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Safety, Health and Environment National Authority

INSPECTION CAMPAIGNS ON OCCUPATIONAL DISEASES (ODS)

REPORTING FOR PRIVATE HEALTH CLINICS

DECEMBER 2025

Safety, Health and Environment
National Authority

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ACKNOWLEDGEMENT

The Safety, Health and National Authority (SHENA) wish to extend its appreciation to all private health clinics and their Medical Practitioners for their cooperation and active participation throughout the Occupational Diseases (ODs) Reporting Inspection Campaign. Their openness and commitment to information sharing have played a pivotal role in advancing this initiative and strengthening collaborative efforts towards the success of this initiative.

SHENA also extends its gratitude to the Ministry of Health, particularly the Occupational Health Division (OHD), for their continued collaboration and professional contributions, which have significantly enhanced the quality and comprehensiveness of this report.

CHAPTER 1: INTRODUCTION

1.1. Background

Occupational Diseases (ODs) and Work-Related Diseases (WRDs) are medical conditions contracted due to workplace exposures and work activities, which pose a significant but often overlooked health risk to workers across industries. ODs are typically specific and have a strong relation to occupation, generally with only one causal agent, whereas WRDs involve multiple causal agents and may not be caused solely by the occupation. Such factors in the work environment therefore play a role in the development of complex diseases such as Noise-Induced Hearing Loss, Occupational Dermatitis, Occupational Asthma, and Musculoskeletal Disorders. These conditions typically have a long latency period and evolve gradually, and therefore differ from acute injuries such as cuts and bruises. Hence, the monitoring of ODs and WRDs requires prompt detection, intervention by competent medical practitioners, and efficient and effective diagnostic and reporting procedures.

ODs and WRDs remain a significant and often under-recognised contributor to the global burden of work-related health issues. According to the International Labour Organization (ILO), in a joint study with the World Health Organization (WHO) in 2023, an estimated 2.93 million work-related fatalities occur globally each year. Of these fatalities, 89 per cent are due to work-related diseases, while only 11 per cent are accounted for by work-related injuries. These figures reveal the pervasiveness and often silent impact of ODs, reinforcing the concept of a 'hidden epidemic'.

In this context, **health clinics and their medical practitioners play a vital role in identifying, treating, and promptly reporting ODs and WRDs to the appropriate authorities.** Their contribution can improve the accuracy of national statistics on ODs and WRDs, facilitate the detection of trends and changes in occurrence, and enable the implementation of effective preventive measures for managing ODs and WRDs (*Davoodi et al., 2017*). In Brunei Darussalam, this includes reporting to the Safety, Health and Environment National Authority (SHENA) and, where appropriate, engaging the specialty referral services of the Occupational Health Clinic within the Ministry of Health, in accordance with the Note To Industry *2023/NTI/11: Duty of Registered Medical Practitioner to Report Occupational Diseases*. Strengthening reporting mechanisms in these settings is essential for both individual patient care and for informing broader public health action.

1.2. National Reporting Patterns: Brunei Darussalam

In Brunei Darussalam, the number of reported ODs and WRDs remain consistently low. This statistic presents a contrasting narrative, raising concerns about the potential under-reporting of ODs. For 2024, Brunei's OD incidence rate was calculated to be 1.80 cases per 100,000 workers. In contrast, Singapore's OD incidence rate stands at 24.4 cases per 100,000 workers, more than 13 times higher than Brunei's in 2024. This disparity is more likely attributable to differences in reporting practices rather than a true variation in the prevalence of ODs. Table 1 below presents the total number of OD cases reported annually, based on data from Brunei Darussalam's SHENA & Ministry of Health and Singapore's Ministry of Manpower (MOM).

YEAR	NUMBER OF ODS CASES (BRUNEI DARUSSALAM)	NUMBER OF ODS CASES (SINGAPORE)
2017	4	799
2018	9	563
2019	35	517
2020	29	528
2021	22	659
2022	7	1052
2023	11	1299
2024	4	899

Table 1: Statistics on ODs reported to SHENA & the Ministry of Health and data sources from MOM on the number of ODs cases in Singapore

Based on the comparison of ODs reported in Brunei Darussalam and Singapore, the disparity highlights potential systematic differences in occupational health reporting and recognition. Hence, the figures raise an important question about the effectiveness of current reporting mechanisms and broader visibility of ODs and WRDs in Brunei Darussalam. Based on these concerns, the direction of this report is to examine further the factors that influence reporting practices of ODs and WRDs in the country.

1.3. Aim and objectives

This report aims to share the approach to the inspection campaign that was conducted over a period of six (6) months from September 2024 to March 2025, **focusing on ODs reporting in private health clinics**, to improve and strengthen reporting practices and enhance the national ODs data reporting.

