



**NATIONAL INSTITUTE FOR  
OCCUPATIONAL HEALTH**

Division of the National Health Laboratory Service



# **COVID-19 Occupational Health Surveillance System (OHSS)**

## **for South African Workplaces**

11 February 2021

*Healthy, Safe, Happy & Sustainable Workplaces*

PROMOTING DECENT WORK THROUGH CUTTING EDGE RESEARCH, SPECIALISED SERVICES, INFORMATION, TEACHING AND TRAINING

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# Introduction

- There is a lack of adequate data on the impact of COVID-19 on the various business sectors in South Africa.
- The data collection and reporting process for employers was not co-ordinated or fully implemented.
- OHSS officially commenced on 1 October 2020.
- Legal framework for reporting of formal sector workers covered by Dept of Employment & Labour direction (28 September 2020).
  - Employers with > 50 employees need to submit the following to NIOH OHSS.
    - Symptomatic employee data weekly
    - Vulnerability status of employees (once off submission, updated as required)
    - Positive case data
    - Return to work/ health outcomes of positive cases

## Thus the Occupational Health Surveillance System was created with the following objectives:

- Develop a framework for a COVID-19 surveillance model for monitoring workers in various economic sectors, both in the public and private sectors.
- Early identification of sectors/companies and occupational groups at high risk of infection so as to inform appropriate interventions (e.g. policy, programs, resources).
- Evaluate the impact of the COVID-19 interventions in the workplace.
- Determine the human resource and economic impact of COVID-19 on the various sectors.
- To provide regular updates on the trajectory of the pandemic in various economic sectors nationally.
- Identification of key scientific questions requiring further investigation.

# The Occupational Health Surveillance System (OHSS)

Partners in this initiative include the National Institute of Occupational Health (NIOH), the National Institute for Communicable Diseases (NICD), Centre for Industrial Research (CSIR), Business for South Africa (B4SA) and occupational medicine specialists from several Universities, together with several major private sector corporations.

***The data collected will be used to monitor trends in the disease, identify workplace risk factors and design effective intervention strategies.***

**Data will be stored in the OHSS data lake at the NIOH.**



## The delivery team is backed by a sound governance structure



Sponsor & Owner



### Steering Committee



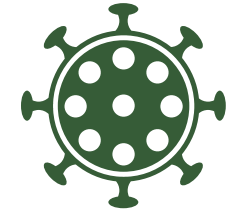
- Government (NDoH, NIOH and NICD)
- Business (B4SA) and Labour Representatives
- Representatives from the **Scientific** Committee
- Representatives from the **Data Management** and Processing Technical Committee.

### Data Management Committee



- NIOH
- CSIR
- Business** Experts

### Scientific Committee

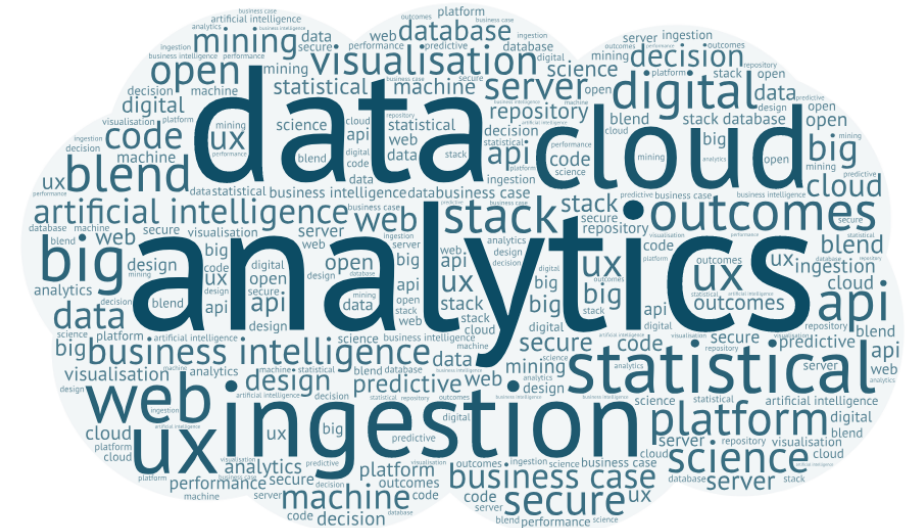


Responsibility ensuring the **scientific validity** of the data being collected, the data **quality**, its routine reporting, and formulating **research** questions

