. ASHK 11 refers to CI Experience from 1 Jan 2005 to 31 Dec 2009
2. ASHK 08 refers to CI Experience from 1 Jan 2002 to 31 Dec 2006

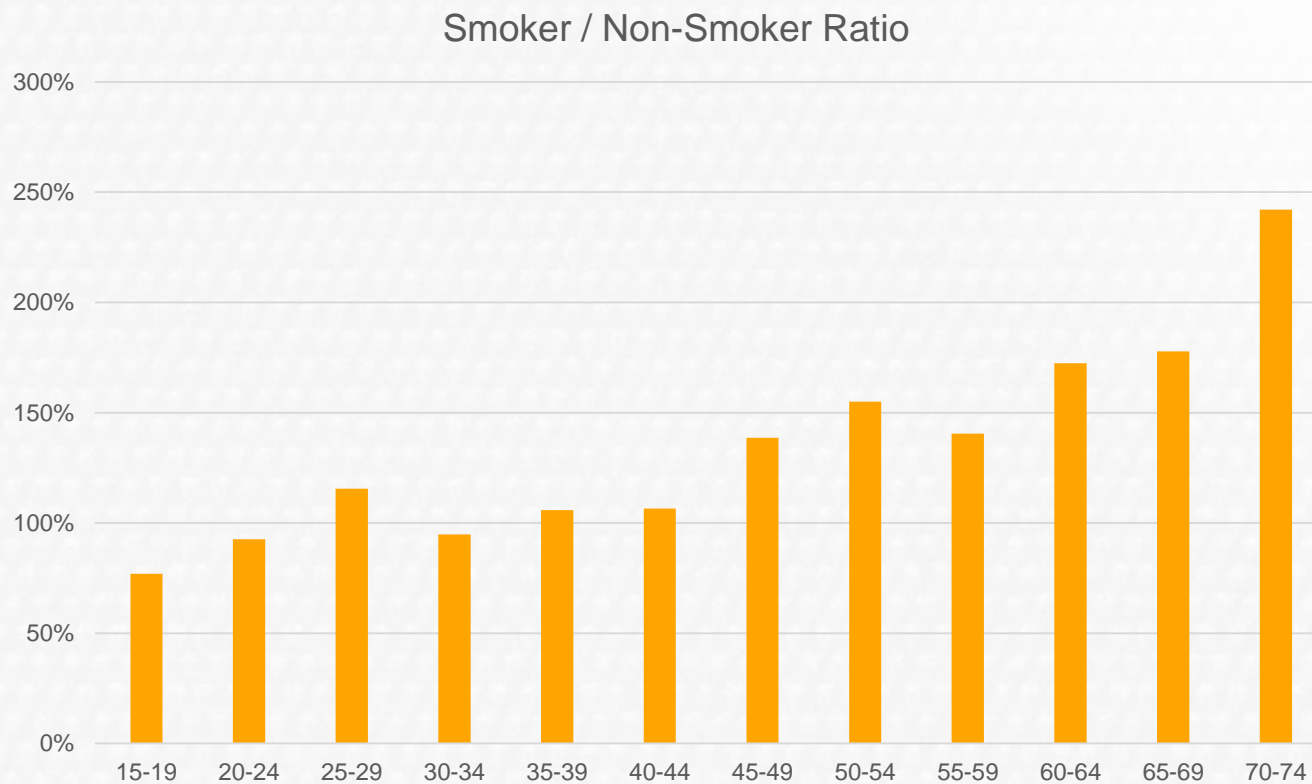
Selection Effect Comparison between ASHK 11 and ASHK 08

We compare selection factors between ASHK 11 and ASHK 08.

		CI	
Gender	Duration	ASHK 11	ASHK 08
		Selection Effect	Selection Effect
Male	0	79%	81%
	1	119%	101%
Female	0	73%	73%
	1	104%	105%

The Selection Effect is pretty similar between ASHK 11 and ASHK 08 except that there should be more significant anti-selection in Male Duration 1 in ASHK 11.

