

Italian workers' compensation systems: the measures to face Covid-19 and the impact on disabled workers' survival

Daniela Martini, Inail – ISOA – AAE

About the speaker

- **Daniela Martini** – *Actuary, Inail, ISOA, AAE*

I am fully qualified actuary, currently working at the Statistical and Actuarial Department of Inail, where I mainly deal with the continuous study of mortality.

In Actuarial Association of Europe (Social Security Sub Committee), I am the representative member of ISOA (Italian Institute and Board of Actuaries) in the Task Force on Mortality

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- **INAIL**, *Italian Institute for insurance against accidents at work*, is a non-profit government administration which provides compulsory insurance coverage against accidents at work and occupational diseases.





Agenda

- ❑ Italian workers' compensation systems & COVID-19
- ❑ The impact of COVID – 19 on disabled workers' survival

Italian workers' compensation systems & COVID - 19



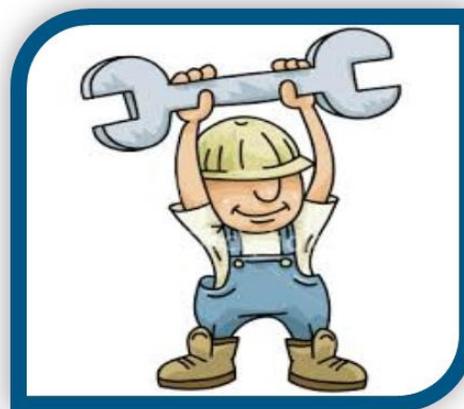
Prevention



Economic benefits



Research



Health care benefits



Reintegration to
social life and work

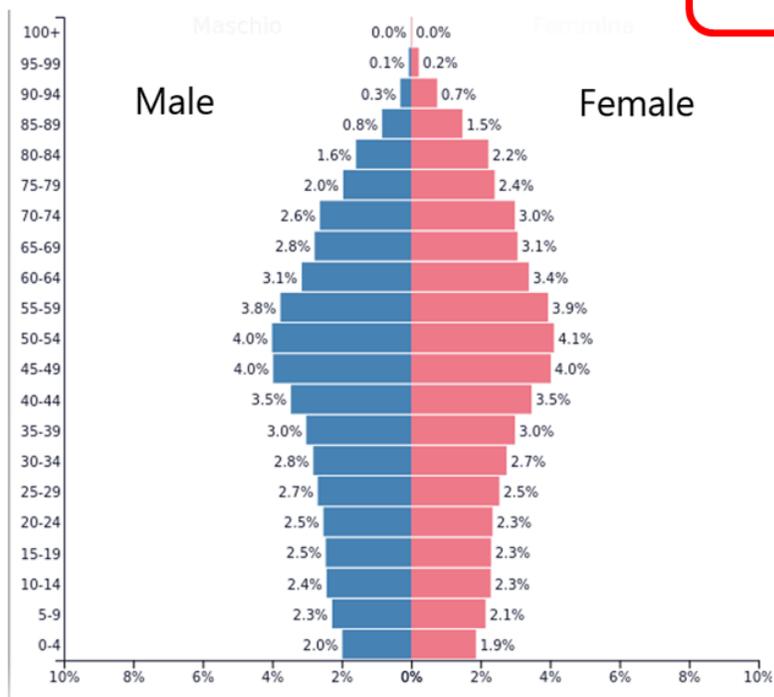


Rehabilitation



Italian workers' compensation systems & COVID - 19

YEAR 2020



**60 million
Italian population**

**21 million
insured workers**

Italian workers' compensation systems & COVID - 19

IS COVID - 19 WORK RELATED?

Yes



No

Benefits are provided from the
**WORKER COMPENSATION
SYSTEM Inail**

Benefits are provided from the
SOCIAL SECURITY SERVICE

Italian workers' compensation systems & COVID - 19

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Benefits from the COMPENSATION SYSTEM Inail

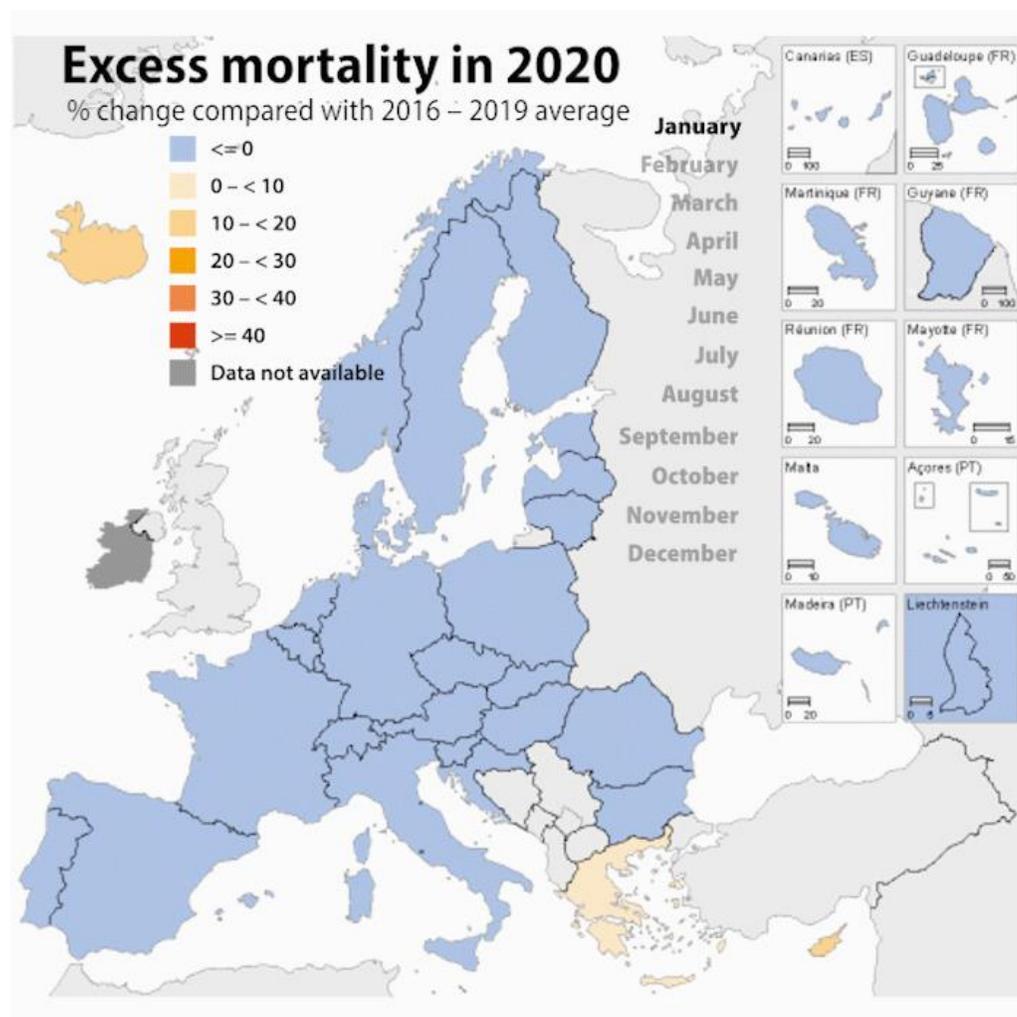
ECONOMIC BENEFITS

- daily indemnity for temporary total disability to work – the Quarantine is included in this indemnity
- lump-sum compensation for persisting consequences between 6% and 15%
- annuity for persisting consequences from 16% upwards annuities are paid
- annuity to surviving dependants
- una tantum benefit to surviving dependants of workers victims of fatal Accidents
- Funeral allowance
- other benefits

HEALTH AND SOCIAL-HEALTH BENEFITS

- outpatient care
- supplementary rehabilitation treatments
- prosthesis care
- support actions for social reintegration
- other benefits

The impact of COVID – 19 on disabled workers' survival



Europe

580.000 more deaths occurred in the EU between March and December 2020 compared with the same period in 2016 – 2019

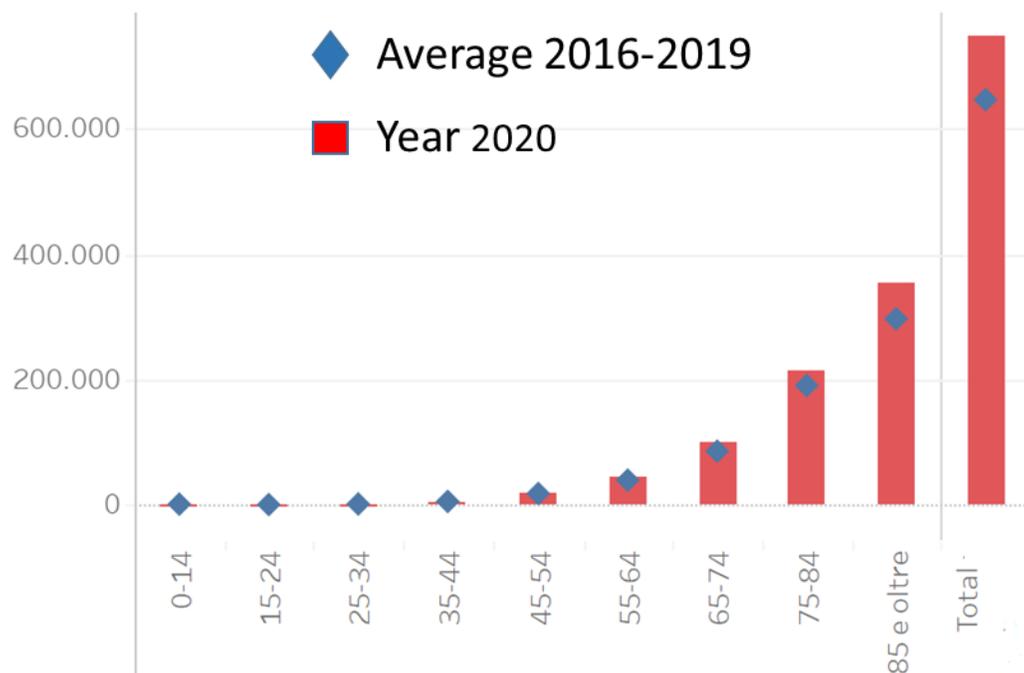
Source:

