



# Preparing the Workplace for Coronavirus

## Construction Work 04/06/2020



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# NHLS

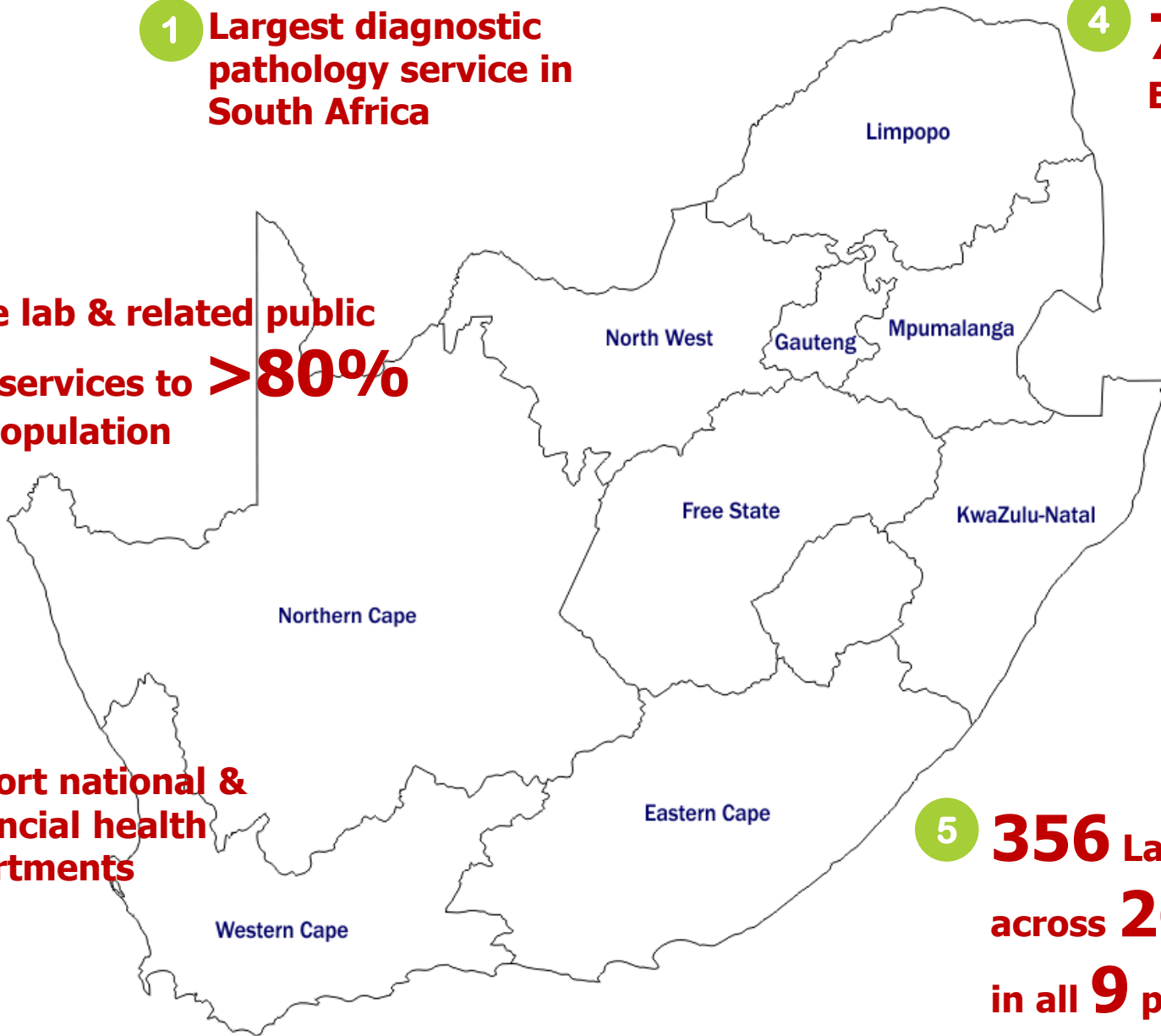
**1** Largest diagnostic pathology service in South Africa