The objectives of the inspections are outlined as follows: -

- Evaluate the compliance of registered medical practitioners and private health clinics for ODs reporting.
- Identify and determine an appropriate way forward to address non-compliance.
- Improve awareness and understanding among medical practitioners regarding the importance of accurately identifying and reporting ODs.
- Identify gaps, challenges, or barriers hindering effective reporting of ODs.
- Provide guidance, resources, and support to health clinics to improve their reporting infrastructure.

1.4. Methodology (PDCA)

Prior to the commencement of the inspection campaign, a feasibility study was undertaken to assess the practicality of similar initiatives implemented by regulatory bodies of other countries. For example, the HSE UK "*Watch Your Step"* campaign incorporated both promotional and enforcement elements to improve workplace safety outcomes (*HSE, 2007*). Additionally, their "*Work Right Agriculture"* initiative adopted a targeted risk reduction through sector-specific outreach and inspections (*HSE, n.d.).* Likewise, WorkSafe Queensland in Australia had implemented focused and targeted compliance campaigns addressing asbestos exposure (*WorkSafe Queensland, 2019*) and respirable crystalline silica (*WorkSafe Queensland, 2023*), demonstrating the effectiveness of proactive, data-driven enforcement approaches. Hence, these international campaign models were appropriately adapted to suit the local context. Preliminary data on the number of existing health clinics was obtained from the Brunei Medical Board to support planning and execution.

Various methods of publication and outreach were carried out prior to the campaign. The objective was to raise awareness, provide clear guidelines for OD reporting, and inform medical practitioners in advance of the inspection campaigns. These efforts included:

1. Issuance of Note to Industry (2024/NTI/07) to notify medical practitioners in private health clinics about the upcoming inspection campaign, including its timeline and key focus areas.
2. Distributing posters and leaflets on OD reporting practices and the required procedures.
3. Socialization of the campaign was conducted through outreach efforts including Continuing Medical Education (CME) webinars, WSH Conference 2024, etc.

The inspection campaign adopted both qualitative and quantitative methodologies. Background research was informed by literature and resources from the International Labour Organization (ILO), World Health Organization (WHO), and other international regulatory bodies. The review focused on reporting and under-reporting of ODs and WRDs, providing a foundation for understanding global practices and identifying gaps relevant to the local context.

A total of thirty (30) private health clinics across all districts, excluding Temburong, were selected for inspection, engagements involved forty-eight (48) registered medical practitioners operating at these health clinics. As part of the inspection process, face-to-face discussions were conducted with the medical practitioners, supported by a structured inspection checklist designed to clarify the focus areas and to assess compliance with OD reporting requirements. After each visit, an inspection report summarising the discussions and findings was issued to the respective health clinic, along with the request to submit improvement action plans.

To further support regulatory improvements, a feedback survey was distributed to the participating health clinics. The survey aimed to identify areas requiring improvement in regulatory guidance on OD reporting and to gather medical practitioners' insights on current challenges and practices. The information would assist SHENA in understanding medical practitioners' perspectives, informing future initiatives and evaluating the overall effectiveness of the campaign.

CHAPTER 2: LEGAL FRAMEWORK

2.1. Relevant Legal Instruments

It is a legal requirement for employers and medical practitioners in Brunei Darussalam to report any diagnosed cases of ODs to SHENA. The list of reportable ODs is outlined under the **Third Schedule of Workplace Safety and Health Act (WSHA), Cap 277** (included in Appendix A). The legal requirements under Regulation 6 *of WSH (Incident Reporting) Regulations* mandate the following:-

DUTY TO REPORT OCCUPATIONAL DISEASE

Reg. 6(1) Where an employee suffers an occupational disease at a workplace, and the employer of that employee receives a written statement prepared by a registered medical practitioner diagnosing the occupational disease, the employer shall, not later than 10 days after receipt of the written diagnosis, submit a report to the Authority.

Reg. 6(2) Any registered medical practitioner who diagnoses any employee with an occupational disease shall, not later than 10 days after the diagnosis, submit a report to the Authority.

SHENA has announced the commencement of registration of Designated Workplace Doctors (DWD), effective from 24 March 2025 (Ref: 2025/NTI/01). This initiative aims to ensure the availability of competent medical practitioners to conduct occupational health assessments and manage workplace health risks.

Medical practitioners are advised to refer any suspected or complex ODs or WRDs cases to the Occupational Health Clinic, Ministry of Health. The referral letter must include the patient's contact details. Figure 1 illustrates the referral and reporting process flowchart.

