



Western Cape
Government



**FACULTY OF HEALTH
SCIENCES**
UNIVERSITY OF CAPE TOWN



Vulnerable worker assessment

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cutting edge

world class training and

partnering for patient-centred

Vulnerable worker assessment (rationale and what needs to be taken into consideration)

Background

Why focus on vulnerable workers

Legislation

Identifying the vulnerable workers

Individual risk assessment

Assessing the vulnerable worker

Accommodation vulnerable worker

COVID-19 STATISTICS IN SA

				
1 864 111	205 721	97 848	3 310	8 971
TESTS CONDUCTED	POSITIVE CASES IDENTIFIED	TOTAL RECOVERIES	TOTAL DEATHS	NEW CASES

MONDAY
06
JULY
2020



Learn more to Be READY for #COVID19:
www.sacoronavirus.co.za

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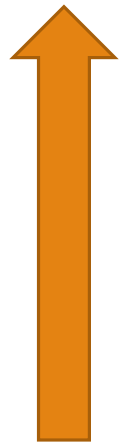
health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Country, Other	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical	Tot Cases/ 1M pop	Deaths / 1M pop	Total Tests	Tests/ 1M pop	Population	
10	Iran	243,051		11,731		204,083	27,237	3,201	2,893	140	1,820,000	21,665	84,006,568
11	Italy	241,819		34,869		192,241	14,709	72	4,000	577	5,660,454	93,623	60,460,068
12	Pakistan	234,509	+2,691	4,839	+77	134,957	94,713	2,306	1,061	22	1,445,153	6,541	220,931,964
13	Saudi Arabia	213,716		1,968		149,634	62,114	2,254	6,138	57	1,934,391	55,554	34,819,965
14	Turkey	206,844		5,241		182,995	18,608	1,130	2,452	62	3,682,673	43,659	84,351,507
15	South Africa	205,721		3,310		97,848	104,563	539	3,468	56	1,864,111	31,426	59,318,236
16	Germany	198,064	+7	9,092		182,700	6,272	305	2,364	109	5,873,563	70,100	83,788,628
17	France	168,335		29,920		77,308	61,107	548	2,579	458	1,384,633	21,212	65,276,107
18	Bangladesh	165,618		2,096		76,149	87,373	1	1,005	13	863,307	5,241	164,712,537
19	Colombia	120,281		4,210		50,370	65,701	841	2,364	83	881,190	17,315	50,890,353
20	Canada	105,935		8,693		69,570	27,672	2,128	2,806	230	2,975,711	78,833	37,747,023

Why focus on vulnerable workers ??

Increased vulnerability associated with poorer outcomes



Complications

Hospitalization

Intensive care and ventilation

Deaths

PREVENTION

PREVENTION

PREVENTION

PREVENTION

Risk factors associated with mortality from Covid-19

Risk factor associated with increased mortality from COVID-19	Hazard ratio
Male sex	1.45
Age (40+ - 70 +)	2.83 - 16.78
Diabetes Mellitus (well-controlled – poor control)	5.37- 16.78
Hypertension	1.31
Chronic Kidney disease	1.86
Previous TB	1.52
Current TB	2.70
HIV	2.15

Andrew Boulle & Mary-Ann Davies on behalf of the Western Cape
Outbreak Response Team

Legislation from Department of Employment and Labour

Workplace Preparedness: COVID-19 (SARS-CoV-19 virus)” on 15 March 2020.

3. Classifying Worker Exposure to SARS-CoV-2

Worker risk of occupational exposure to SARS-CoV-2 (the virus that causes COVID-19) during an outbreak may vary from very high to high, medium, or low (caution) risk. The level of risk depends in part on the industry type, need for contact within 2 metres (6 feet) of people known to be, or suspected of being infected with SARS-CoV-2, or requirement for repeated or extended contact with persons known to be, or suspected of being infected with SARS-CoV-2.

VERY HIGH EXPOSURE RISK: Jobs involving PROCEDURES on COVID patients. Examples include

- Healthcare workers (e.g. doctors, nurses, dentists, paramedics, emergency medical technicians) performing aerosol-generating procedures (e.g. intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on known or suspected COVID patients.
- Healthcare or laboratory personnel collecting or handling open specimens from known or suspected COVID patients (e.g. manipulating cultures from known or suspected COVID patients).
- Mortuary workers performing autopsies, which generally involve aerosol-generating procedures, on the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.