**4** **7515** Employees

**2** Provide lab & related public health services to **>80%** of SA population

**3** Support national & provincial health departments

**5** **356** Laboratories across **260** sites, in all **9** provinces



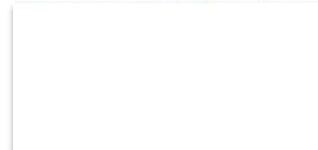


# Healthy, Safe and Sustainable Workplaces

## PROMOTING DECENT WORK THROUGH CUTTING EDGE RESEARCH SERVICE DELIVERY AND TRAINING



Improve and promote workers' health and safety



Catalyst for a mind set change towards greater prevention



Inform regulation, policy and standards



Public and private sectors of the economy



Formal and informal economies



## HOW TO STAY INFORMED:

THIS SITUATION IS RAPIDLY EVOLVING

Please check for updates on the NHLS, NIOH , NICD, and NDOH websites

[www.nhls.ac.za](http://www.nhls.ac.za) | [www.nioh.ac.za](http://www.nioh.ac.za) | [www.nicd.ac.za](http://www.nicd.ac.za) | [www.ndoh.gov.za](http://www.ndoh.gov.za)

Latest updated information on the spread of COVID-19

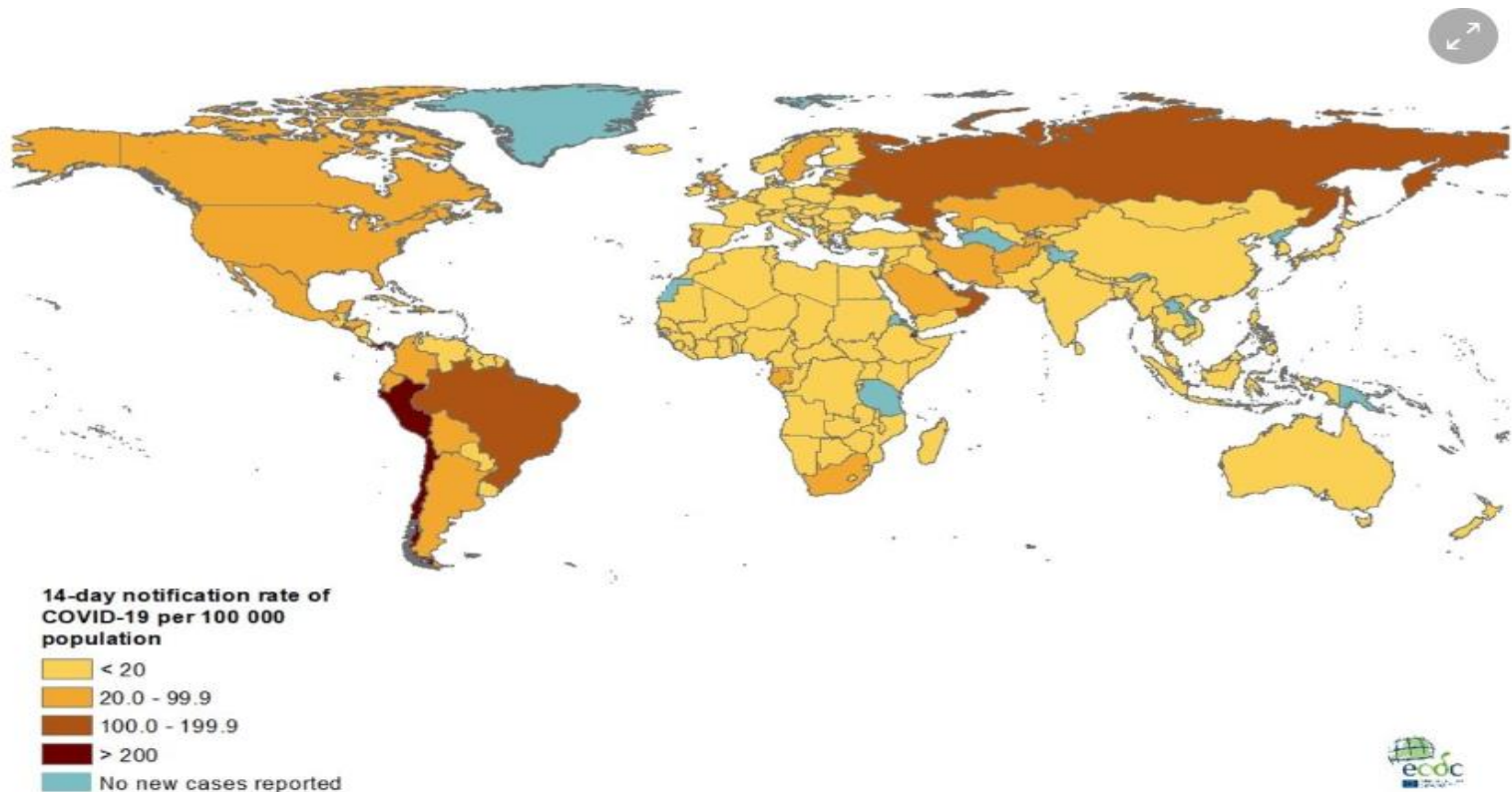
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