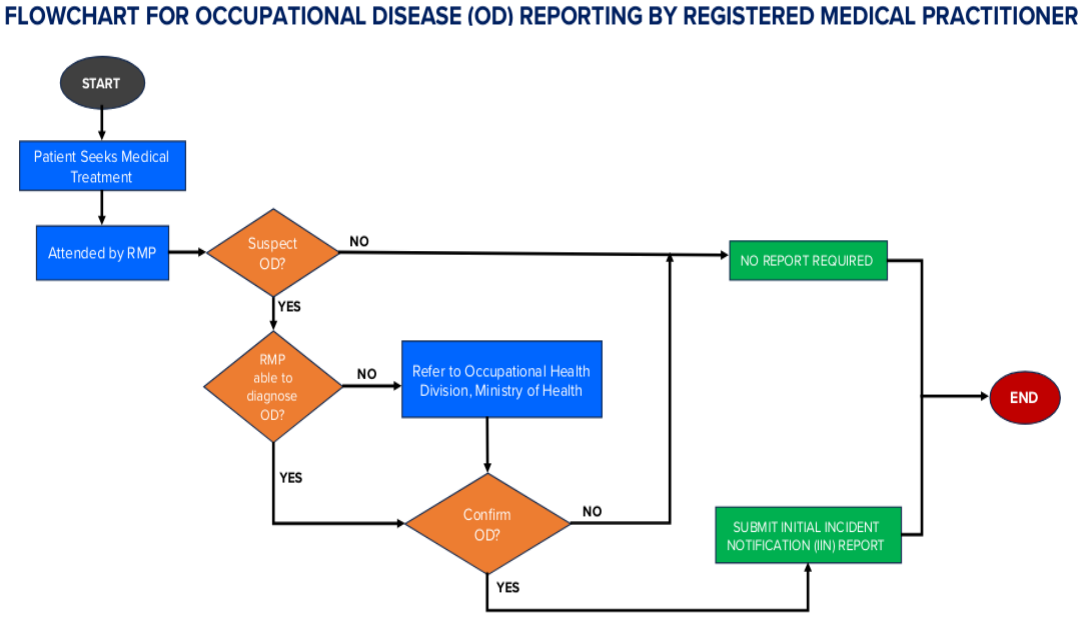

Figure 1: 2023/NTI/11: Duty of Registered Medical Practitioner to Report Occupational Diseases.

2.2. International legal instruments

In May 2024, SHENA, in collaboration with the Occupational Health Division, Ministry of Health (OHD, MOH), established the Occupational Health Committee (OH-Comm) as part of a national initiative to strengthen and advance occupational health in Brunei Darussalam. Co-chaired by SHENA and OHD MOH, the OH-Comm operates on a whole-of-nation approach, fostering alignment and collaboration across sectors through a shared scope and coordinated strategies. While the Committee contributed to early discussions and strategies on occupational health priorities, the inspection campaign was principally led and executed by the SHENA Enforcement Division, with OH-Comm serving in a supportive and consultative capacity.

The Committee comprises representatives from government agencies, statutory bodies, private healthcare providers, industry organisations, and academia. It is currently developing a strategic work plan for occupational health, which will be integrated into the broader National Occupational Safety and Health (OSH) Programme. This effort reinforces Brunei's commitment to international labour standards, particularly the ILO Conventions C187 (Promotional Framework for Occupational Safety and Health, 2006), C161 (Occupational Health Services, 1985), and C155 (Occupational Safety and Health, 1981). These conventions call for the establishment of comprehensive national OSH policies and frameworks aimed at improving occupational health systems, strengthening ODs reporting, and promoting the protection and well-being of workers across all sectors.

CHAPTER 3: REPORTING OCCUPATIONAL DISEASES

3.1. Introduction

The collection and analysis of data on reported ODs are critical for maintaining an up-to-date diagnostic overview of Brunei Darussalam's National Profile on Occupational Safety and Health (OSH). OSH-related information, including data on occupational accidents and diseases, serves as the fundamental basis for identifying national trends and strengthening the country's preventive and regulatory capabilities.

In response to concerns regarding the potential under-reporting of occupational diseases in Brunei, SHENA launched a targeted inspection campaign focused on private health clinics. The campaign specifically engaged medical practitioners who play a pivotal role in identifying, treating, and precisely reporting these conditions to the appropriate authorities. Their efforts contribute to improving the accuracy of national statistics on ODs, facilitating the detection of changes in patterns and occurrences and enabling the implementation of effective preventive measures (*Davoodi et al., 2017*). In Brunei Darussalam, this includes reporting to the SHENA and involving the expertise and specialty referral services to the Occupational Health Clinic within the Ministry of Health.

The campaign commenced with a review of the occupational health training of medical practitioners and an assessment of their awareness of the legal obligations under the Workplace Safety and Health (Incident Reporting) Regulations. A key focus was Regulation 6, which mandates that confirmed cases of ODs must be reported to SHENA by both the medical practitioner and the employer.

The campaign also examined how ODs are diagnosed in private clinical settings, including whether occupational exposure factors are appropriately considered during medical consultations. This enabled SHENA to evaluate the degree to which current private clinical practices aligned with regulatory and national expectations.

Beyond verifying compliance, the campaign also aimed to strengthen OD reporting by identifying knowledge gaps and systemic barriers. The insights gained will inform the development of future strategies to enhance national surveillance and promote more accurate, timely, and consistent reporting by medical practitioners.