<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210312-2?redirect=%2Feurostat%2Fweb%2F-covid-19%2Flatest-releases>

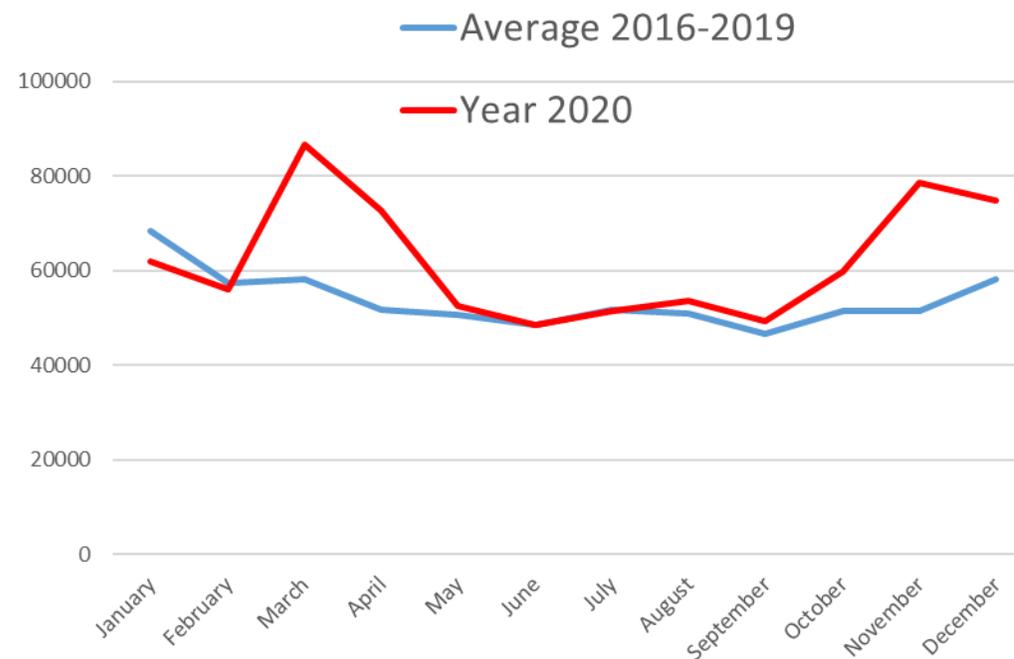
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Italy

Deaths by age classes



Trend of deaths by month



Number of deaths year 2020: **746.146**
 Number of deaths average(2016-2019): 645.620
 Increase 2020 vs average 2015-2019: **15,6 %**

Source: ISTAT

https://public.tableau.com/views/Variazioni/DecessiIstat?:language=it&:display_count=y&publish=yes&:origin=viz_share_link&:showVizHome=no#3

ISTAT: Italian National Institute for Statistic



The impact of COVID – 19 on disabled workers' survival

The goal of the study is to verify if COVID – 19 changed survival of disabled workers insured by Inail.

The collective is composed of disabled workers who suffered an accident at work or contracted an occupational disease and receive a life annuity (*impairment degree over 15%*).

In the next slides, for the sake of simplicity:



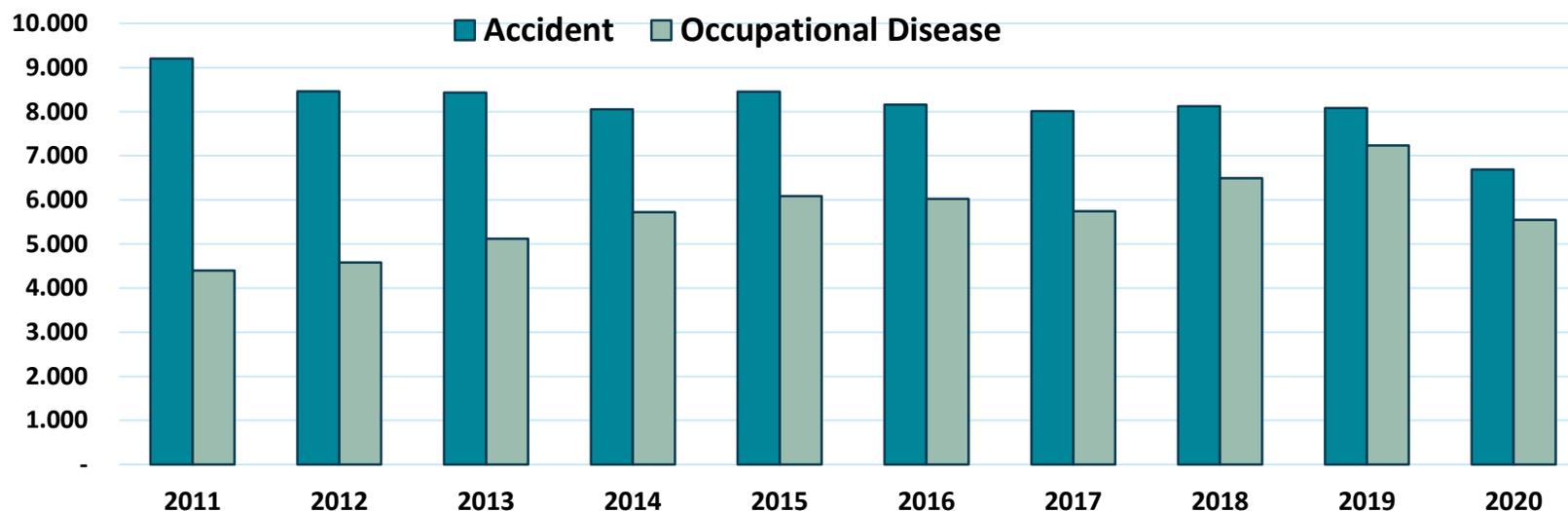
ACCIDENT stands for accident at work;

DISEASE stands for occupational disease;

DISABLED Inail annuitant who suffered an accident at work or contracted an occupational disease

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NUMBER OF PERMANENT DISABILITY ANNUITIES ARISES EVERY YEAR



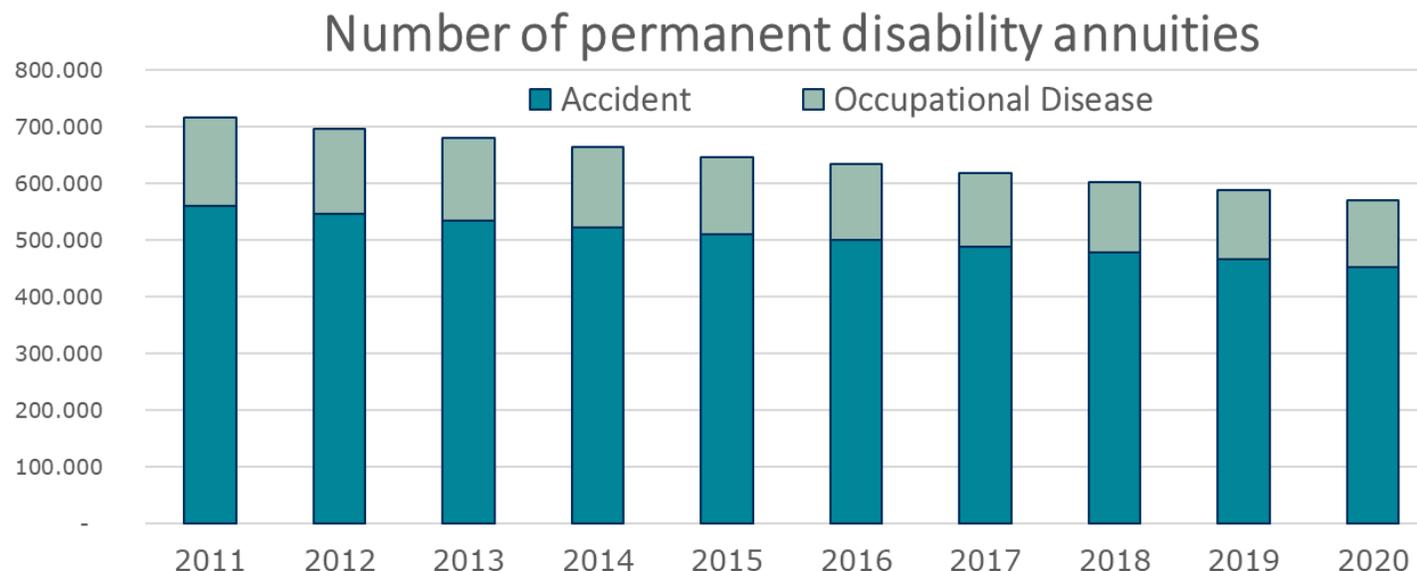
Data source: INAIL data base

Average Value year 2020	Annuitants		Total annuities
	Injured	Diseased	
Age	52	61	56
Degree	24%	24%	24%
Claim duration	0 years	0 years	0 years



CLAIM DURATION:
years from the start date of annuity to valuation date

The impact of COVID – 19 on disabled workers' survival



Data source: INAIL data base

Average Value at 31/12/2020	Annuitants		Total annuities
	Injured	Diseased	
Age	69	74	70
Degree	29%	26%	28%
Claim duration	30 years	25 years	28 years

Year 2020:

Inail pays over 570.000 annuities
 79% caused by accidents
 21% caused by occupational diseases