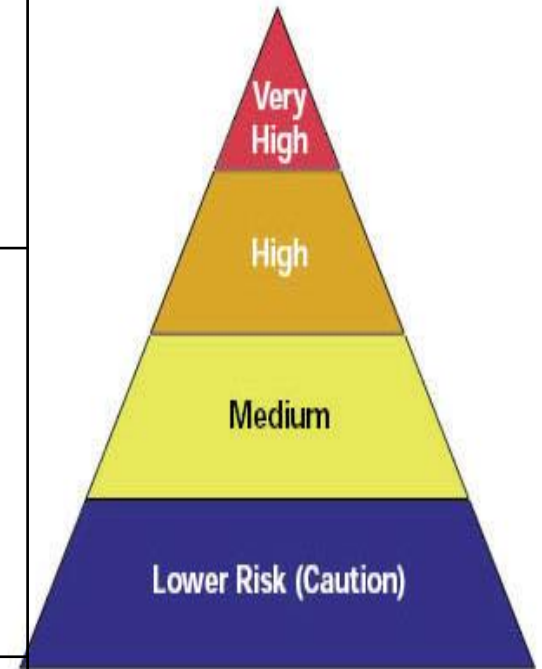
HIGH EXPOSURE RISK: Jobs with a high potential for exposure to known or suspected sources of COVID. Examples include:

- Healthcare delivery and support staff (e.g. doctors, nurses, and other hospital staff who must enter patients' rooms) exposed to known or suspected COVID-19 patients. (Note: no aerosol-generating procedures may be performed)
- Medical transport workers (e.g. ambulance personnel and porters) moving known or suspected COVID patients in enclosed vehicles
- Mortuary workers involved in preparing (e.g. for burial or cremation) the bodies of people who are known to have, or suspected of having COVID-19 at the time of their death.

MEDIUM EXPOSURE RISK:

Frequent and/or close (<1.5m) contact with people not known or suspected with COVID. This includes employees with contact with the general public (e.g. in schools, high-population-density work environments, such as labour centres, consulting rooms, point of entry personnel and some high-volume retail settings).

LOW EXPOSURE RISK: Workers in this category have minimal occupational contact (<1.5m) with the public and other co-workers



Determining vulnerability

VERY HIGH VULNERABILITY:

- Solid organ transplant recipients
- People with specific cancers or receiving immunosuppressive treatment for their cancer:
 - o undergoing active chemotherapy or radical radiotherapy for lung cancer
 - o cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment
 - o receiving immunotherapy or other continuing antibody treatments for cancer
 - o receiving targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or Poly ADP-ribose Polymerase (PARP) inhibitors
- People who have had bone marrow or stem cell transplants in the last 6 months, or who are still taking immunosuppressive drug.
- People with severe respiratory conditions including cystic fibrosis, severe and unstable asthma and severe Chronic Obstructive Pulmonary Disease (COPD), or current active tuberculosis of the lung.
- People with rare diseases and inborn errors of metabolism that significantly increase the risk of infections (such as Severe Combined Immunodeficiency (SCID), homozygous sickle cell).
- People on immunosuppressive therapies sufficient to significantly increase risk of infection
- Women who are pregnant with significant heart disease, congenital or acquired.

HIGH VULNERABILITY:

- Age >60
- Chronic lung problems (moderate to severe asthma, previous complicated TB, etc.)
- Serious heart conditions
- Those who are moderately or intermittently immunocompromised
- Severe obesity (BMI >40)
- Underlying medical conditions, particularly if not well controlled, such as diabetes, renal failure, hypertension or liver disease
- More than 28 weeks pregnant

MEDIUM VULNERABILITY:

- Less than 28 weeks pregnant, but otherwise healthy
- Age between 40 and 60, with controlled medical conditions (hypertension, diabetes, cardiovascular disease, etc.)
- Previous lung TB, but recovered without complications

LOW VULNERABILITY:

- Physiologically young
- Healthy

Legislation from Department of Employment and Labour

COVID -19 Direction on Health and Safety in the Workplace 4th June 2020

Seeks to ensure that the measures taken by employers under OHSA are consistent with the overall national strategies and policies to minimise the spread of COVID-19

Legal definition of vulnerable employee

"vulnerable employee" means any employee, as contemplated in the Department of Health Guidelines³.

with known or disclosed health issues or comorbidities or any other condition that may place the employee at a higher risk of complications or death than other employees if infected with COVID-19; or

above the age of 60 years who is at a higher risk of complications or death if infected;

"worker" means any person who works in an employer's workplace including an employee of the employer or contractor, a self-employed person or volunteer⁴;

"workplace" means any premises or place where a person performs work.