3.2. Findings and discussion

As discussed in previous sections, in Brunei Darussalam, the reporting of occupational diseases remains significantly limited, with only a small proportion of ODs and WRDs formally documented and reported. This under-reporting is primarily attributed to the difficulty in diagnosing occupational causes of medical conditions, a challenge further

compounded by medical practitioners' lack of further investigating for occupational links unless the clinical presentation was obviously work-related such as occupational injuries. Consequently, existing statistics seldom reflect the true prevalence of ODs in the country. The findings from the inspection campaign highlighted gaps within the current reporting systems in private health clinics.

3.2.1. Medical Practitioners' Understanding of OD Reporting

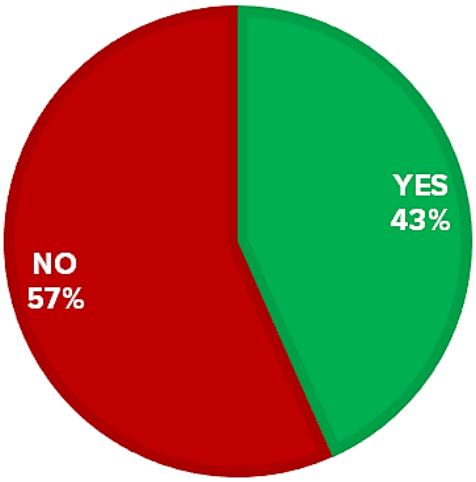

Figure 2: Medical practitioners with OH training

A total of 30 targeted private health clinics across all districts, excluding Temburong, were inspected during the campaign, with 48 medical practitioners engaged across the health clinics. The engagements provided insights into how the health clinics managed ODs reporting and offered inspectors a realistic understanding of the clinical experiences, knowledge gaps and challenges faced by the medical practitioners in recognising and reporting ODs. Based on data gathered during the inspection, 57% of the medical practitioners did not have a formal qualification in Occupational Health, and their primary focus was on General Practice or Family Medicine. In addition, only 43% of the medical practitioners had attended training in occupational health.

A survey was conducted to assess the level of familiarity with ODs reporting requirements under the WSH (Incident Reporting) Regulations prior to SHENA's inspection campaign. As shown in Figure 3, the results indicate varying levels of awareness among respondents. Of the total participants, only 26% (7 respondents) reported being very familiar with the regulations, while 33% (9

respondents) were somewhat familiar. The most significant proportion, 41% (11 respondents), reported not being familiar with the reporting requirements.

These findings suggest that a considerable number of medical practitioners **may lack sufficient knowledge of ODs reporting obligations, which may impact regulatory compliance and effective monitoring of ODs.** This highlights the need for further awareness and training initiatives.

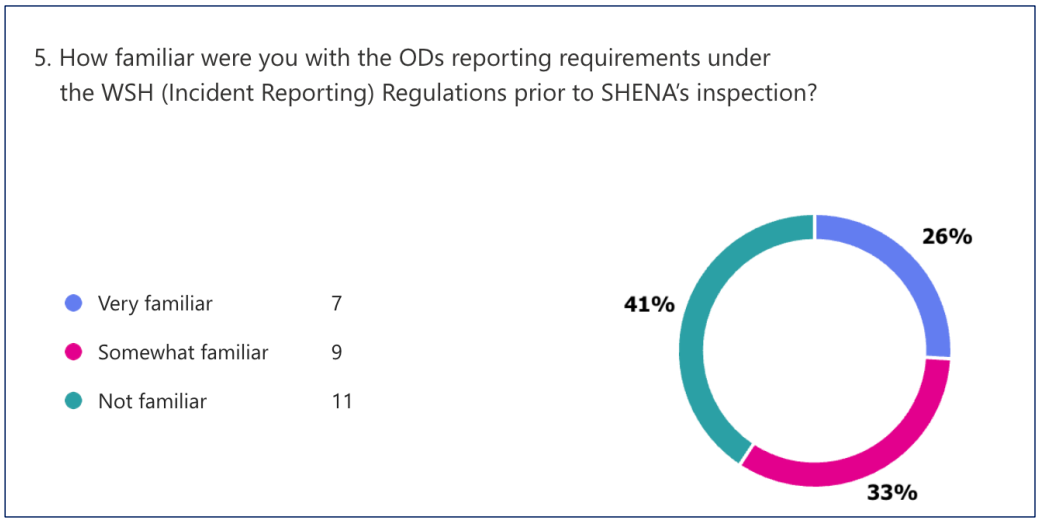

Figure 3: Survey on the familiarisation of medical practitioners on OD reporting requirements.

Complementing the survey results, interviews conducted during the inspection campaign revealed that **33.33% of medical practitioners were not familiar with their obligation to submit a report of OD to SHENA within 10 days of diagnosis**. In contrast, **66.67% indicated that their health clinics were familiar** with the reporting timeline.