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Regulatory framework

CONSOLIDATED LAW n. 1124/1965



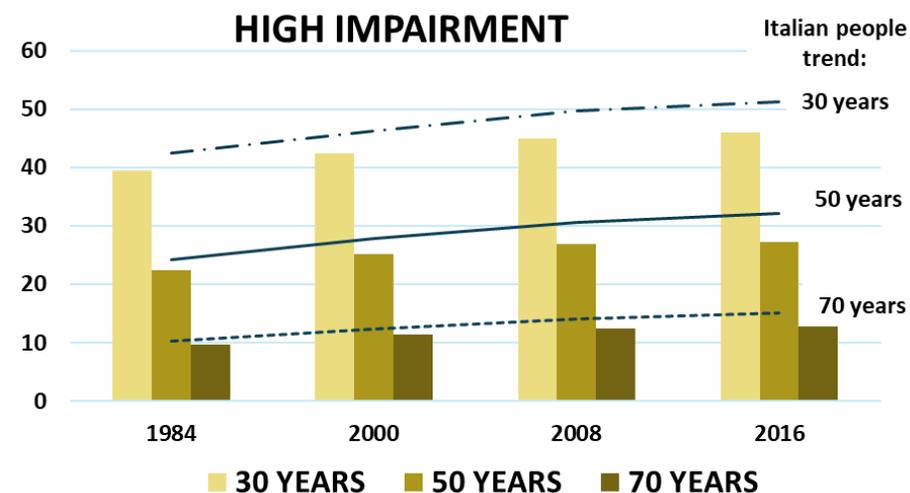
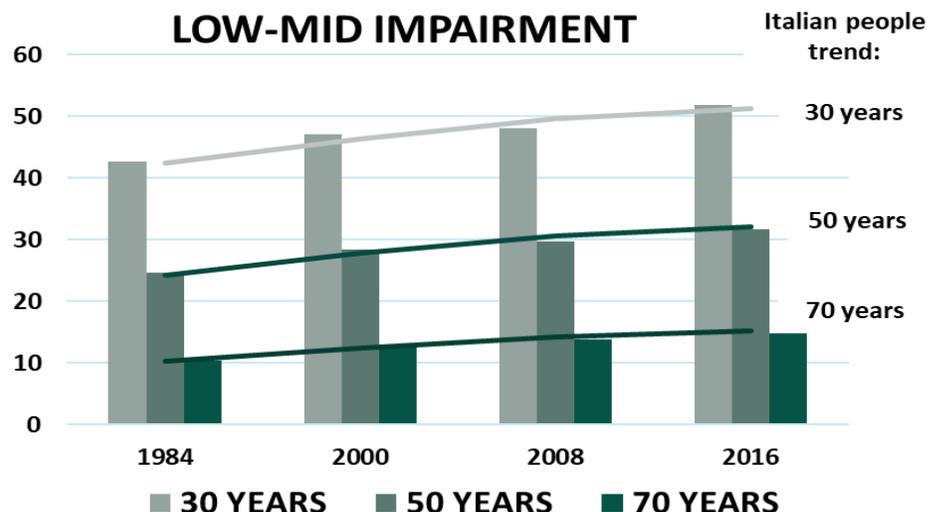
LEGISLATIVE DECREE n. 38/2000



25 July 2000

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TREND OF DISABLED WORKERS LIFE EXPECTANCY

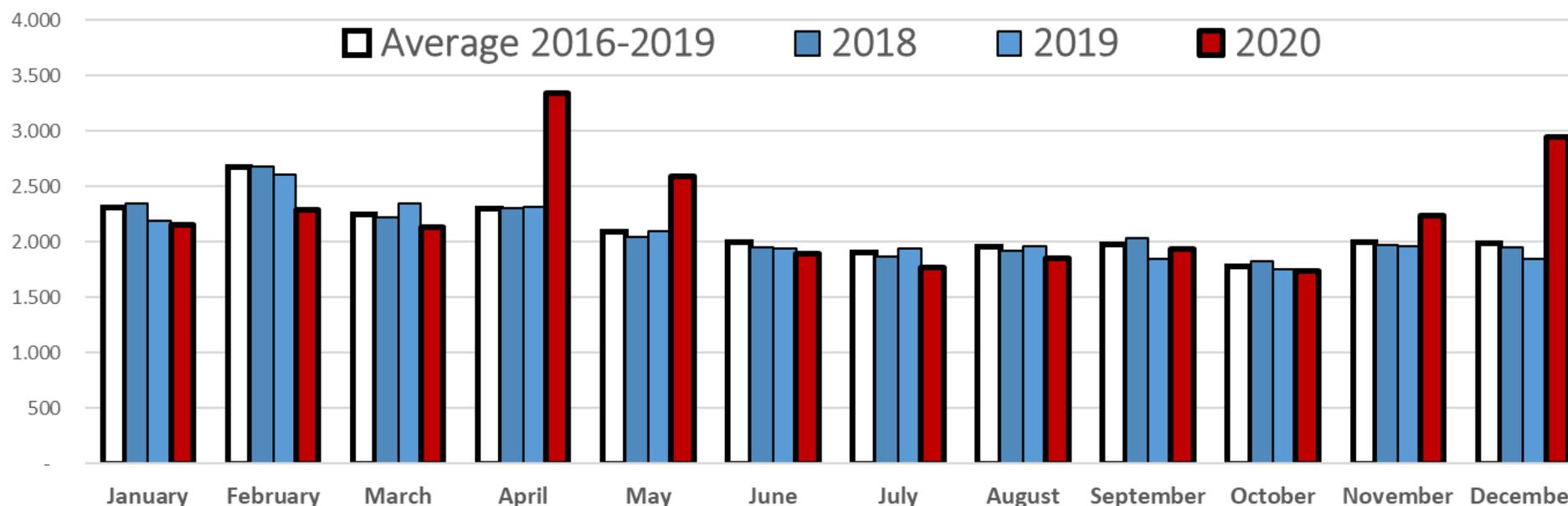


LIFE EXPECTANCY IMPROVEMENT 1984-2016

AGE	DISABLED		ITALIAN POPULATION
	Low-mid impairment	High impairment	
30	21,5%	16,7%	20,5%
50	28,4%	21,2%	32,3%
70	41,3%	32,1%	48,2%

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Trend of dead annuitants by month

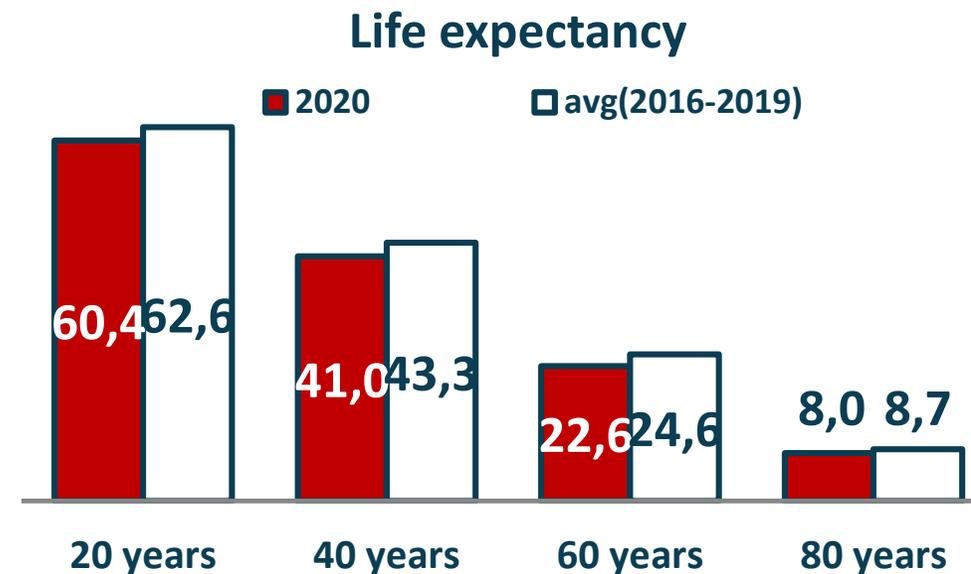
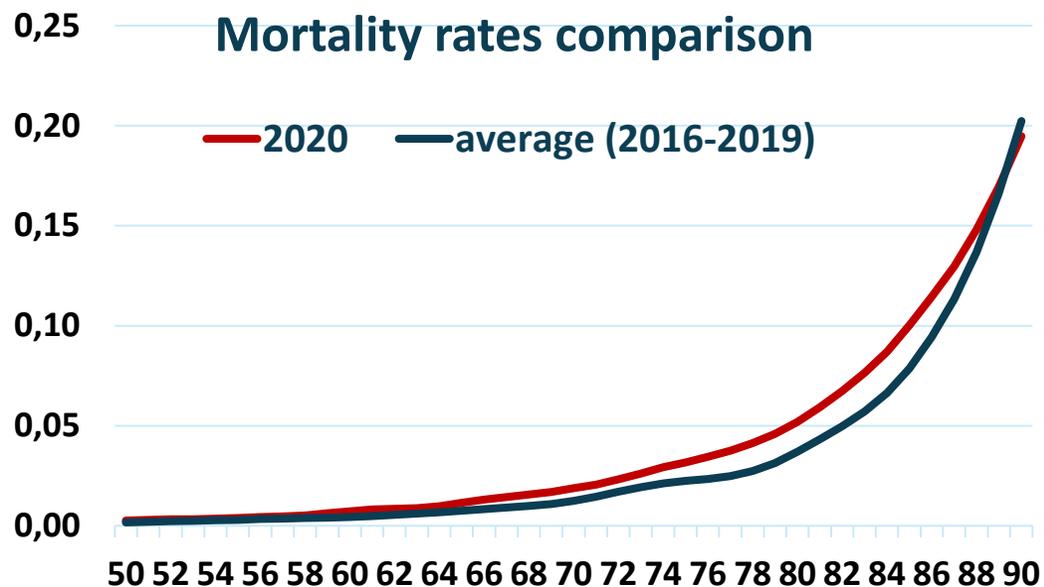


	January	February	March	April	May	June	July	August	September	October	November	December	Year
2020/Avg 2016-2019	-8%	-15%	-5%	44%	23%	-5%	-8%	-6%	-2%	-2%	12%	48%	6%
2020/2019	-1%	-12%	-8%	44%	23%	-1%	-9%	-5%	6%	0%	15%	61%	9%

Data source: INAIL data base

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Year 2020 vs average (2016-2018)



Age	ex(2020) - ex(avg 2016-2019)	%
20 years	-2,2	-4%
40 years	-2,3	-6%
60 years	-2,0	-9%
80 years	-0,6	-8%

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The variables that affect the disabled's survival

AGE	From 12 to 108 years
CLAIM DURATION	HIGH (events before 25/7/2000) LOW (events since 25/7/2000)
CLASS OF DEGREE	Up to 60% 61%-100%
TYPE OF EVENT	Accident Occupational disease