Advice and guidance

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>  
[https://www.ilo.org/beijing/information-resources/public-information/WCMS\\_736744/lang--en/index.htm](https://www.ilo.org/beijing/information-resources/public-information/WCMS_736744/lang--en/index.htm)

**Global infections : 6,586,010**

**Deaths: 388,250**  
**as of 04 June 2020**



# COVID-19 STATISTICS IN RSA

03-06-2020

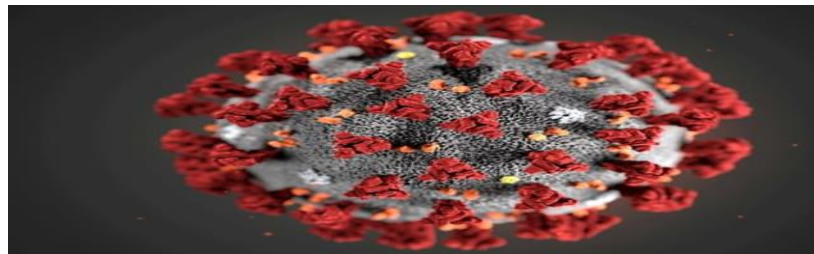
Unknown: 5  
Confirmed cases: 37 525  
Tests conducted: 785 979  
Deaths: 792  
Recoveries: 19 682

Province	Deaths	Recoveries
Eastern Cape	95	2 123
Free State	8	123
Gauteng	33	2 169
KwaZulu-Natal	54	1 248
Limpopo	3	145
Mpumalanga	0	86
North West	1	59
Northern Cape	1	33
Western Cape	597	13 696



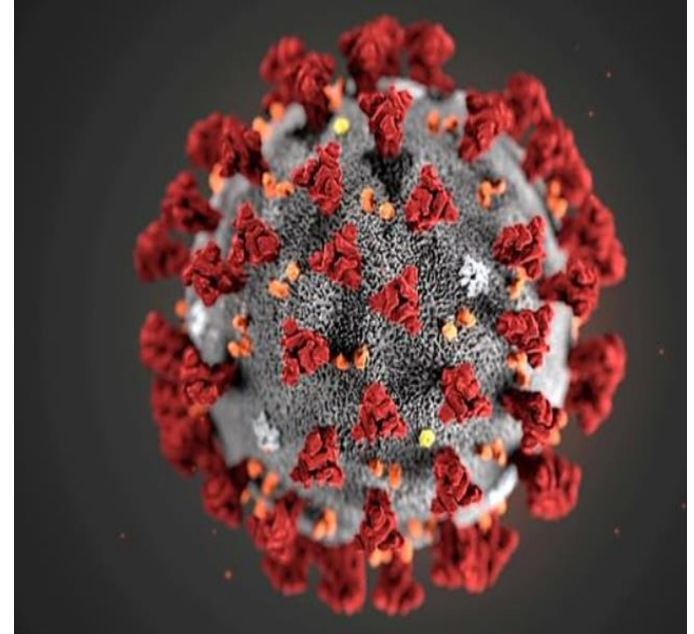
# South African COVID-19 issues

- Lock down March 20
- Lock down & Upliftment after 30 April 2020 (levels 5/4/3)
- Travel and **community** acquired spread
- **Occupational cases (currently health workers)**
- Workplaces: travel related, teachers, health workers, retail workers, correctional services mining, etc.
- Level 4: 60% construction work resumed
- **Level 3: 100% of construction work expected to resume**
- Construction work interfaces with all other industries/workplaces