Further, the inspections identified that **63.33% of medical practitioners either had not shared or did not intend to share the diagnosis report with the employer in the event of a confirmed OD case.** Only **36.67% of health clinics reported that they currently share** such reports with employers as part of their standard of practice.

These findings indicate a significant communication gap between medical practitioners and employers, which may hinder timely workplace interventions, leading to underreporting and delayed risk mitigation. The results highlight the need for more precise guidance, enhanced awareness of reporting obligations, and improved collaboration between healthcare providers and employers.

Additionally, the inspection identified that **73% of health clinics utilised digital systems or softwares** to manage patient medical records, appointment scheduling, follow-up and status tracking. In contrast, **26.67% of health clinics continued to rely on physical documentation** for these functions. The adoption of digital tools supports more efficient case management and promotes timely reporting.

Following SHENA's inspection, the post-inspection feedback survey indicated a marked improvement in the level of familiarity with OD reporting requirements under the WSH (Incident Reporting) Regulations. According to the results, **44% of the respondents considered themselves to be very familiar with the requirements**, while another **44% reported being somewhat familiar.** Only **11% remained unfamiliar** with the reporting process.

These findings reflect a significant increase in awareness compared to the pre-inspection results. The proportion of those who reported being very familiar nearly doubled, while the percentage of those unfamiliar with the reporting requirements decreased from **41% to 11%. This suggests that SHENA's intervention has had a positive impact on the medical practitoners' knowledge and understanding, potentially contributing to improved compliance and more effective monitoring of ODs.**

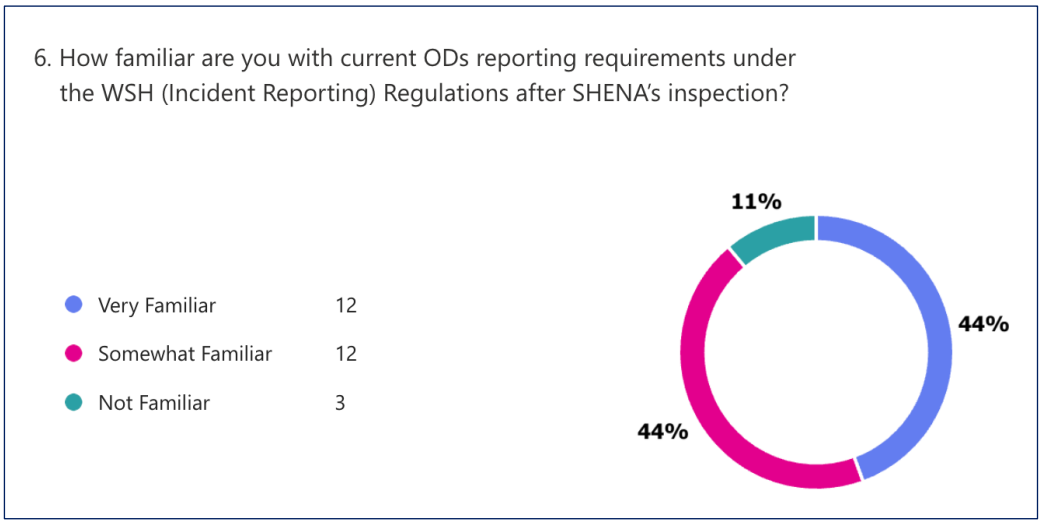

Figure 4: Medical practitioners' understanding of ODs reporting requirement after SHENA's inspection

3.2.2. Diagnosis of Occupational Diseases

During the inspection, **83.33% of private health clinics reported relying primarily on clinical experience and professional judgement when diagnosing ODs**, without the use of structured diagnostic tools or questionnaires. In contrast, only **16.67% health clinics indicated the use of standardised diagnostic tools and questionnaires**, such as for noise exposure, fitness-to-work assessment or work-related asthma to supplement clinical evaluation. Moreover, most of the health clinics did not conduct or request any form of workplace exposure measurements. Instead, medical practitioners relied entirely on information verbally provided by patients during consultations, including self-reported job roles, symptoms and work exposure history. No evidence of workplace visits to verify potential workplace exposures was carried out.

These findings suggest that while most medical practitioners demonstrated clinical competence in recognising occupational conditions, there is limited application of structured or evidence-based diagnostic aids. According to ILO's Guidelines for Diagnosing and Recording of Occupational Diseases and WHO's Global Plan of Action on Workers' Health, it is recommended to use standardised tools such as exposure questionnaires, job exposure matrices and diagnostic algorithms, to enhance diagnostic accuracy, consistency and reporting quality. Accurate diagnosis requires not only clinical evaluation but also thorough exposure assessment, including an understanding of the nature, duration and intensity of workplace hazards.
Additionally, the Occupational Hygiene Training Association (OHTA) advocates for systematic health surveillance practices, including the use of standardised symptom checklists and structured exposure histories, particularly in cases involving chemical, noise and respiratory hazards. These tools support objective correlations between workplace exposure and health outcomes, which aim to facilitate early detection, prevention and regulatory reporting.