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6 groups



6 lines of mortality

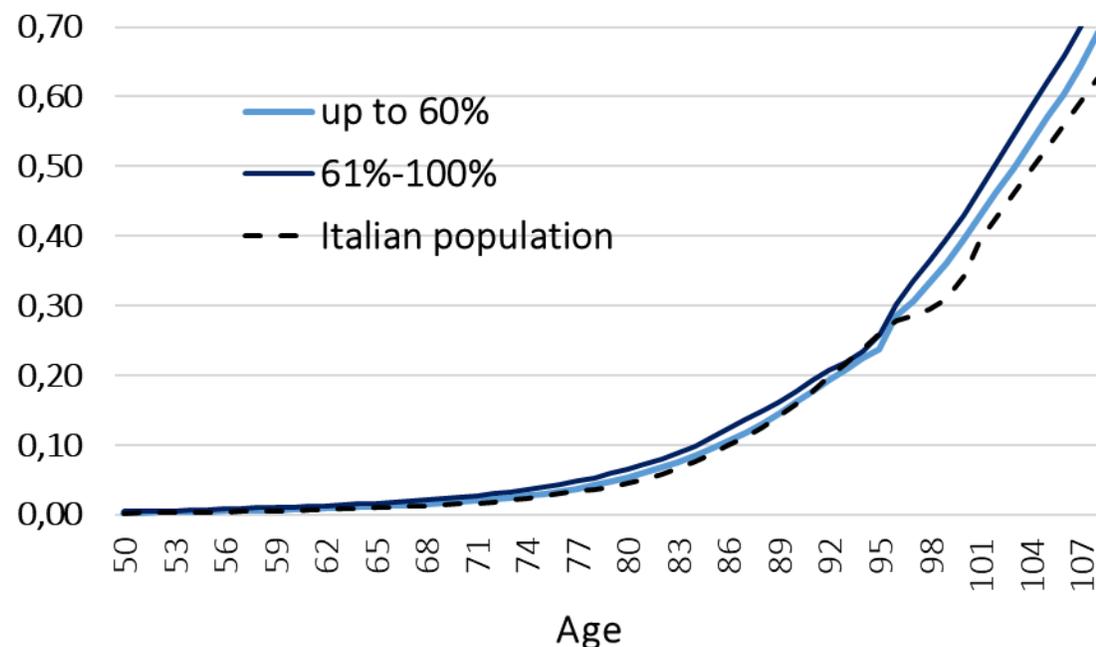
Life tables 2018 - period of observation 2000-2018

CLAIM DURATION	TYPE OF EVENT	CLASS OF DEGREE
HIGH DURATION ANNUITIES	Accidents and Occupational Diseases	up to 60% (1)
		61%-100% (2)
LOW DURATION ANNUITIES	Accidents	up to 60% (3)
		61%-100% (4)
	Occupational Diseases	up to 60% (5)
		61%-100% (6)

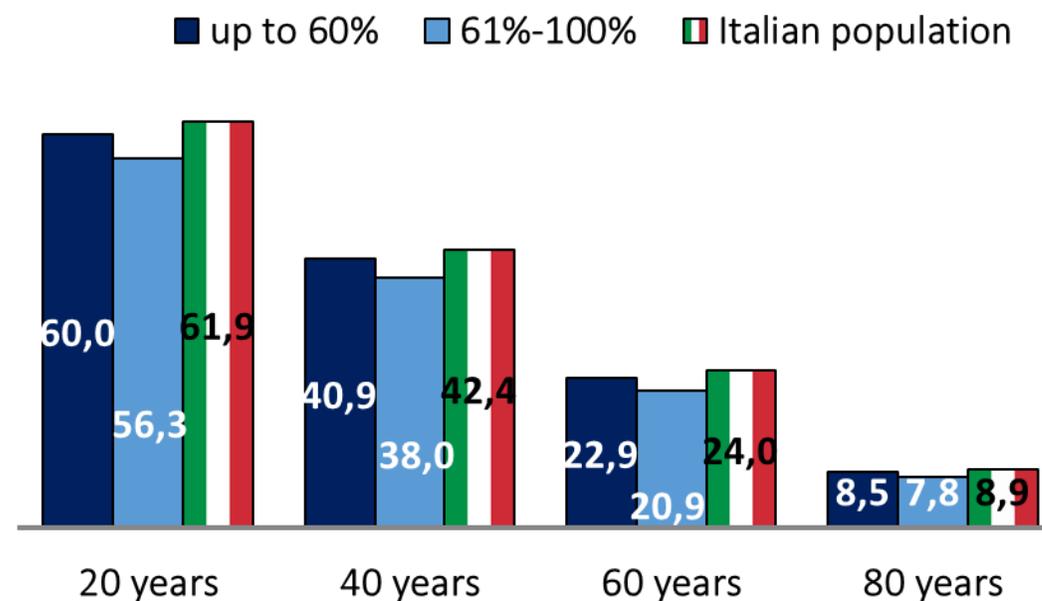
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LIFE TABLE 2018 - HIGH CLAIM DURATION

Mortality rates comparison

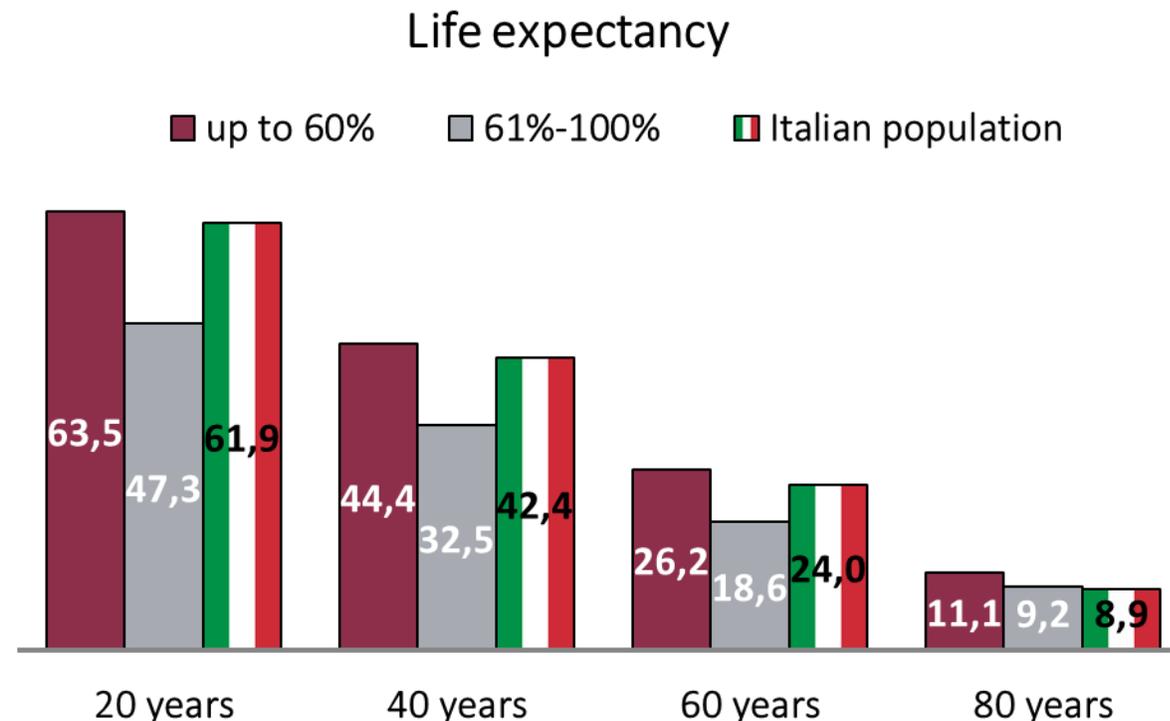
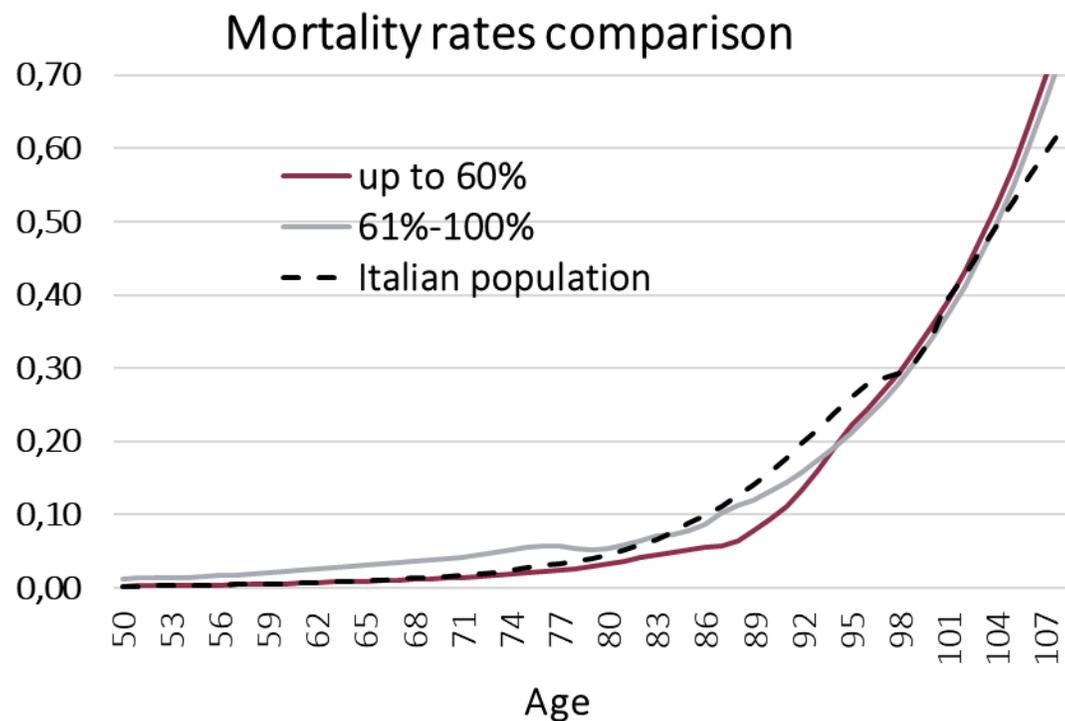