Smoking Differentials



The smoker and non-smoker differentiation increases by ages.

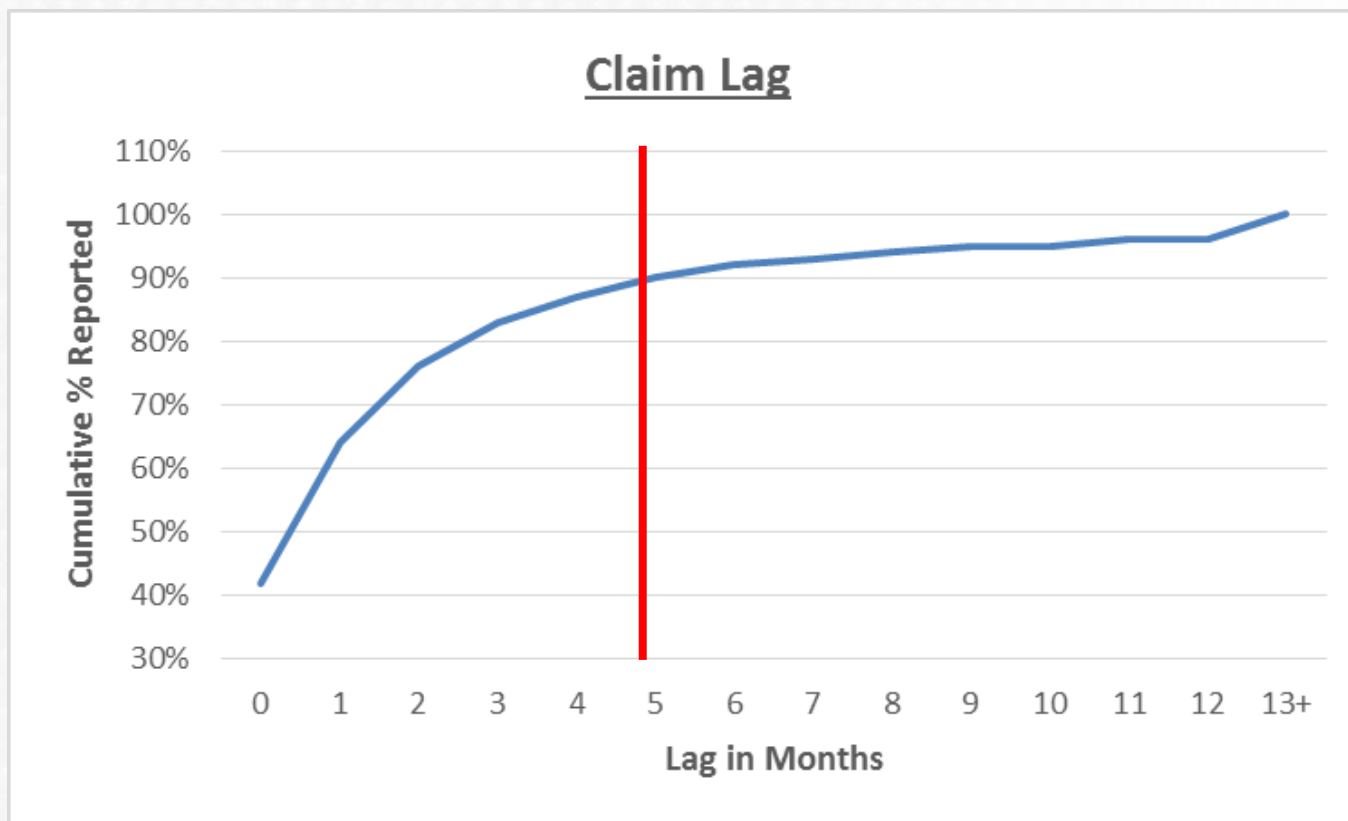
Impact from various Underwriting Approaches

We assess the underwriting impact through A/E approaches.