Current practices also indicated that medical practitioners in private health clinics may refer patients to the Occupational Health Clinic, Ministry of Health HD for further evaluation when they are unable to make a definitive diagnosis of an OD.

3.2.3. Challenges on reporting ODs

This section summarises the key challenges encountered by medical practitioners during the inspection campaign on OD reporting in Brunei Darussalam. The objective was to identify barriers hindering effective OD reporting and highlight systemic issues affecting diagnosis, referral practices, and compliance with national occupational health regulations. The main challenges shared by medical practitioners are outlined and elaborated below:

Figure 5: Challenges faced by Medical Practitioners

3.2.3.1. Multifactorial Issues

One of the primary challenges identified was the complex nature of OD cases, which often have a long latency period before a diagnosis can be made. The lack of continuity in patient care, particularly when individuals seek treatment across different health clinics and the absence of a centralised medical record in the private health sector, makes it difficult for medical practitioners to establish baseline health data or monitor the progression of work-related illnesses. Furthermore, some employers were reported to send affected workers home for treatment or transfer them to other companies, creating ambiguity over who is responsible for managing and reporting the case. This lack of clear employer accountability undermines effective disease surveillance and follow-up. Medical practitioners also expressed

concern over the potential conflict between their duty to maintain patient confidentiality and their legal obligation to report OD cases to SHENA. In some instances, employment contracts were said to contain clauses that discouraged health clinics from submitting such reports, thereby further deterring compliance with regulatory requirements.

3.2.3.2. Repercussions

Fear of adverse consequences remains a significant barrier to the reporting of OD. Employees, particularly foreign workers, often express concern that disclosing health issues may result in job termination or repatriation. This fear discourages them from seeking formal medical evaluation or discussing potential workplace exposures. In several cases, foreign workers delayed seeking treatment until symptoms had significantly worsened.

From the perspective of private health clinics, commercial pressures also play a role. Some health clinics reported concerns about losing contracts or clients if they reported cases that may implicate employers. The financial burden associated with diagnosing and managing OD cases, including the costs of clinical assessments, follow-ups and documentation, was cited as another challenge, especially for smaller healthcare providers. Additionally, many medical practitioners expressed uncertainty regarding legal protections available to them when reporting ODs to SHENA. This lack of clarity contributes to hesitancy and further undermines the overall effectiveness of the reporting system.

3.2.3.3. Training and Competency Gaps

Another critical challenge identified during the inspection campaign was the gap in training and competency among medical practitioners in the field of occupational health, despite available training opportunities. As a result, the pool of medical practitioners with the requisite knowledge and skills to confidently diagnose and manage ODs remains limited.

Several medical practitioners reported difficulties in identifying and diagnosing OD cases, citing limited clinical experience and unfamiliarity with occupational exposure profiles. The absence of a national structured diagnostic criteria or standardised clinical

guidelines further compounds the challenge. In the absence of clear national frameworks, medical practitioners may under-recognise or misdiagnose conditions related to workplace exposures, ultimately affecting the accuracy of reporting and timely intervention.

3.2.3.4. Lack of Guidelines

The inspection campaign also observed the absence of standardised national guidelines for the diagnosis and reporting of ODs. Inconsistencies in how health clinics manage suspected or confirmed OD cases were prevalent, often stemming from the lack of formal procedures or reference frameworks. This variability contributes to gaps in occupational disease surveillance, making it challenging for medical practitioners to justify or validate their clinical decisions within the context of occupational exposure. Moreover, the lack of clear national guidelines creates uncertainty among medical practitioners regarding their legal obligations, appropriate referral pathways, and the proper documentation required for regulatory reporting.

3.2.3.5. Lack of Interest in Occupational Diseases Diagnosis

It was observed that there was a general lack of interest among some medical practitioners in actively diagnosing occupational diseases. This passive approach contributes to the under-recognition of potential cases, many of which are either overlooked or misattributed to non-occupational causes. Consequently, this results in significant under-reporting of the actual burden of disease in the workforce.

3.2.3.6. Reporting OD against Patient Confidentiality

Medical practitioners often faced dilemmas in reporting ODs due to concerns over patient confidentiality, which they regard as a fundamental duty under their professional ethical code of conduct. However, under the WSH (Incident Reporting) Regulations, all medical practitioners are legally obligated to report diagnosed cases of OD within ten (10) days to the relevant authority, to ensure timely occupational disease surveillance.

While the duty to maintain patient confidentiality remains essential, medical practitioners also hold a legal responsibility to report ODs when required by law. It is important to recognise that, in such cases,

the public health interest to prevent further harm and to protect workplace health and safety may rightfully be prioritised whilst still maintaining patient confidentiality.

