INTERNATIONAL INSIGHTS ON MORTALITY, POPULATION AND THE PUBLIC INTEREST

A JOINT SEMINAR BY THE POPULATION ISSUES WORKING GROUP AND THE MORTALITY WORKING GROUP OF THE INTERNATIONAL ACTUARIAL ASSOCIATION



(8:30 - 18:00)

WESTIN RIVER NORTH

CHICAGO IL, UNITED STATES

The Population Issues Working
Group (PIWG) and the
Mortality Working Group (MWG)
of the International Actuarial
Association (IAA) are pleased to hold a
seminar entitled "International Insights on
Mortality, Population and the
Public Interest" on October 3, 2017, in
conjunction with the IAA Council and
Committee meetings in Chicago.

Changes in mortality and morbidity are difficult to forecast, but developing trends will directly affect the work of actuaries and the lives of many around the world.

The seminar will begin with an update on recent international trends in mortality, obesity, and smoking, and discussions on the underlying reasons for these trends, as well as their likeliness to continue.

Other important topics to be covered include research into the unequal mortality and morbidity in different socio- economic groups, the potential impact of climate change on mortality, the use of predictive analytics in morbidity, the interrelation of retirement income systems and housing, and implications for society.

The seminar will conclude with an interactive discussion between the audience and the panel of speakers.

Please join us for this informative and thought- provoking seminar featuring an international group of speakers.



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Program

(Dress Code: Business Casual)

7:45 – 8:30

Registration, Coffee and Muffins

8:30 - 8:40

Welcome - Al Klein (Co-Vice-Chair, IAA Mortality Working Group) **Introduction -** Assia Billig (Chair, Population Issues Working Group)

8:40 - 9:20



A Deep Dive into Recent Trends in US Mortality

This session will "peel back the onion" on the recent trends in US mortality by discussing the trends, the drivers behind these trends, and the underlying reasons for these drivers. Changes in cause of death and geographical differences will be discussed and both population and insured perspectives will be covered.

Speaker: Al Klein, Co-Vice-Chair, IAA Mortality Working Group. Principal and Consulting Actuary, Milliman USA

9:20 - 10:00



Lifestyle, Aging and Mortality

Changes in human behavior, especially as observed through smoking and obesity epidemics, have had and will continue to have substantial effects on mortality. The trends, lags and effects involving these mortality risk factors will be discussed. In addition, most deaths occur at older ages—to get a firm handle on this part of the mortality curve, trends in the mortality at these ages will be addressed.

Speaker: Sam Gutterman, Co-Vice-Chair, IAA Resource and Environment Working Group. Co-Vice-Chair, IAA Population Issues Working Group, formerly Director of PricewaterhouseCoopers USA

10:00 - 10:40



Mortality Trends from an International Perspective

After years of improving longevity, many countries are seeing a slackening of the rate of improvement. Is this significant in the long term, and what can we learn from international trends?

Speaker: Brian Ridsdale, Chair, IAA Mortality Working Group. Past Vice President, Faculty of Actuaries. Past Chair CMI, formerly General Manager, Zurich Life, UK

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Program

10:40 - 11:00

Break

11:00 - 11:40



Climate Change and Mortality

Highlights of the IAA Resources and Environment Working Group's Paper "Climate Change and Mortality" will be presented. Changes in long-term global climate, involving the level and variability in climate factors such as temperature and precipitation may prove to have substantial (both favorable and adverse) effects on mortality, especially on vulnerable populations.

Speaker: Sam Gutterman, Co-Vice-Chair, IAA Resource and Environment Working Group. Co-Vice-Chair, IAA Population Issues Working Group, formerly Director of PricewaterhouseCoopers USA

11:40 - 12:20



Using Predictive Analytics to Better Understand Morbidity

Population morbidity (health status) drives health care utilization across a wide array of services, procedures, treatments, and products. Predictive analytics make it possible to translate numerous demographic characteristics into factors associated with morbidity and drivers ofhealth care use. Comparing these factors over time also reveals underlying trends in population morbidity, both at the sub-population level and overall. This session will profile some applications of predictive analytics within the context of morbidity and health care utilization modeling and demonstrate how it may inform forecasts of future morbidity characteristics, health care utilization, and claims.

Speaker: Merideth Randles, Principal and Consulting Actuary, Milliman, USA

12:20 - 13:10

LUNCH

13:15 - 13:55



<u>Impact of Inequality and Socio-Economic Differences on Morbidity and Mortality</u>

Morbidity and mortality outcomes are not distributed uniformly and the differences can be sometimes quite dramatic. This presentation will discuss determinants and magnitudes of such differences, as well as implications on the work of actuaries.

Speaker: Assia Billig, Chair, Population Issues Working Group. Senior Actuary, Office of the Chief Actuary, OSFI-BSIF Canada

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13:55 – 14:35



Retirement Income Systems: Harmonisation of Pensions and Housing

Actuaries are prominent in respect of two of the pillars of retirement income systems: pension plans and Social Security. Equally important to a retiree are living arrangements in retirement: either through home ownership or affordable renting. This presentation reviews trends in home ownership in various countries and how housing and pensions can interact to provide optimum retirement outcomes.

Speaker: Martin Stevenson, Vice-Chair, IAA Population Issues Working Group. Consultant, formerly Partner Mercer Australia.

14:35 – 15:15



<u>Impact of Mortality Trends on Society and Public Policy</u> (includes discussion on financial impact of mortality changes and the challenge of converting retirement savings into lifetime income)

An actuary's work is never done. Understanding mortality trends is important, but there are real-life implications that impact related public policy programs and the people they concern. In this session, we will consider the full spectrum of mortality changes and trends discussed throughout the day and look at the challenges they create both financially and practically for policy makers and individuals.

Speaker: Ted Goldman, Senior Pension Fellow, American Academy of Actuaries, USA

<u> 15:15 – 15:35</u>

Coffee Break

15:35 – 16:05



<u>Highlights of Society of Actuaries Mortality and Population Research</u>

Current research projects range from providing mortality experience studies, creating mortality improvement models and scales for forward mortality estimates, developing public tools for better understanding retirement survival scenarios, and supporting academic research in modeling mortality and longevity. In this session, we will highlight key findings from recent SOA mortality and population research projects, and provide insights as to how SOA research findings are used by actuaries around the world.

Speaker: R. Dale Hall, Managing Director of Research, Society of Actuaries, USA

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16:10 – 16:55

Panel Discussion

16:55 – 17:00

Closing Remarks - Brian Ridsdale (Chair, Mortality Working Group)