# The OHS system will consolidate data from various sources and process this data to achieve the outcomes

## Data Sources

- Private sector businesses
- Public sector
- NICD - NMC and sentinel hospital admissions database (DATCOV)
- NHLS laboratory testing data
- Private laboratory testing data
- Compensation Fund
- National Department of Health
- Department of Employment and Labour
- Mining Sector



## Confidentiality

- Data in the data lake will be anonymised and any identifying information removed after a period of 6 weeks.
- All OHSS data collected by NIOH will be securely stored and processed in the NIOH data centre.
- All systems used for data collection, storage, and processes will be **assessed on regular basis** (every month) for any security vulnerabilities.

# OHSS Process

## Business Registration

Business Name \* Required

Industry \* Required

Address \* Required

Province \* Required

District

Contact Name \* Required

Contact Email \* Required

Contact Number \* Required

Sector Affiliation \* Required

Non Disclosure Consent \* Required

# Total Employees \* Required

# Female Employees \* Required

# Male Employees \* Required

Please supply the number of employees in the below Job Categories

# Managers ⓘ <input type="text" value="0"/>	# Professionals ⓘ <input type="text" value="0"/>	# Technicians and Associate Prof. ⓘ <input type="text" value="0"/>	# Clerical Support Workers ⓘ <input type="text" value="0"/>
# Service and Sales Workers ⓘ <input type="text" value="0"/>	# Skilled Trades ⓘ <input type="text" value="0"/>	# Plant and Machine ⓘ <input type="text" value="0"/>	# Elementary Occupations ⓘ <input type="text" value="0"/>

Preferred data submission process \* Required

API Integration ⓘ

CSV via NextCloud ⓘ

CMORE platform submission ⓘ

I have read and accepted the Occupational Health Surveillance System [Terms & Conditions](#)

✓ Register



# DATA SUBMISSION GUIDELINES



# Categories of data to be submitted

- Vulnerability assessments
- Symptom screening
- Positive case
- High exposure work contact
- Return to work



# Vulnerability assessments

- Once off data submission

Vulnerability		
Title	Field status	Definitions
Business ID	Compulsory	System Generated- Provided to business by NIOH
Employee ID	Compulsory	Employer Generated unique employee number
Date	Compulsory	
Province	Compulsory	
District	Compulsory	
Age	Compulsory	Years
Sex	Compulsory	Female/ Male/ Other
Job category	Compulsory	Managers Professionals Technicians and Associate Professionals Clerical Support Workers Services and Sales Workers Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers Plant and Machine Operators and Assemblers Elementary Occupations
Vulnerability present	Compulsory	Yes/No
Age ≥60 years	Optional	Yes/ No
Pregnancy ≥28 weeks	Optional	Yes/No
Smoking current	Optional	Yes/No/ Unknown
Asthma	Optional	Yes/No/ Unknown
Chronic Lung Disease	Optional	Yes/No/ Unknown
Diabetes	Optional	Yes/No/ Unknown
Hypertension	Optional	Yes/No/ Unknown
Serious heart conditions	Optional	Yes/No/ Unknown
Chronic Kidney Disease	Optional	Yes/No/ Unknown
Chronic Liver Disease	Optional	Yes/No/ Unknown
Immunocompromised	Optional	Yes/No/ Unknown
Tuberculosis previous	Optional	Yes/No/ Unknown
Tuberculosis current	Optional	Yes/No/ Unknown
HIV	OPTIONAL	Yes/No/ Unknown
Obesity (measured by obtaining Height and Weight of employee) or BMI >30	OPTIONAL	Yes/No/ Unknown
Received flu vaccine	OPTIONAL	Yes/No/ Unknown