In accordance with Regulation 9(c) of the WSH (Incident Reporting) Regulations, failure to comply with reporting obligations may result in a fine up to $5,000 for a first offence, and up to $10,000 or imprisonment for a term of up to six (6) months for a second or subsequent offence.

3.2.3.7. Reporting of ODs with long latency period

Regulation 6(2) WSH (Incident Reporting) Regulations stipulates that any medical practitioner who diagnoses an employee with an OD must submit a report to SHENA within ten (10) days of the diagnosis. The term “any employee” is interpreted to include both current and former employees. Therefore, even if a worker has retired or is no longer employed, the medical practitioner remains legally obligated to report the diagnosis of an OD.

It is also essential to recognise that many ODs, such as asbestosis and mesothelioma, have long latency periods, with symptoms often emerging years after the initial exposure. In such cases, the determining factor is not the timing of employment, but the established link between the disease and prior workplace exposure.

Hence, this presents a significant challenge to medical practitioners, as the delayed onset of symptoms often obscures the occupational origin of the disease, making it difficult to establish causality, recall exposure history, and ensure timely reporting. Nevertheless, it is precisely in such cases that vigilance and professional judgement are most critical to uphold the integrity of occupational health surveillance amongst the private health clinics.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1. Conclusions

The inspection campaign observed several significant and interconnected challenges that hinder the effective identification, diagnosis, management, and reporting of ODs in Brunei Darussalam. Among the pressing issues is the absence of standardised national guidelines for diagnosing and reporting ODs, which has led to inconsistencies in case recognition and documentation across private health clinics. The diagnostic process remains largely dependent on individual clinical judgement, which varies according to the medical practitioner's experience and familiarity with occupational health principles and concepts.

Limited training and competency in occupational health among medical practitioners further compound this issue. Many medical practitioners lack formal occupational health training and clinical experience/exposure to workplace hazards recognition, occupational health assessment, and the legal obligations stipulated under the WHS (Incident Reporting) Regulations. This knowledge gap contributes to under-reporting, delayed referrals, and missed opportunities for early intervention and workplace risk mitigation.

Ethical dilemmas surrounding patient confidentiality add another layer of complexity. Some medical practitioners expressed reluctance to share diagnostic findings with authorities or employers due to concerns about breaching doctor/patient confidentiality, even in cases where disclosure could facilitate workplace modifications or control measures. This highlights the urgent need for more explicit ethical and legal guidance to support OD reporting in a manner that balances patient rights with the imperative for effective occupational risk management.

This campaign also identified procedural gaps in referral practices. In several instances, referrals for suspected OD cases were made directly to specialist units within the MOH without notifying the OHD, MOH, resulting in incomplete case tracking and compromised regulatory oversight. This lack of coordination creates uncertainty among referring clinics regarding the status and outcome of escalated cases, undermining the integrity of the national reporting system.

Although Brunei Darussalam has a well-defined and established legal framework to support OD reporting, particularly under the WSH (Incident Reporting) Regulations, the current level of compliance remains insufficient. The findings demonstrate that

regulatory inspections alone are not enough to drive full adherence to occupational health obligations. Achieving meaningful and sustained compliance will require a coordinated, multi-stakeholder approach that includes development of clear national guidelines, continuous capacity-building initiatives, streamlined referral pathways and improved mechanisms for information sharing.

Such efforts are essential not only for strengthening compliance but also for safeguarding and protecting workers' health, improving the early detection of occupational diseases, and cultivating a national culture of prevention in Brunei Darussalam.

4.2. Recommendations

The inspection campaign provided valuable insights from medical practitioners on how the OD reporting process in Brunei Darussalam could be improved. While some recommendations fall within the remit of SHENA, others require collaboration with relevant ministries and stakeholders involved in the broader occupational health services and systems. The following actionable recommendations are proposed:

4.2.1. Develop National Guidelines for Diagnosing Occupational Diseases

A comprehensive and standardised national diagnostic guideline should be developed to assist medical practitioners to accurately identify and report ODs. This guideline should include clear case definitions, diagnostic criteria for common ODs, and standardised referral protocols and documentation procedures. This will promote consistency in diagnosis, improve competency among medical practitioners, and strengthen national surveillance.

4.2.2. Increase Awareness on OD Reporting Responsibilities

Targeted awareness programmes should be conducted to educate medical practitioners and employers on their respective legal responsibilities under the WSH (Incident Reporting) Regulations. These efforts should clearly explain the reporting timeline and procedures, required documentation, and the roles of employers and medical practitioners in the notification and follow-up process. This will improve awareness, reduce uncertainty, and promote better compliance.

4.2.3. Utilise Existing Platforms for Continuing Professional Development

The MOH conducts a Public Health and Occupational Medicine (PHOM) continuous professional development (CPD) sessions twice a month, which includes presentations related to occupational health. Medical practitioners are

encouraged to attend these sessions to gain Continuing Professional Development (CPD) points and to further support their ongoing professional growth through this platform.