Life expectancy



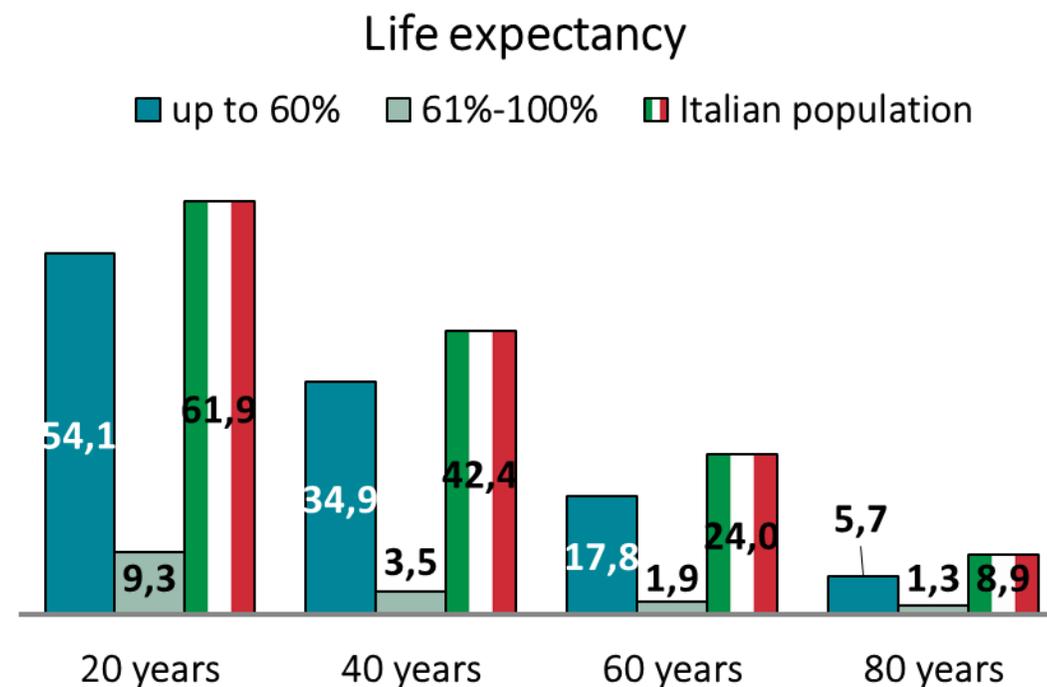
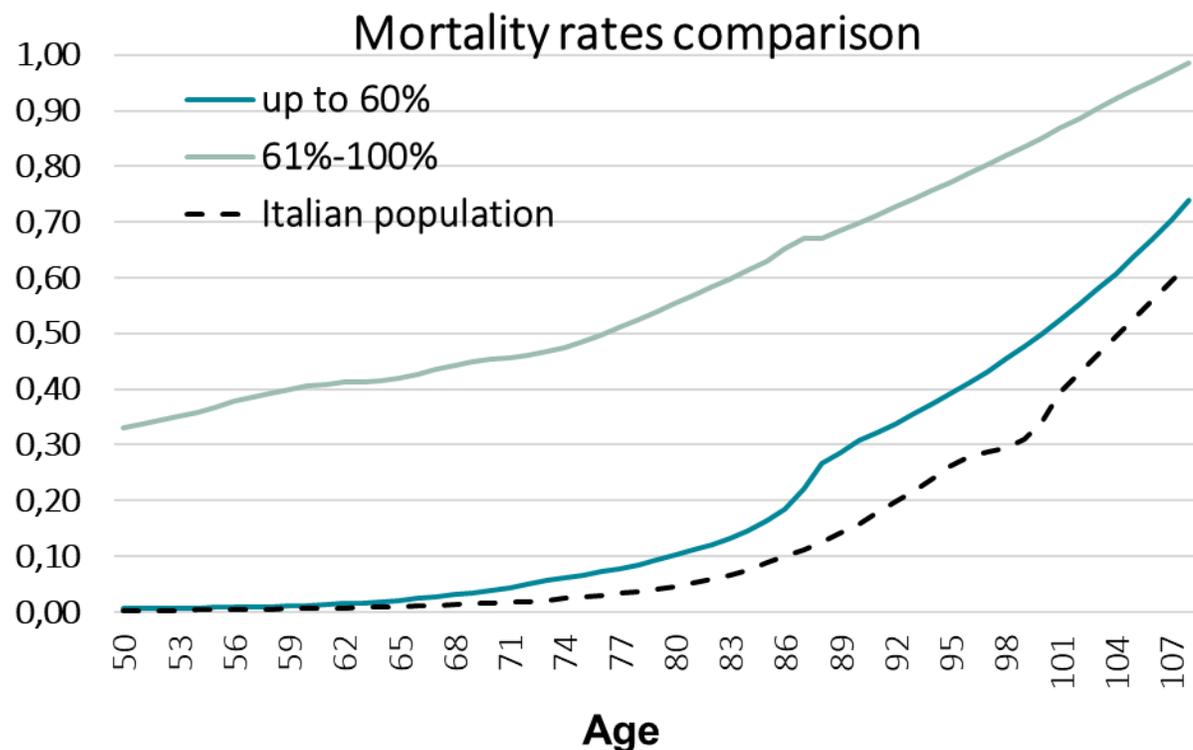
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LIFE TABLE 2018 - LOW CLAIM DURATION - INJURED



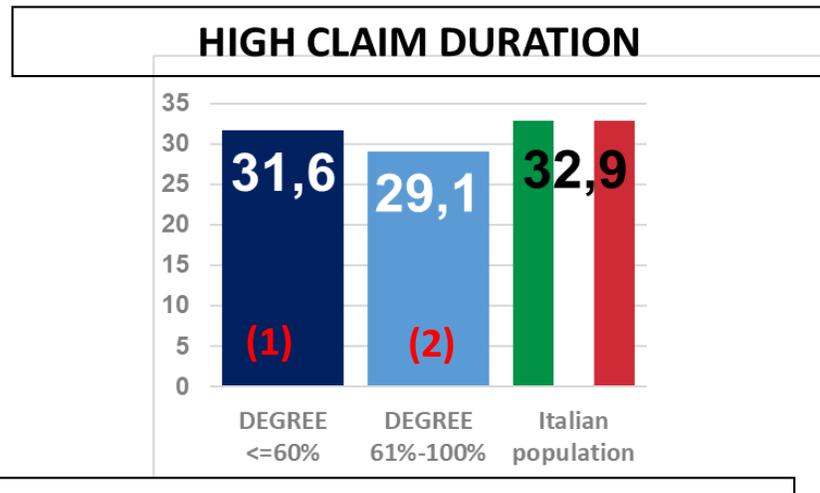
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LIFE TABLE 2018 - LOW CLAIM DURATION - DISEASED

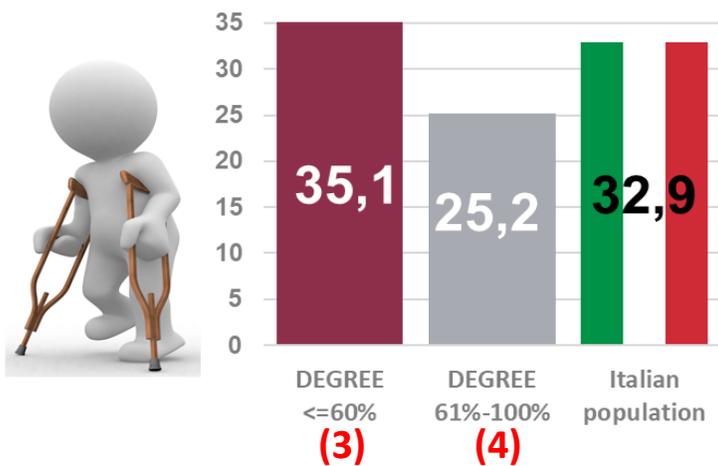


The impact of COVID – 19 on disabled workers' survival

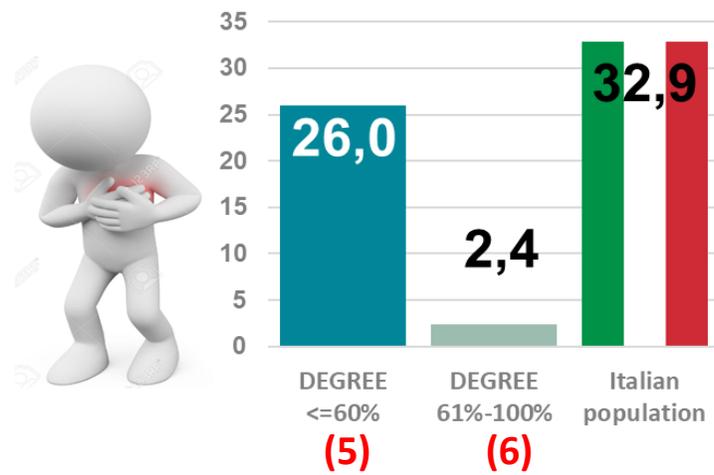
LIFE TABLE 2018
TYPE CASE: 50 YEAR OLD
DISABLED WORKER



LOW CLAIM DURATION - INJURED



LOW CLAIM DURATION - DISEASED

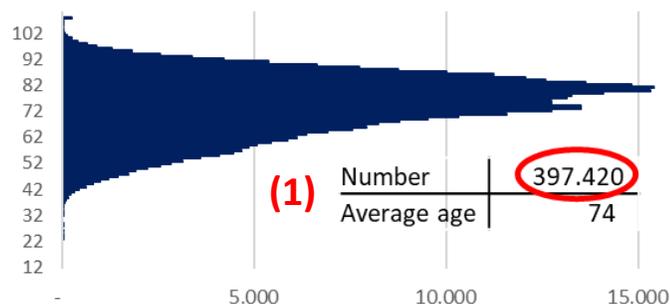


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Age distribution of Exposed to risk **YEAR 2020**