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X			
	EmployeeID (SANationalID/BusinessID)	Date	Province	District	Age	Sex	JobCategory	status	Asthma	Chronic L	Diabetes	Hyperten:	SeriousHe	ChronicKi	ChronicLi	Immunoc	PreviousT	CurrentTu	HIV	Age=>60 y	Smoking c	weeks	Pregnanc	y => 28	Obesity	Rece	
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# Screening data

Collected daily from employees but submitted weekly to OHSS

Symptom Screening		
Title	Field status	Definitions
<b>Business ID</b>	Compulsory	System Generated- Provided to business by NIOH
<b>Consent obtained</b>	Compulsory	Has the business informed employees that the information collected is being sent to the NIOH/NDOH
<b>Employee ID</b>	Compulsory	Employer Generated unique employee number or SA National ID
<b>Screening date</b>	Compulsory	Date when screened
<b>Employee Age</b>	Compulsory	Years
<b>Employee sex</b>	Compulsory	Male/ Female / Other
<b>Job Category*</b>	Compulsory	Managers Professionals Technicians and Associate Professionals Clerical Support Workers Services and Sales Workers Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers Plant and Machine Operators and Assemblers Elementary Occupations
<b>Province</b>	Compulsory	
<b>District</b>	Compulsory	
<b>Symptoms Present (yes/ no)</b>	Compulsory	Yes/No
Fever >38°C	Optional	Yes/No/ Unknown
Chills	Optional	Yes/No/ Unknown
Dry cough	Optional	Yes/No/ Unknown
Sore throat	Optional	Yes/No/ Unknown
Shortness of breath	Optional	Yes/No/ Unknown
Tiredness	Optional	Yes/No/ Unknown
Lack of smell or taste	Optional	Yes/No/ Unknown
Conjunctivitis	Optional	Yes/No/ Unknown
Diarrhoea	Optional	Yes/No/ Unknown
Muscle pains	Optional	Yes/No/ Unknown
Nausea or vomiting	Optional	Yes/No/ Unknown
Dizziness	Optional	Yes/No/ Unknown
Headache	Optional	Yes/No/ Unknown
Screening Outcome No action required Referred for self-isolation Referred for testing Referred to the doctor	Optional	Yes/No

# Positive test case data

Submitted when there is a positive case

Positive test		
Title	Field status	Definitions
<b>Business ID</b>	Compulsory	System Generated- Provided to business by NIOH
<b>Employee Business Generated ID</b>	Compulsory	Employer Generated unique employee number if used in the other templates
<b>Employee SA National ID</b>	Compulsory	SA National ID
<b>Province</b>	Compulsory	
<b>District</b>	Compulsory	
<b>Sex</b>	Compulsory	Female/ Male/ Other
<b>Age</b>	Compulsory	Years
<b>Job category</b>	Compulsory	Managers Professionals Technicians and Associate Professionals Clerical Support Workers Services and Sales Workers Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers Plant and Machine Operators and Assemblers Elementary Occupations
<b>Test Date</b>	Compulsory	Date
<b>Test type</b>	Compulsory	Unknown/PCR/Antigen/Antibody
<b>Symptoms Present</b>	Compulsory	Yes/ No
<b>Number of high-risk workplace contacts</b>	Compulsory	Number
<b>Vulnerability Present</b>	Compulsory	Yes/ No
<b>Post-test result action</b>	Compulsory	Sick Leave Self-Isolation at home Self-Isolation at quarantine site Hospitalization
<b>Exposure Contact type</b>	Compulsory	Work contacts Community contacts Family contacts Large events contacts Travel history from a designated hotspot Public transport Unknown
<b>Reporting Action</b>	Optional	Reported to Department of Employment and Labour Reported to COIDA Reported to DMRE