All CI				
Underwriting Method	Male		Female	
	Actual Claims	A/E Lives	Actual Claims	A/E Lives
Medical	678	101%	949	101%
Non-Medical	2,900	104%	4,981	100%
Simplified Issue	12	128%	13	88%
Unknown	984	106%	1,529	103%

- 1) The results are much distorted by “unknown” claim status.
- 2) Results might not be credible for simplified underwriting approach due to its limited exposure.

Claim Development for CI



90% of CI claims shall be developed within 5 months.

Trend: Critical Illness Incident Rates

We assess the trend for Critical Illness Incident Rates by various year A to E ratios.

All CI	Males, Duration 2+		Females, Duration 2+	
	A/E Lives	A/E Amounts	A/E Lives	A/E Amounts
Year				
2005	98%	101%	103%	105%
2006	101%	106%	102%	103%
2007	108%	110%	97%	100%
2008	109%	117%	106%	109%
2009	105%	103%	106%	114%

The trend is obvious from 2005 to 2008.

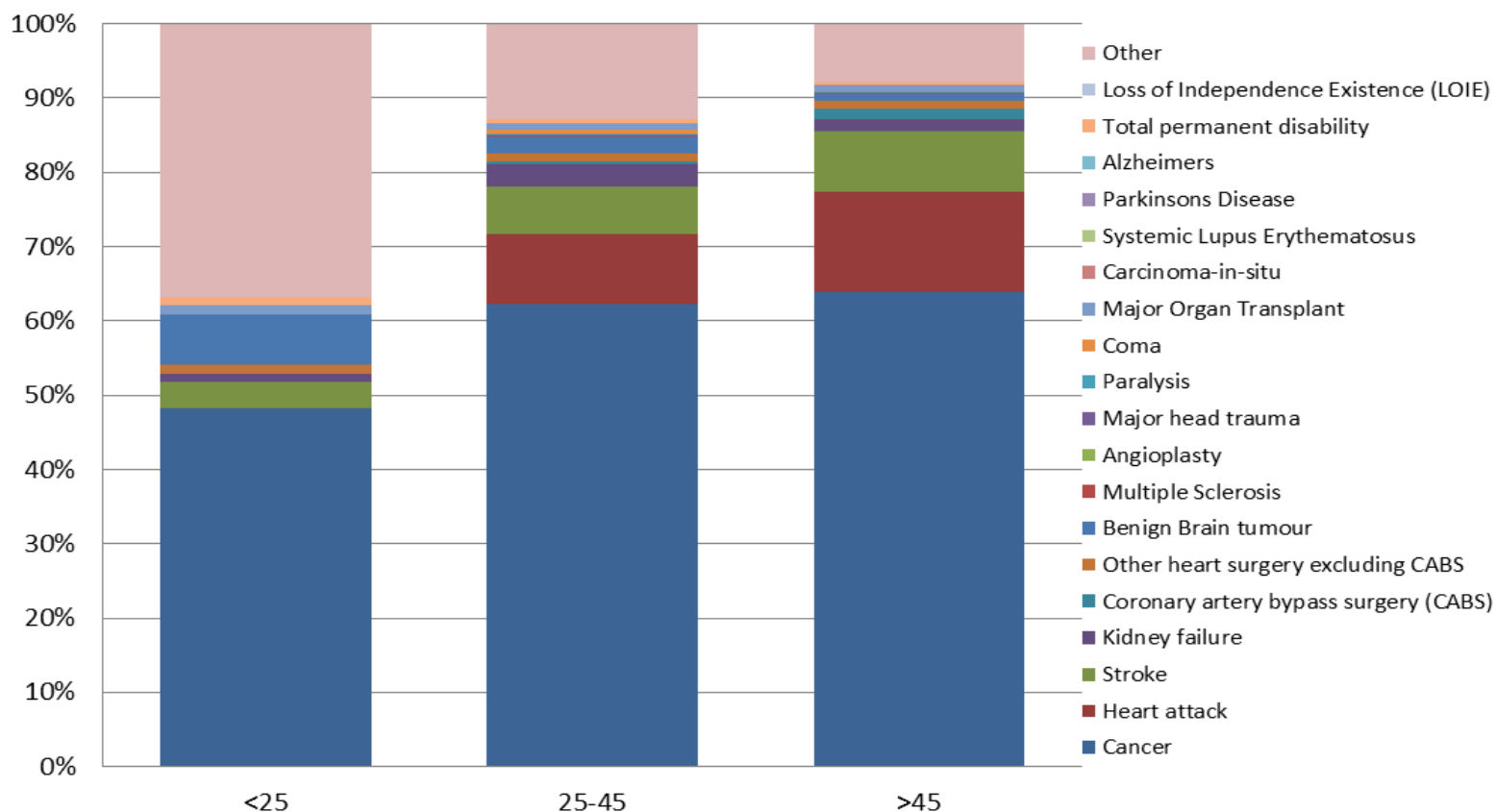
Not sure if the incident rates are distorted in 2009.