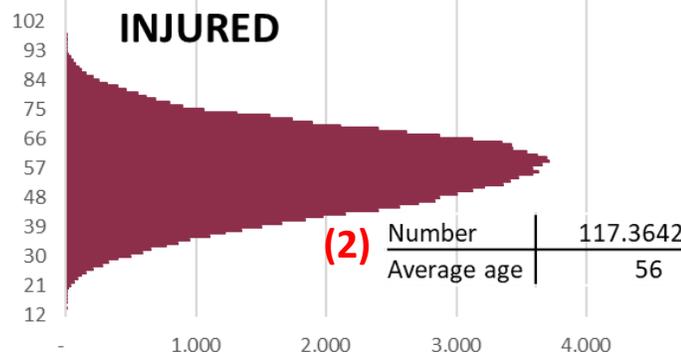
HIGH CLAIM DURATION

CLASS OF DEGREE: UP TO 60%

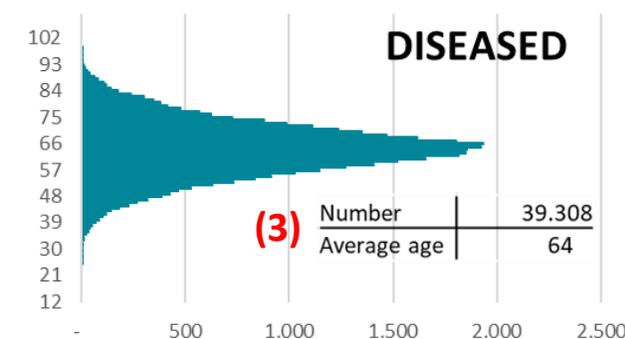


LOW CLAIM DURATION

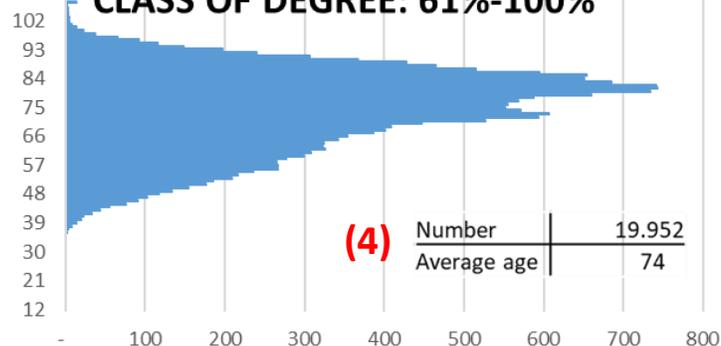
CLASS OF DEGREE: UP TO 60%



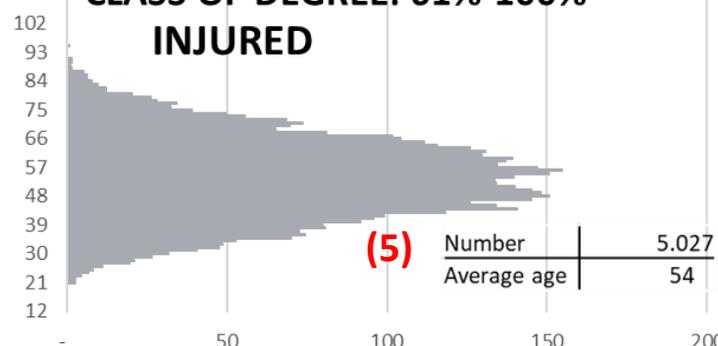
CLASS OF DEGREE: UP TO 60%



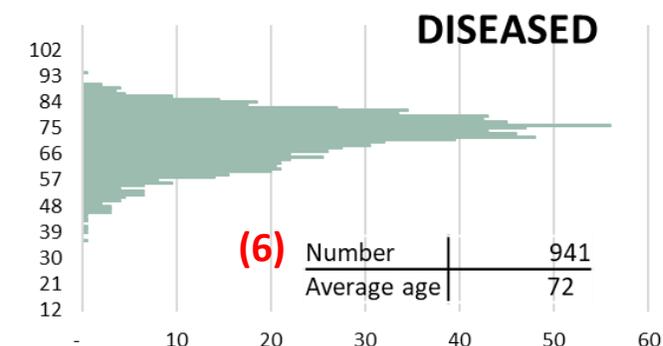
CLASS OF DEGREE: 61%-100%



CLASS OF DEGREE: 61%-100%



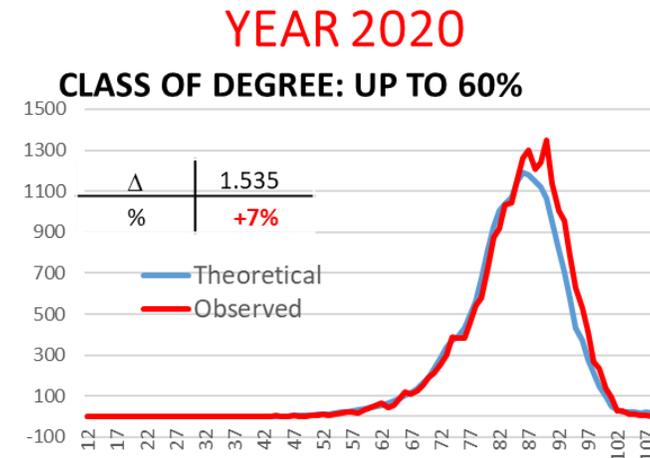
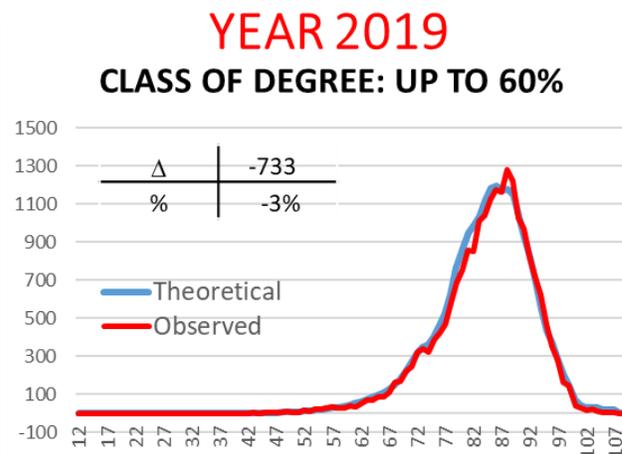
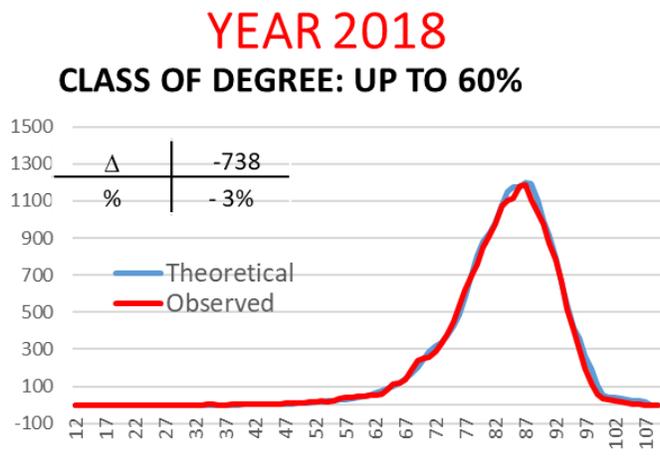
CLASS OF DEGREE: 61%-100%



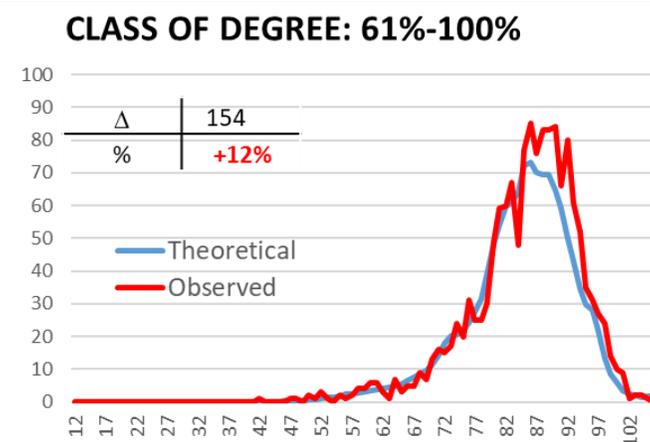
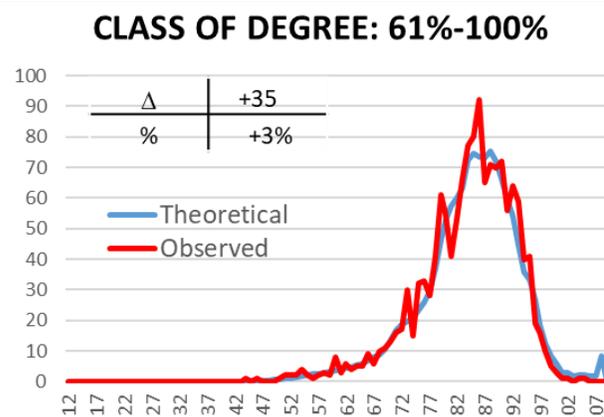
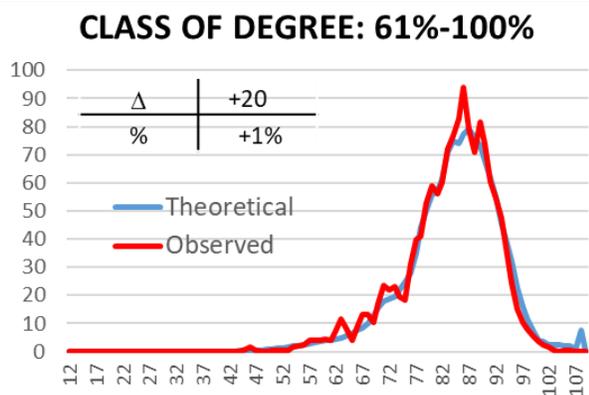
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Theoretical vs **observed** deaths - HIGH CLAIM DURATION

(1)



(2)