Plan for reopening workplace

18.4 Identify vulnerable employees for the purposes of clause 20.3;

20.3 It must take special measures to mitigate the risk of COVID-19 for vulnerable employees in accordance with the Department of Health's Guidelines⁸ to facilitate their safe return to work or their working from home;



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Guidance on vulnerable employees and workplace accommodation in relation to COVID-19 (V4: 25 May 2020)

**(Document prepared by Academic Group within the Occupational Health and Safety Workstream
of the National Department of Health – Covid-19 Response)**

Please note: This is an interim guide that may be updated as the outbreak in South Africa intensifies, to guide additional workforce preserving strategies

Who is a vulnerable employee in the context of COVID-19?

In order to minimise the adverse consequences of COVID-19 on selected persons, employers should implement a process in identifying employees who:

- are at high-risk of developing severe illness from COVID-19; or
- reside with or care for persons that are at high-risk for severe illness from COVID-19 (including family members, aged parents etc.)

Identifying vulnerable employees

- ❑ Based on information and clinical expertise available,
- ❑ Older adults and people of any age who have impaired function of certain organs (heart, lung, kidneys) or depressed immune system
- ❑ at higher risk for serious complications and severe illness from COVID-19.

Identifying vulnerable employees

The major categories include:

1. 60 years and older
2. Severe obesity (body mass index [BMI] of 40 or higher)
3. Immunocompromised as a result of cancer treatment, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, prolonged use of corticosteroids and other immune weakening medications
4. >28 weeks pregnant (and especially with any of co-morbidities listed)

Identifying vulnerable employees

5. One or more of the underlying commonly encountered *chronic medical conditions* (of any age) particularly if not well controlled:

- chronic lung disease: moderate to severe asthma, chronic obstructive pulmonary disease (COPD), bronchiectasis, idiopathic pulmonary fibrosis, active TB and post-tuberculous lung disease (PTLD)
- diabetes (poorly controlled) or with late complications
- moderate/severe hypertension (poorly controlled) or with target organ damage
- serious heart conditions: heart failure, coronary artery disease, cardiomyopathies, pulmonary hypertension; congenital heart disease
- chronic kidney disease being treated with dialysis
- chronic liver disease including cirrhosis

Assessing vulnerable employees

The employee should be assessed by his/her treating doctor.

The doctor should provide a confidential note to the employer, indicating the presence of any of the above conditions, without specifying the diagnosis.

However, the guidelines state that doctor should refrain from commenting on the employee's fitness to work.

- Knowledge of risk factors for COVID associated with poor health outcomes
- Treating doctor or occupational Health doctor
- Ideally knowledge of COVID risk in the workplace related to workers occupation

Other steps which a doctor should take to ensure that an employee's health condition is fully optimised, can include:

- Recommending flu vaccinations (and pneumococcal vaccine where appropriate);
- The employee has adequate supply of chronic medication for up to six months;
- Advise the employee not to delay getting emergency care for their underlying condition;
- Advise employee to maintain ongoing health consultations if they have any concerns;
- Ensure that the employee has access to psychosocial support for new-onset or exacerbation of pre-existing mental illness.