Cause of Claim Study



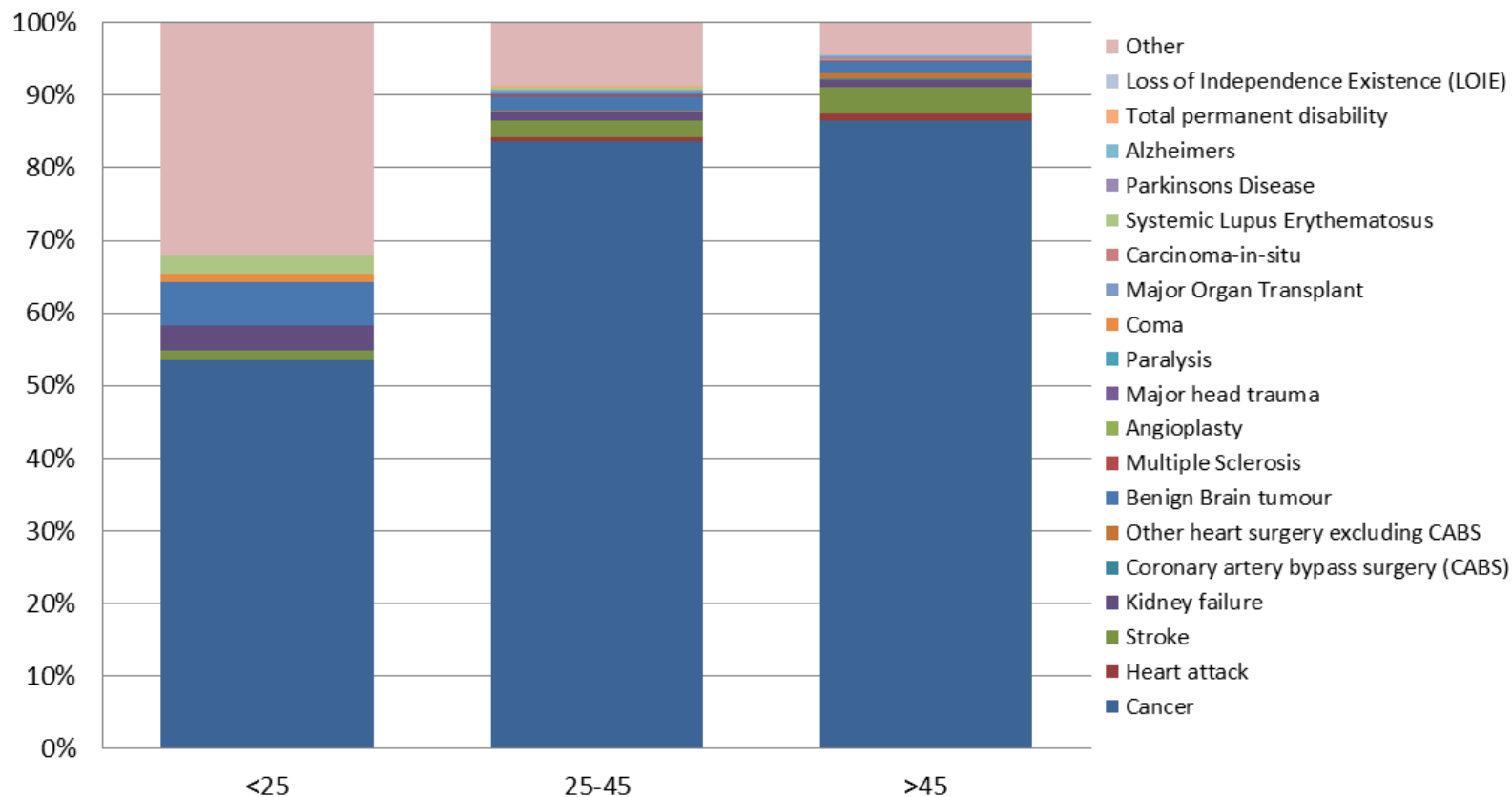
Cause of Claim – Critical Illness

Cause of CI: 2005-2009 by lives (Male) - by Percentage



Cause of Claim – Critical Illness

Cause of CI: 2005 - 2009 by lives (Female) - by Percentage



Lapse/Surrender Experience



Lapse Experience Critical Illness Insurance

The lapse rates has been derived from 2005 to 2009 for both Duration 0 and Duration 1+.

CI				
Year	A/E Lives	A/E Amounts	A/E Lives	A/E Amounts
	Duration	Duration 0	Duration 1+	Duration 1+
2006	12%	12%	6%	6%
2007	11%	10%	6%	6%
2008	10%	9%	5%	5%
2009	13%	12%	7%	7%
2005 to 2009	12%	11%	6%	6%

The lapse rates for CI policies in Duration 0 and Duration 1+ are pretty consistent at around 12% and 6% respectively.