The impact of COVID – 19 on disabled workers' survival

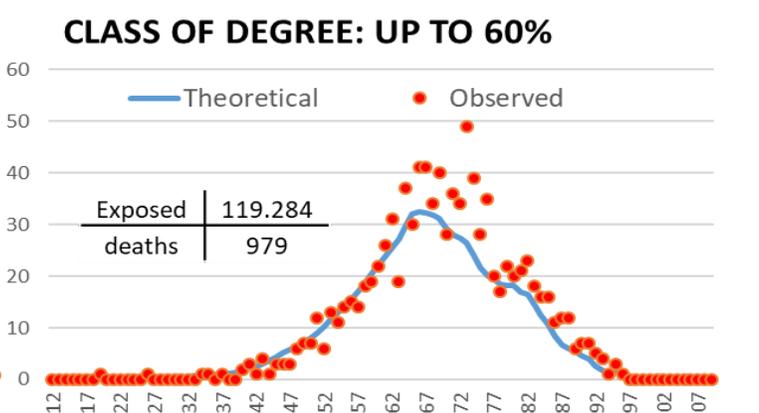
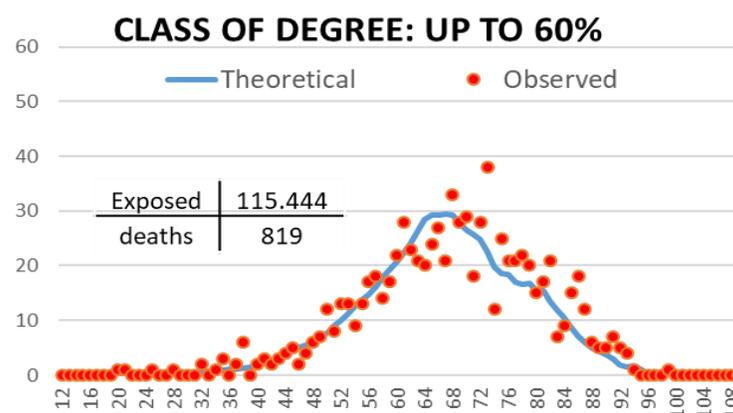
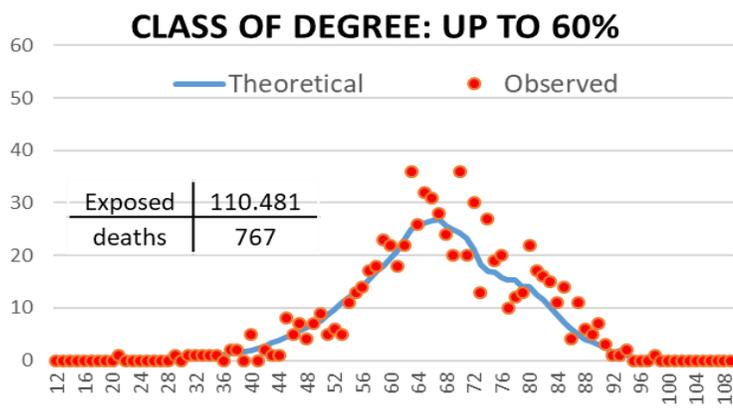
Theoretical vs observed deaths - **LOW CLAIM DURATION - INJURED**

YEAR 2018

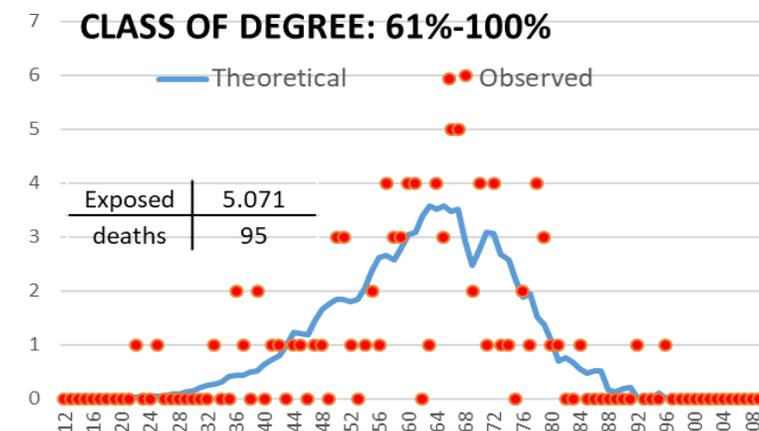
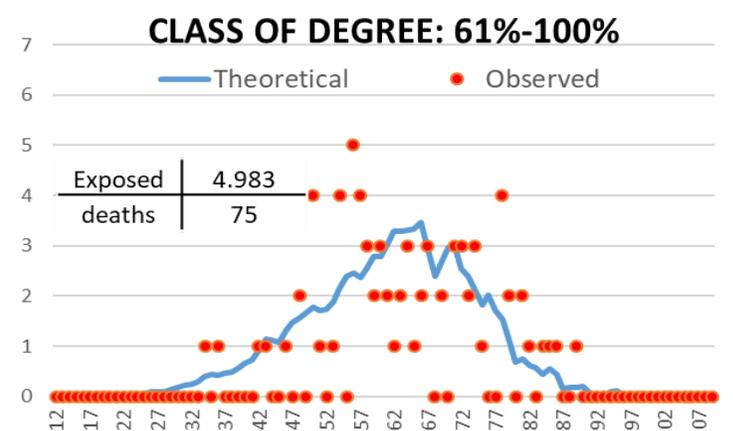
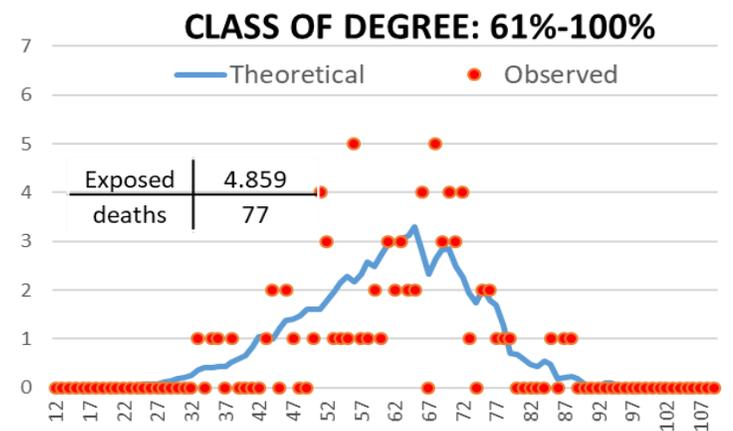
YEAR 2019

YEAR 2020

(3)



(4)



The impact of COVID – 19 on disabled workers’ survival

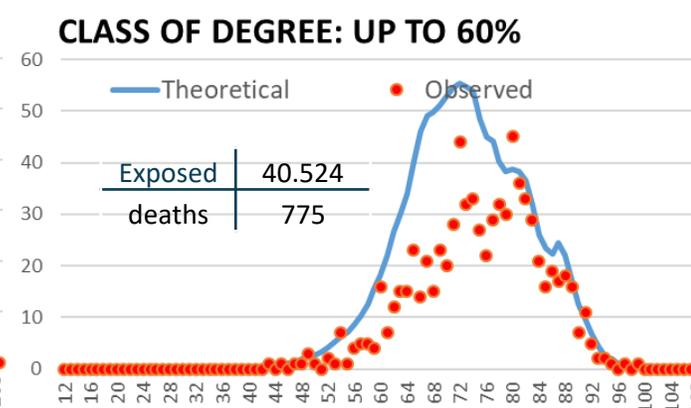
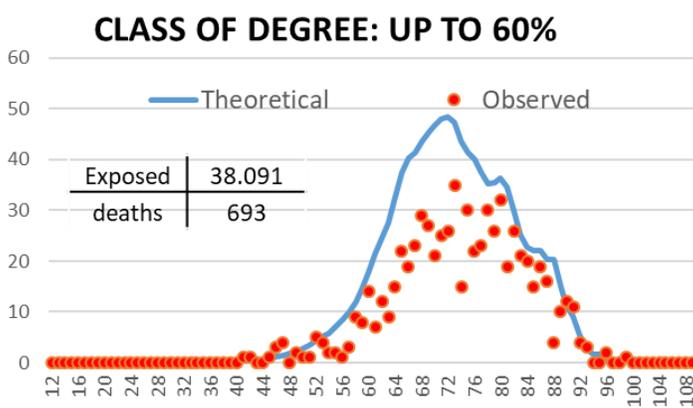
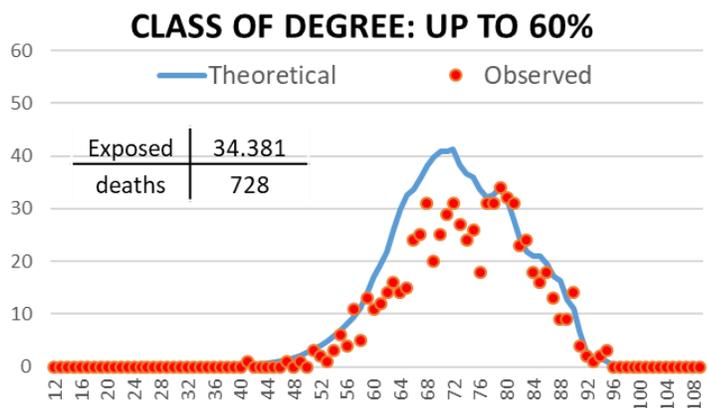
Theoretical vs observed deaths **LOW CLAIM DURATION - DISEASED**