# Return to work data

Submitted when employee returns to work

Return to work: Clinical Management and Outcomes		
Title	Field status	Definitions
<b>EmployeeID</b>	Compulsory	System Generated- Provided to business by NIOH
<b>BusinessID</b>	Compulsory	Employer Generated unique employee number
<b>Date</b>	Compulsory	Date
<b>Province</b>	Compulsory	
<b>District</b>	Compulsory	
<b>Job category</b>	Compulsory	Managers Professionals Technicians and Associate Professionals Clerical Support Workers Services and Sales Workers Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers Plant and Machine Operators and Assemblers Elementary Occupations
<b>Hospitalized</b>	Compulsory	Yes/ No/ Unknown
<b>Hospital Type (Private/Public)</b>	Compulsory	Private/ Public/ Unknown
<b>If Hospitalised:</b>	Compulsory	
<b>Date of admission</b>		Date
<b>Outcome (Discharge or Death)</b>	Compulsory	Discharged or death
<b>Outcome date</b>	Compulsory	Date
<b>Return to work date</b>	Compulsory	Date
<b>Return to work fitness level</b>	Compulsory	Fit for Job Description Fit with Accommodation Fit with restrictions Temporarily unfit for Job Description Unfit for review Permanently Unfit
<b>Compensation claim</b>	Compulsory	Yes/ No
<b>Percentage disablement</b>	Optional	000000(IF UNKNOWN)
<b>COID Claim reference number</b>	Optional	000000 (IF UNKNOWN)

# OHSS Process

1. Confirm that your business has 50 or more employees per site.

The Department of Employment and Labour Directive – 28<sup>th</sup> September 2020- applies to your business.

2. Read the NDoH guidelines on the submission of COVID-19 related health data. 1 October 2020

3. Register on the OHSS business registration portal: <https://ohss.nioh.ac.za/>

4. An email confirming registration will be sent to you.

5. An email with your business ID, Username and password with the link to the submission portal will be sent to the email contact.

6. Submissions can commence.



## Profiles of businesses registered on OHSS as at 3 February 2021

- Total businesses registered on OHSS : 2910

(3/02/2021)

- % of all businesses in South Africa: 0.1%

(December 2020 CIPC registered companies total: 2 317 429, however note that some maybe dormant businesses )

Total Employees: 1 688 674 registered on OHSS

(3/02/2021)

% of all formally employed in SA: 17%

(14,1 million employees -LABOUR FORCE SURVEY Sept 2020- approximately 10 million formally employed)

85% of total registrations have >50 employees

## Concerns & Recommendations

- <1% of business registered covering 17% of workers (formal sector).
  - Challenge- data on the number of businesses registered per sector is required- to determine representativity in sectors.
  - Not all sectors are registered and reporting Data quality
- 
- Continue to increase awareness.

# Acknowledgements:

Academia, NICD, CSIR, Private sector (FNB, BUSA, B4SA, Accenture, Webber Wentzel)

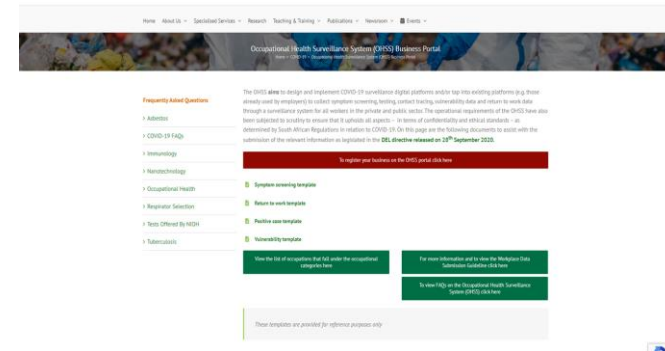
Email: [OHSworkplace@nioh.ac.za](mailto:OHSworkplace@nioh.ac.za)  
[ohssupport@nioh.ac.za](mailto:ohssupport@nioh.ac.za)

OHSS Hotline: 0723215503/ 0713981169

Registration Portal: <https://ohss.nioh.ac.za>

Information about OHSS:

<https://www.nioh.ac.za/covid-19/occupational-health-surveillance-system-ohss-business-portal/>





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