Assessing vulnerable employees

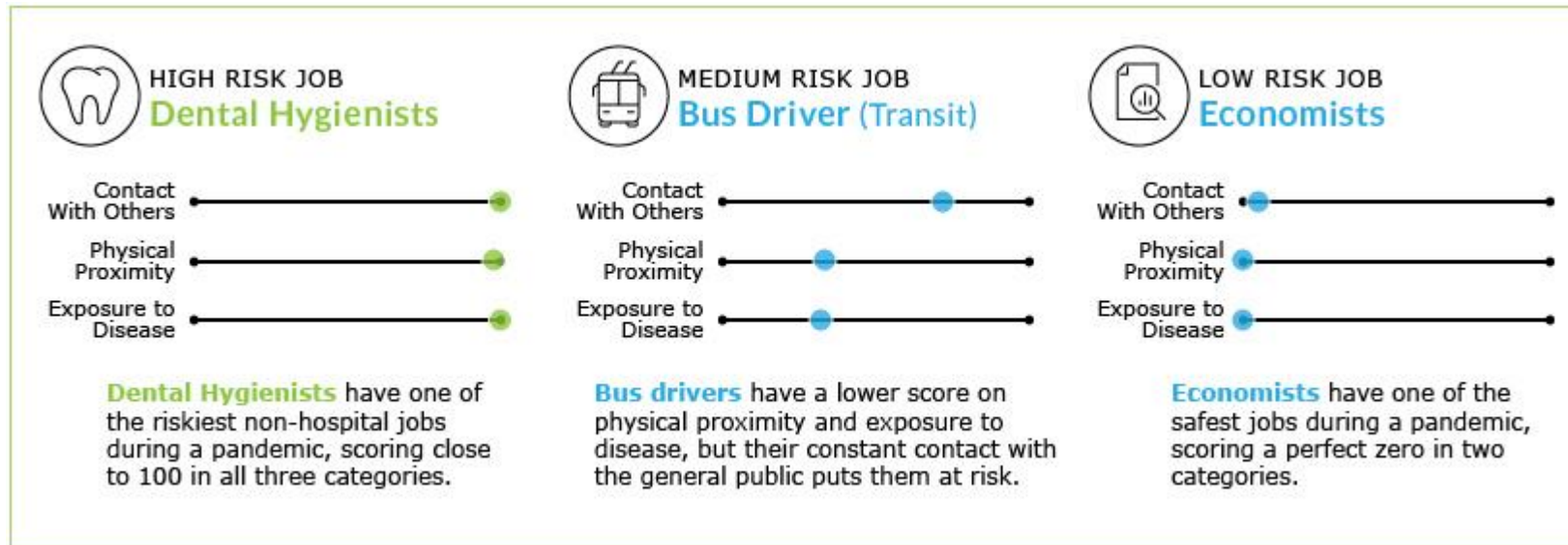


CALCULATE THE RISK SCORE

		Exposure risk group			
		1. Low	2. Medium	3. High	4. Very High
Employee vulnerability group	1. Low	1	2	3	4
	2. Medi	2	4	6	8
	3. High	3	6	9	12
	4. Very	4	8	12	16

Key: 1 – 6 Acceptable risk (low to medium)
7 – 8 High risk (only acceptable under critical conditions)
9 – 16 Unacceptable risk

Occupational risk score





The Front Line: Visualizing the Occupations with the Highest COVID-19 Risk

Search:

Occupation	COVID-19 Risk Score	Average Annual Income	Number of Employed
Web Developers	12.5	\$69,430	127,300
Waiters and Waitresses	43.6	\$21,780	2,582,410
Veterinary Assistants and Laboratory Animal Caretakers	74.9	\$27,540	89,480
Veterinarians	70.0	\$93,830	71,060
Ushers, Lobby Attendants, and Ticket Takers	51.1	\$22,260	133,970
Tellers	50.9	\$29,450	468,470
Teacher Assistants	55.7	\$26,970	1,331,560
Taxi Drivers and Chauffeurs	35.2	\$25,980	207,920
Surgical Technologists	80.6	\$47,300	110,160
Social and Human Service Assistants	60.3	\$33,750	392,300

Showing 1 to 10 of 100 entries

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While some of these findings may be obvious—nurses and paramedics have a higher chance of exposure to the virus than lawyers and web developers, for example—these datasets allow us to assign a more quantitative figure to each occupation’s level of risk.