YEAR 2018

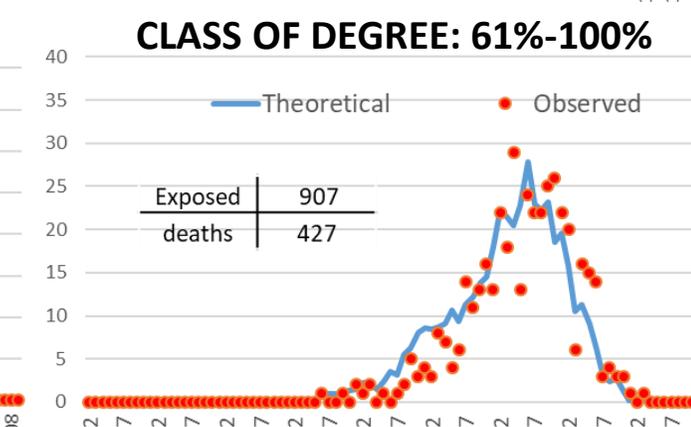
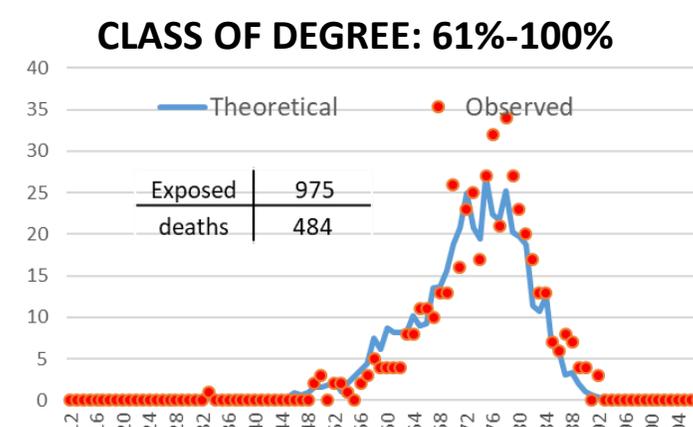
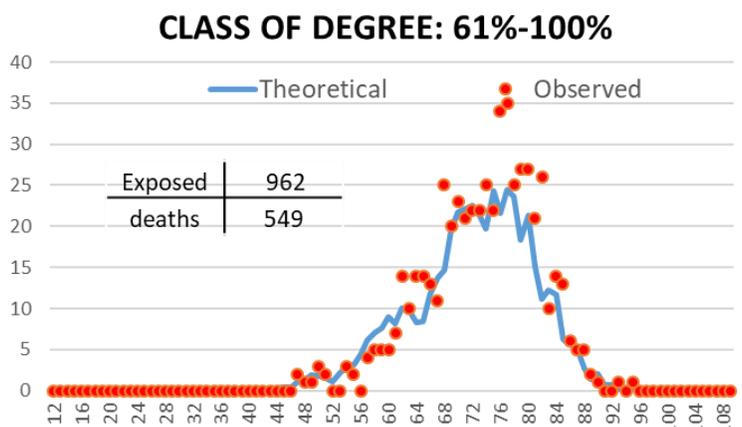
YEAR 2019

YEAR 2020

(5)

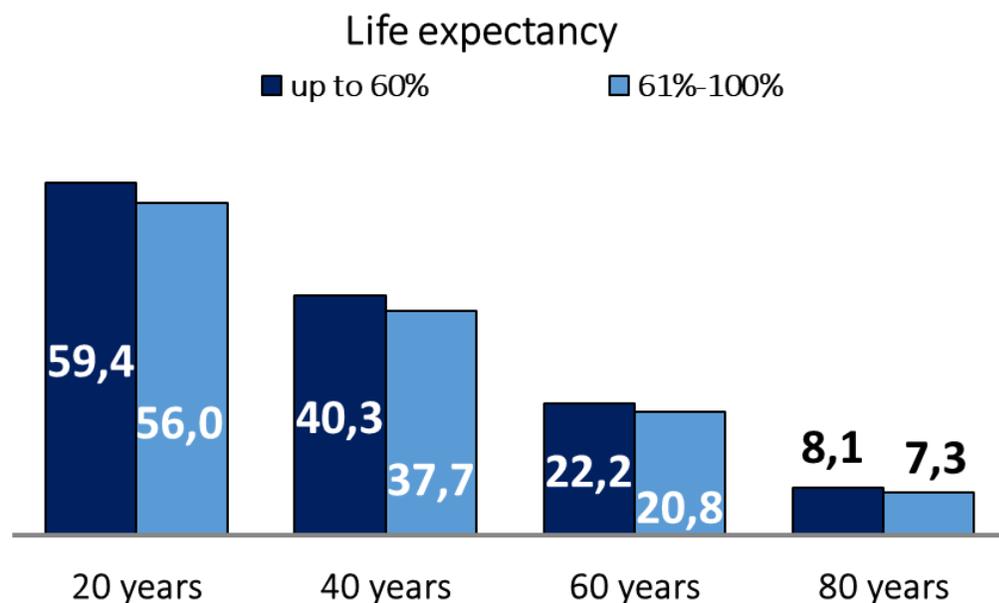


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LIFE TABLES 2020 - HIGH CLAIM DURATION



Life expectancy 2020 compared to 2018 and 2016

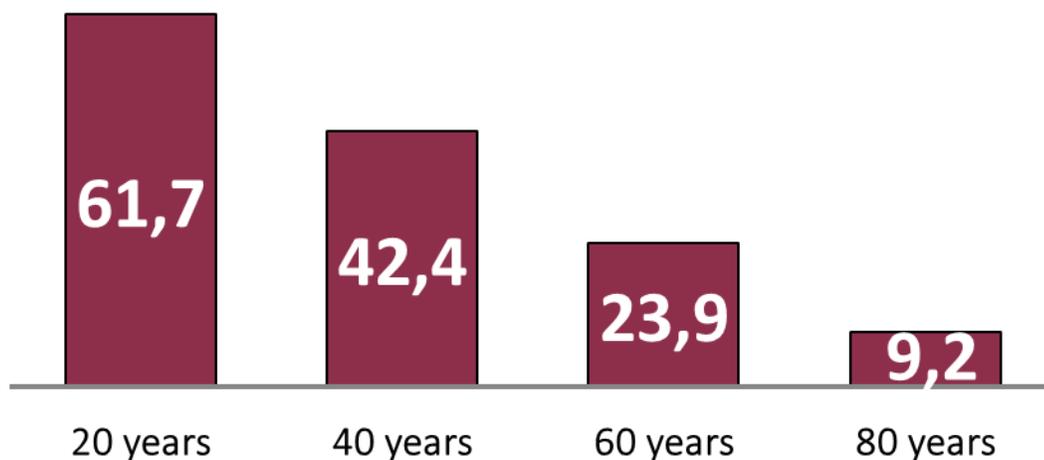
Age	ex(2020) - ex(2018)		ex(2020) - ex(2016)	
	up to 60%	61%-100%	up to 60%	61%-100%
20 years	-0,6	-0,3	-0,2	0,4
40 years	-0,6	-0,3	-0,2	0,0
60 years	-0,7	0,0	-0,3	0,2
80 years	-0,4	-0,5	-0,2	-0,3

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LIFE TABLE 2020 – LOW CLAIM DURATION – INJURED – CLASS OF DEGREE UP TO 60%

Life expectancy

■ up to 60%



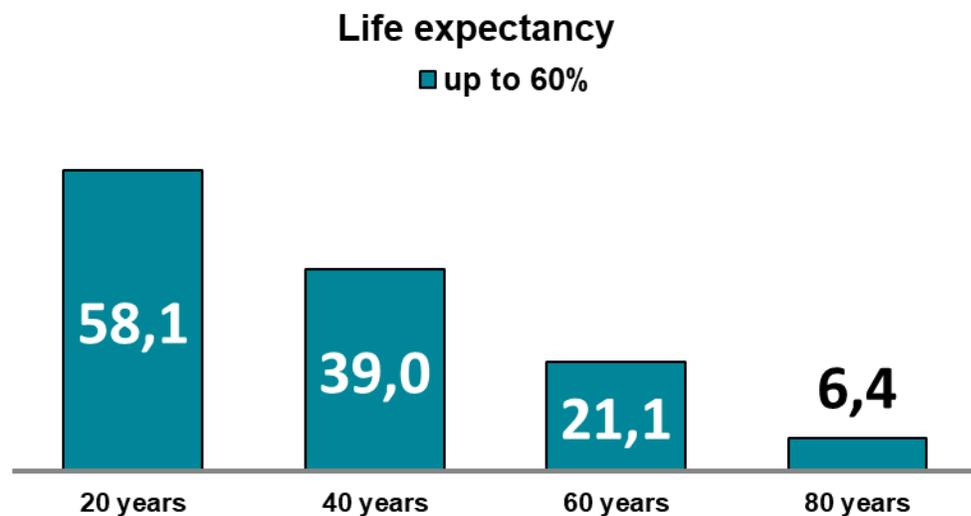
Life expectancy 2020 compared to 2018 and 2016

Age	ex(2020) - ex(2018)	ex(2020) - ex(2016)
20 years	-1,8	-1,0
40 years	-2,0	-1,1
60 years	-2,3	-1,4
80 years	-1,9	-1,0

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LIFE TABLE 2020 – LOW CLAIM DURATION – DISEASED – CLASS OF DEGREE UP TO 60%

Life expectancy 2020 compared to 2018 and 2016



Age	ex(2020) - ex(2018)	ex(2020) - ex(2016)
20 years	3,9	7,0
40 years	4,0	6,9
60 years	3,4	5,3
80 years	0,6	0,8

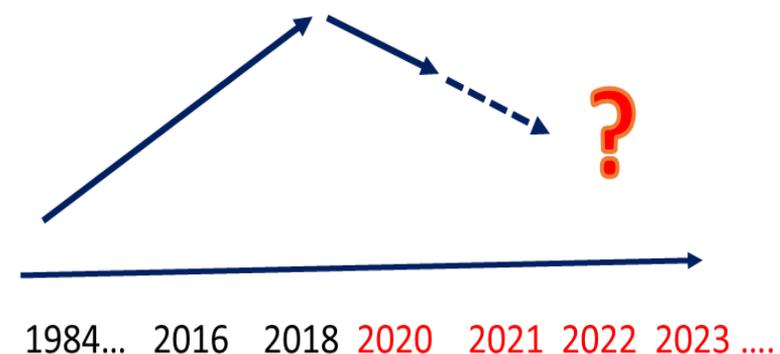
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Conclusions

In 2020 the spread of Covid 19 has negatively impacted the survival of disabled workers:

1. The **deaths** are **6%** higher than the average of the years 2016-2019
2. The **60-year-old** disabled worker had a **2-years** (9%) decrease in life expectancy compared to the period 2016-2019
3. The group of disabled workers who had the most severe loss of survival was that of **injured** with **low claim duration** and **impairment degree up to 60%**. At the age 60, they suffered a decrease in survival of **2.3 years**.

Life expectancy forecast



Thank you!

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