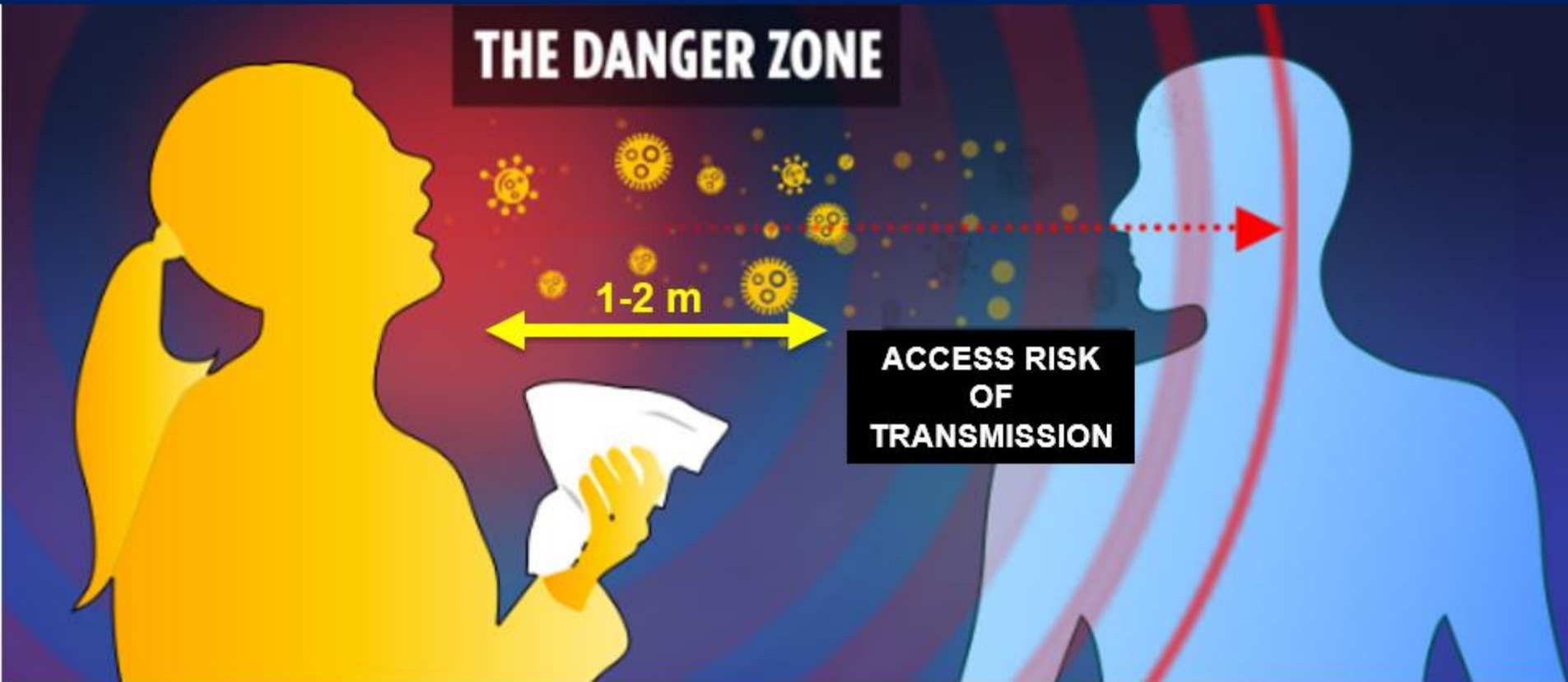
# Microbiology and epidemiology

- **Coronaviruses are responsible for the common cold, and usually cause self-limited upper respiratory tract infections**
- Novel- new/unknown .... No immunity





# TRANSMISSION



Direct contact: **Touching an ill persons or a contaminated surface**

Droplet transmission: **inhaling droplets**

- **Coughing & sneezing generates droplets of different sizes**
- **Larger droplets fall to the ground within a 1-2m radius of the person within a few seconds**
- **More infectious when symptomatic**

## Prevention practices



Practice good hand and respiratory hygiene.