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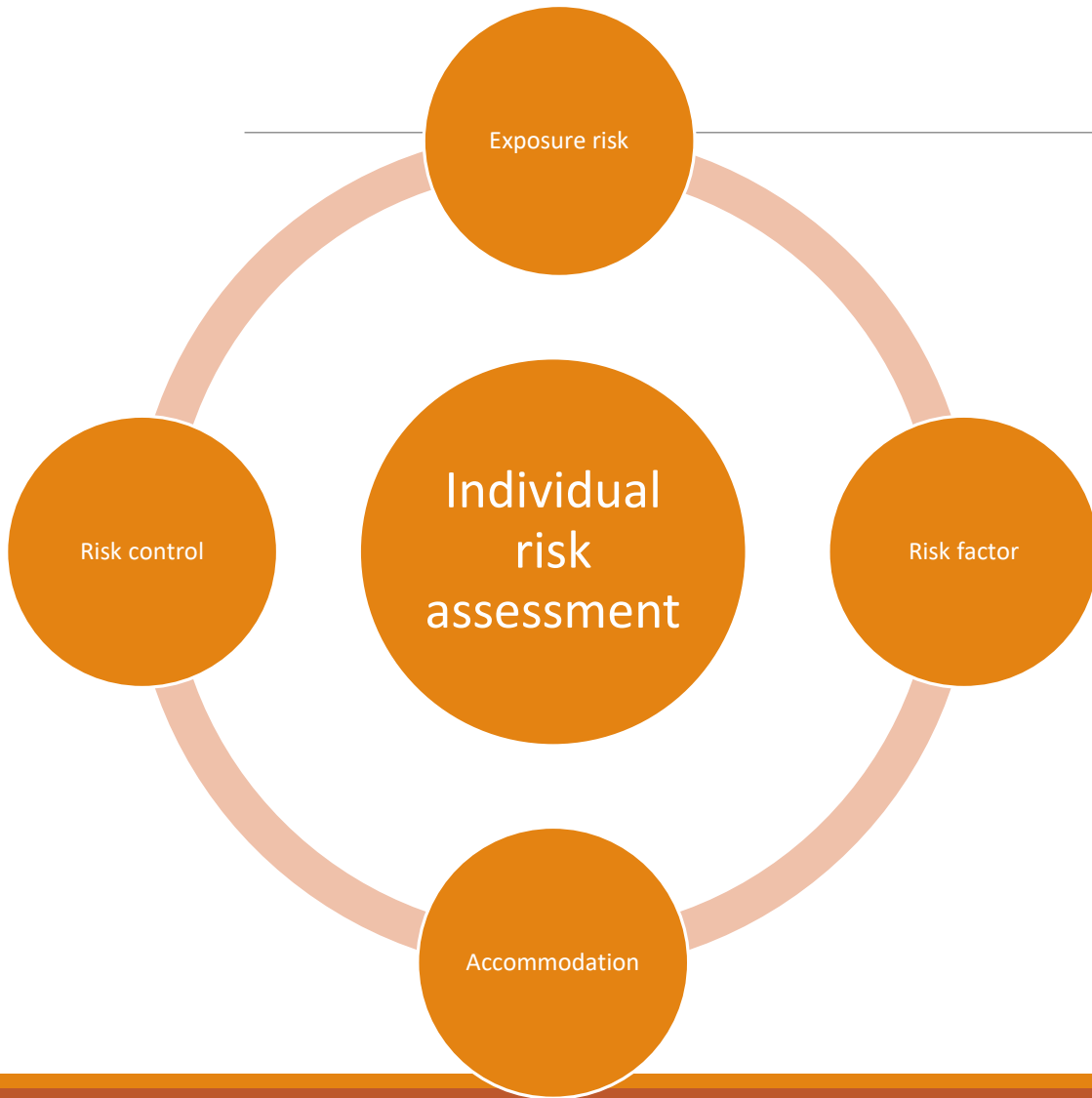
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Individual Risk assessment



Classify individual risk based on exposure

Classify individual vulnerability

Evaluate mitigating impact of risk control strategies

Risk score

Determine need for accommodation

Occupational Health expertise to support decision making

Accommodation of vulnerable employee

□ Option to be accommodated in :

- alternative temporary placement / redeployment to a different role and responsibility which has a negligible risk for transmission
- restriction of certain duties (not allowed to perform high risk procedures)
- protective isolation (e.g. providing a dedicated, clean office, etc.)
- provision of specific PPE appropriate to the risk of the task/activity identified in the workplace risk assessment and adherence to PPE usage protocols
- stricter physical distancing protocols (including staggering of shifts), barriers or additional hygiene measures
- limit duration of close interaction with clients, colleagues and/or the public reducing external risks (use of public transport) by providing alternative transport arrangements where feasible

Accommodation of vulnerable employee

Employees with well-controlled illnesses; or those who have provided their managers with written confirmation that despite their illness, **they would like to continue working in their current occupation**; or have been accommodated in low risk areas are urged to follow the following guidelines:

- Follow prescribed treatment plan.
- Continue current medications as prescribed.
- Ensure adequate supply of medication.
- Avoid triggers that make symptoms worse.
- Consult their doctor should you suffer any exacerbation of symptoms.
- Maintain a healthy balanced lifestyle by getting enough sleep, exercise and eating
- a balanced diet.

Accommodation of vulnerable employee

- Clear and transparent process;
- Based on clearly identified criteria;
- Based on sound information provided by the employee; and his/her health care practitioner;
- Respect for confidentiality ;
- Fair and consistent decision making;
- Multidisciplinary expertise needed for complex cases : HR, OH etc
- Clear timeframe for accommodation
- Subject to review

THANK YOU