Use of this Report

Report on Hong Kong Assured Lives Critical Illness Experience Study 2005 to 2009



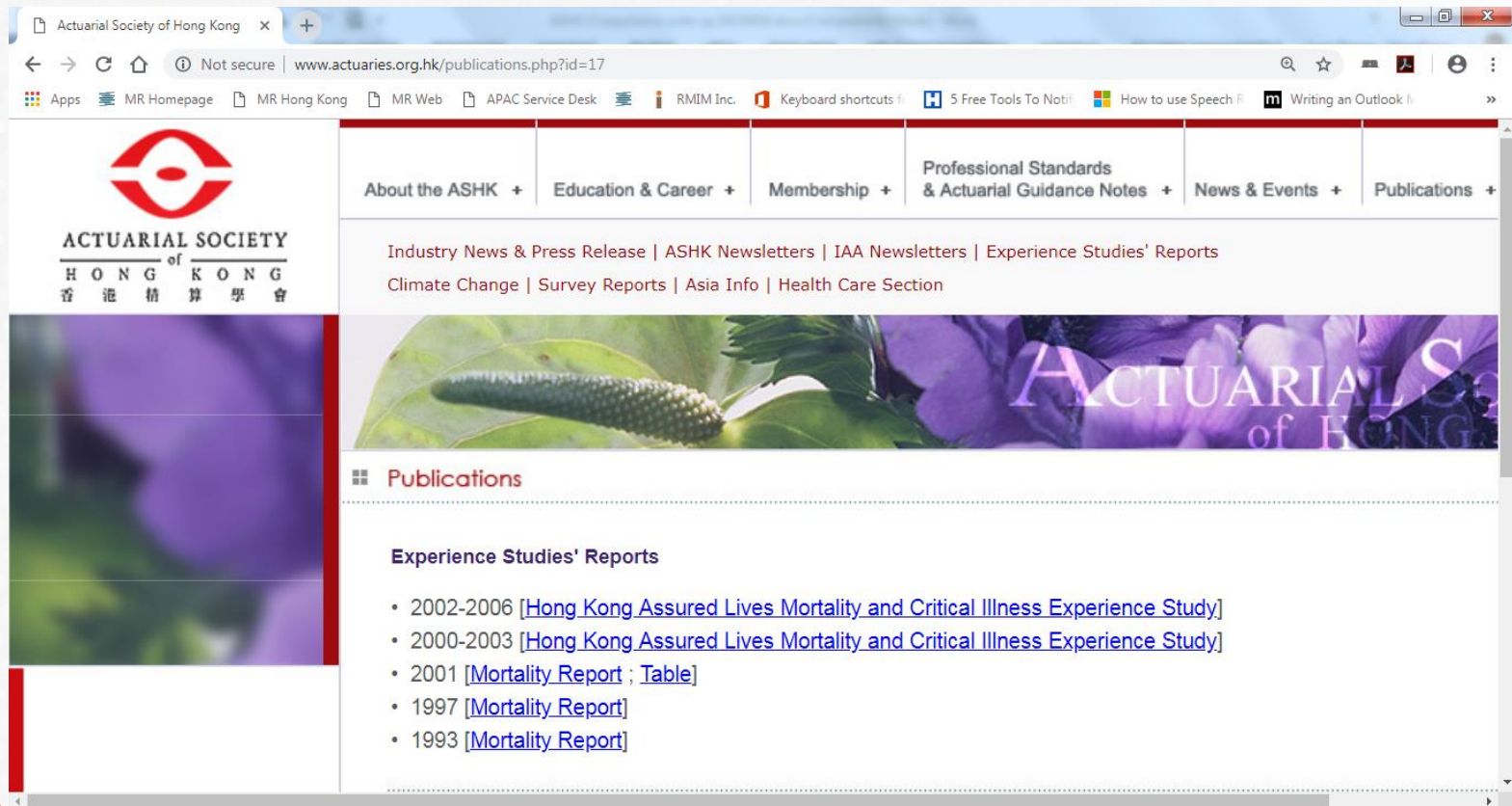
Use of this Report

General data issues include:

- The accuracy of a large amount of data in this study might not be ensured.
- Critical illness definitions are not standardized in Hong Kong and the number of conditions covered varies by company.
- The results might only represent industrial results only but not for any particular company.

The way forward....

We will publish this experience study in our ASHK website formally.



The screenshot shows a web browser window displaying the Actuarial Society of Hong Kong website. The browser's address bar shows the URL www.actuaries.org.hk/publications.php?id=17. The website features a navigation menu with links for 'About the ASHK', 'Education & Career', 'Membership', 'Professional Standards & Actuarial Guidance Notes', 'News & Events', and 'Publications'. Below the navigation menu, there is a list of links including 'Industry News & Press Release', 'ASHK Newsletters', 'IAA Newsletters', 'Experience Studies' Reports', 'Climate Change', 'Survey Reports', 'Asia Info', and 'Health Care Section'. A banner image with the text 'ACTUARIAL SOCIETY of HONG KONG' is visible. The 'Publications' section is expanded, showing a list of 'Experience Studies' Reports' with the following entries:

- 2002-2006 [[Hong Kong Assured Lives Mortality and Critical Illness Experience Study](#)]
- 2000-2003 [[Hong Kong Assured Lives Mortality and Critical Illness Experience Study](#)]
- 2001 [[Mortality Report](#) ; [Table](#)]
- 1997 [[Mortality Report](#)]
- 1993 [[Mortality Report](#)]

Questions and Answers