Avoid close contact with people who are coughing.



Stay at home if you are ill.



Wipe down all surfaces with disinfectant.

# COVID-19

Patients with COVID-19 have experienced mild to severe respiratory illness

Symptoms can include

FEVER



COUGH



Symptoms may appear 2-14 days after exposure

SHORTNESS OF BREATH



If you have been in a country affected by COVID-19 or in close contact with someone with confirmed COVID-19 in the past 2 weeks and develop symptoms, call your doctor.

## Person under investigation

Persons with acute respiratory illness with sudden onset of **at least one** of the following:

- cough
- sore throat
- shortness of breath or
- fever [ $\geq 38^{\circ}\text{C}$  (measured) or history of fever (subjective)]

Call the COVID-19 Hotline: 0800 029 999

Send 'hi' on Whatsapp to COVID-19 Connect: 060 012 3456

Visit the website [www.sacoronavirus.co.za](http://www.sacoronavirus.co.za)

COVID-19 IS DIAGNOSED BY A LABORATORY TEST, POLYMERASE CHAIN REACTION (PCR) MOLECULAR TEST, ON A RESPIRATORY TRACT SAMPLE.

SAMPLES ARE COLLECTED FROM THE NOSE, THROAT OR CHEST.

# Symptoms and clinical outcome



- **80% of persons have mild-moderate disease (common 'flu' or cold)**
- **15% of cases require hospital admission**
- **5 % of cases are become critically ill and require ICU of which 2% die**
- **Persons with underlying co-morbid illness esp. pulmonary disease, elderly, immunocompromised, etc.**

# Isolation and quarantine

- **Quarantine**
  - Separation of asymptomatic persons for a period longer than the incubation period of the disease
- **Isolation**
  - Separation of a symptomatic (ill) person to ensure that the disease is not transmitted

# Treatment

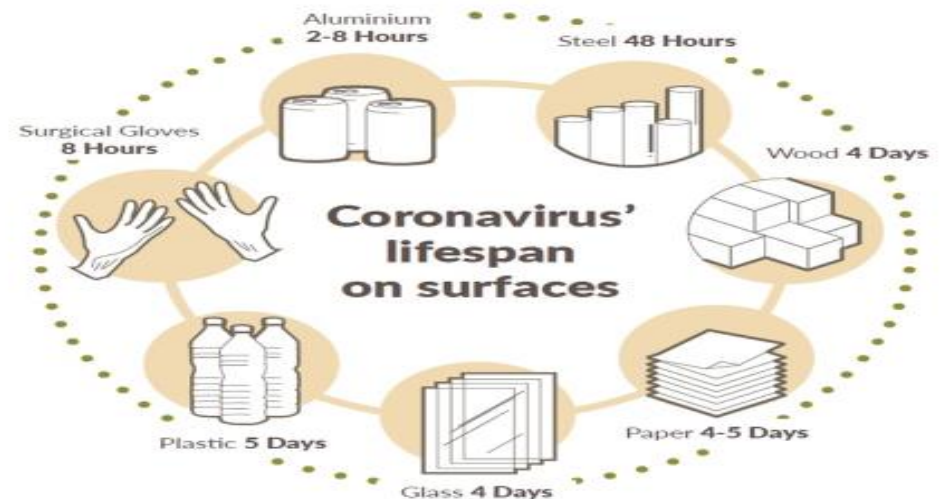


- Currently no vaccines for COVID-19
- **No specific treatment** for disease caused by SARS-CoV-2 infection
- Early supportive **therapy and monitoring**



# Update on persistence of COVID-19

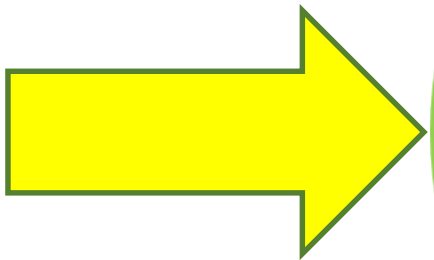
- COVID-19 virus has a fragile outer membrane - it is less stable in the environment and can be killed by simple disinfectants
- Survival time in the environment depends on
  - pH
  - Inoculum size
  - Dryness
  - Temperature
  - **Exposure to disinfectants**
  - Type of surface
- **Common disinfectants such as 70% ethanol and bleach can kill the virus**



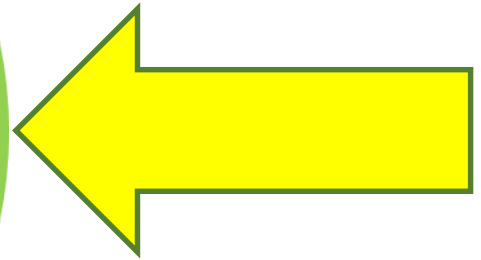


# POTENTIAL SOURCES OF EXPOSURE IN THE WORKPLACE

**Community  
acquired**



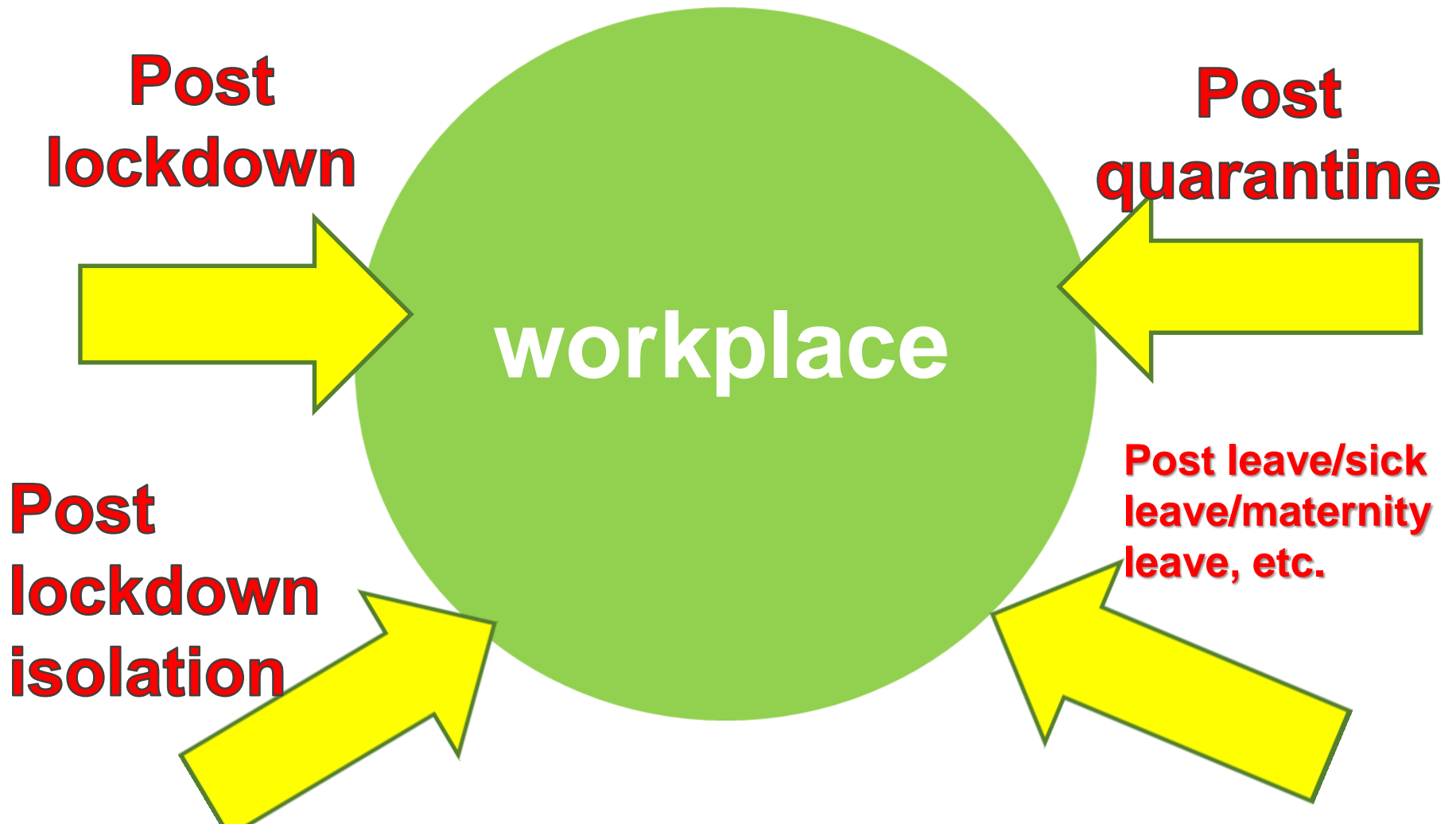
**Workplace  
acquired**







# RETURN TO WORK





# Risk & Consequence: Employees

RISK	CONSEQUENCE
Risk of exposure	Infection (acquired & transmit)
Financial risk	e.g. Medical aid, sick leave (exhausted)
No medical aid cover	Use of already overburdened public services <b>Travelling and no access to health care</b>
Asymptomatic workers	Transmissions to others
Mental health	Psychological and psychiatric disorders
Return to work / disability	Rehabilitation and accommodation of employee

# Workers at risk of infection

- Every person may be at risk of exposure to COVID-19, however..
- The risk is higher for **workers interacting with persons** that may be potentially infected
- Immunocompromised workers are at higher risk of infection e.g. pre-existing conditions such as
  - asthma
  - diabetes
  - heart disease
  - cancer
  - kidney failure
  - Other immunocompromising conditions as advised by attending health care provider



# Workers at risk of exposure

## High risk :occupational

- Airline operations (e.g. airline cabin crew, aircraft cleaners, mechanics)
- Border control (e.g. security officials, and other border officials)
- **Health care** (e.g. EMS workers, nurses, doctors, other medical staff)
- **Laboratories** (e.g. medical technologists, scientists, laboratory aids and researchers)
- **Pathology and funeral services** (e.g. mortuary attendants, autopsy technicians and funeral directors)
- **Solid waste and wastewater management** (e.g. waste pickers, water treatment plant workers)
- **Carers and teachers**

## Other categories that might be exposed

- **Persons interacting with people**
- Teaching staff
- **Cleaners**
- Security worker
- Transport people
- Canteen & Tuck shop workers
- **Maintenance staff**
- Visitors

Construction workers in various settings

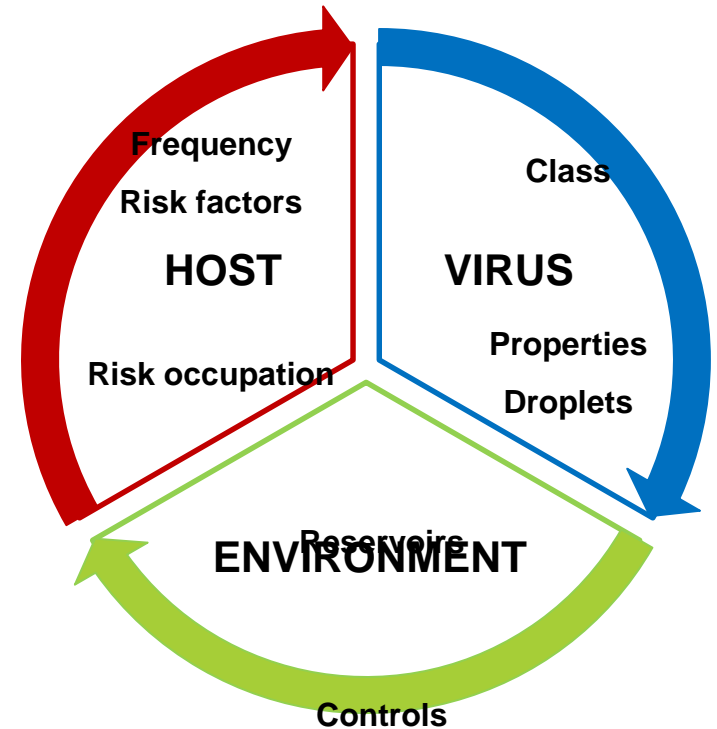
# Back to basics....

## Hazard identification & Risk assessment

A workplace specific Risk Assessment

- To determine the **RISK** of **EXPOSURE** to **COVID-19** & **communicate to all in the workplace (workers and visitors) workers**
- To include all other hazards (Biological, Physical, Chemical, Ergonomic & Psychosocial)
  - **Psychosocial** - exposure to long working hours, psychological distress, fatigue, occupational burnout, stigma, physical and psychological violence

**Away from home. Unknown environment.  
Access to health facilities. Fear of job loss  
and employment uncertainty**



**Different workers have different  
risk exposures: based on job  
specific risk assessments**

# Mitigation of risk in the workplace considerations

## Primary prevention

- Minimise risks of transmission in the workplace. HRA including controls (Engineering, Administrative and PPE)
- Business continuity and pandemic preparedness - Policies
- Education and Training /Health Promotion (risk communication)

## Secondary Prevention

(identify people at risk & respond early)

## Tertiary Prevention



# Workplace Changes for consideration

- Engineering controls (reviewed or improved ventilation, natural, mechanical)
- Administrative controls
- Substitution
- PPE

## Admin

Social distancing

Office based workers : More office space or working offsite

Workplace facilities (ablution facilities, rest rooms, dining facilities and lodging areas...domestic travel)

Time and attendance. Workers in different sites.....contact tracing

# Educate and inform (risk communication)

- Communication platforms... accessible to all workers
- Relevant and credible information around COVID-19
  - **Facts about how the disease is transmitted**
  - **An updated list of affected provinces- planning ahead**
  - **Latest policies regarding sick leave**
  - **Don't punish people for staying away for 'flu'**
  - **Make it possible to work from home**
- **Understand travel risks and make informed decisions re risk-benefit of travelling within and between provinces=hotspots)**
- **Public Hotline number 0800 029 999**





# Minimise risks of transmission in the workplace

- **Screening** and identification of potentially affected employees, limit contact and movement
- Social distancing



- Promote regular and thorough handwashing by employees/  
**contractors**
- Respiratory hygiene
- Avoid touching your face, especially while working
- Encourage / insist that symptomatic persons stay away / self isolate

# Workplace preparedness

- Anticipated number of staff : **Plan ahead**
- Opening up services (construction in public spaces, workplace with no physical boundaries)
- Risk assessment (potential ↑risk of transmission)
  - operations
  - activities

# Construction COVID19 exposure control plan

- Designate a site-specific COVID-19 officer at every job site
- Plan for office staff to have the ability to work from home
- Training
- High touch areas- tools, screws, crew vehicles etc
- Screening: Ask workers to self-identify
  
- Screen all workers
- Ensure there is a plan for affected workers
- Social distancing: Implement social distancing procedures
- A plan for working in high risk areas- health care facilities, retail centres



# Workplace practices to review

- Transportation
- Mass gathering- (dining together, rest facilities, common areas)
- Waiting areas- clinic- medicals (Construction regulations- medical assessments etc.)
- Meetings (forums, etc.)
- Health and safety risks and systems review spirometry (consider method & assess risk), breathalysers (safety risk), etc.
- Time and attendance (signing-in with common material)
- Public spaces... workers

# ACKNOWLEDGEMENTS

- NHLS Management
- NIOH Outbreak Response Team
- NICD

Questions

[info@nioh.ac.za](mailto:info@nioh.ac.za)

NIOH 24hr- hotline

**0800 212 175**