Other CPD sessions and occupational health / health and safety events such as those organised by SHENA, may also be leveraged to provide focused sessions on occupational health.

These platforms can serve as an effective engagement to reach medical practitioners across the public and private sectors with practical and supportive channels.

4.2.4. Publish a List of Clinics Offering Occupational Health Services

To streamline case management and facilitate appropriate referrals, SHENA should maintain and publish a regularly updated list of registered DWDs and Occupational Health Practitioners offering occupational health services in Brunei Darussalam. This information should be accessible to medical practitioners, employers, workers and the general public to improve access to occupational health services.

4.2.5. Expand Competency Training for Medical Practitioners

Competency training should be expanded to enable medical practitioners to recognise early signs and symptoms of ODs, understand occupational exposure risks, and apply best practices in documentation and referral. Medical practitioners interested in registering as DWDs under SHENA must complete the Micro-Masters in Occupational Health and Safety programme offered by UBD. Applications can be submitted to SHENA for evaluation. Additionally, MOH's existing PHOM CPD sessions, conducted twice a month, should be promoted more widely for medical practitioners to attend regularly.

4.2.6. Referral Processes and Feedback Mechanisms

Inspection revealed procedural gaps in referral communication, where some health clinics reported receiving no feedback after referring suspected OD cases to OHD, MOH. Conversely, OHD noted that there had been no referrals received from private health clinics to OHD, MOH. Therefore, to address this, all suspected OD referrals must be referred to Occupational Health Clinic, MOH, with a standard feedback mechanism to inform referring clinics of case outcomes. This will improve case tracking, close feedback loops, and enhance coordination between healthcare providers on proper communication and reporting chain.

4.2.7. Legal Protections for OD Reporting

Some of the medical practitioners expressed concern about the legal protection when reporting OD to the authority. The reporting of OD is a legal requirement under Regulation 6 of the WSH (Incident Reporting) Regulations. All medical practitioners are required to submit a report to SHENA of any of the ODs listed in Schedule 3 of the WSHA CAP 277 no later than 10 days after the diagnosis of the disease of any employee with an occupational disease (Regulation 6(2)). Medical practitioners should also inform employers of the diagnosis to enable employers to comply with their statutory duty to notify ODs to SHENA. Reassurance should be given to medical practitioners that reporting is a statutory duty supported by legal safeguards. This will build confidence amongst medical practitioners, who will feel confident in fulfilling their duties without the fear of reprisal and contract termination. While medical practitioners have a duty to maintain patient confidentiality, they also have a legal and ethical obligation to report occupational diseases when mandated by law. It is important to acknowledge that the public interest in preventing further harm may take precedence over an individual patient's right to confidentiality.

4.2.8. Improve the IIN Form for OD Reporting

Medical practitioners noted that the current Incident Investigation Notification (IIN) form is not well-suited nor user-friendly for OD cases. For example, the medical practitioners shared that the current IIN form format is structured primarily around workplace injuries such as immediate accident events, physical injury details and unsafe acts/conditions, rather than medical history or occupational health determinants. Therefore, a revised, OD-specific version should be developed in the IIN form, including structured fields for occupational exposure history, suspected occupational diagnosis, and clinical and procedural notes as supporting evidence. This simplified and purpose-built form will encourage accurate, complete, and timely reporting of ODs.

4.2.9. Strategic Focus and Impact of SHENA's Directives

The findings from this survey highlight the positive impact of SHENA's inspection campaign in improving awareness and compliance with OD reporting requirements under the WSH (Incident Reporting) Regulations. However, to fully bridge the gaps and strengthen Brunei Darussalam's occupational diseases reporting ecosystem, the following key areas require continued focus:

1. **Strengthening Enforcement of Occupational Health Regulations**
   Regular inspections, supported by well-defined enforcement strategies, are essential to ensure ongoing compliance across workplaces. Clear and

accessible guidance on legal obligations as well as the consequences of non-compliance will further encourage duty holders and stakeholders to adhere to their responsibilities.

2. **Enhancing Awareness Among Medical Practitioners**
   There remains a pressing need to improve awareness among medical practitioners regarding their statutory responsibilities under the WSH (Incident Reporting) Regulations. Targeted interventions should include stakeholder engagement sessions particularly with DWDs, CME/CPD-accredited workshops and events, distribution of guidance materials for reporting as well as other reference materials. Such capacity-building initiatives will enhance medical practitioners' knowledge and confidence to identify, diagnose, and report OD cases in a timely and compliant manner.

3. **Addressing Under-Reporting of Occupational Diseases**
   Under-reporting of ODs remains a persistent challenge and concern, mainly due to limited occupational health knowledge among healthcare providers. To address this, stronger collaboration between SHENA, MOH, and healthcare providers is essential. This includes strengthening existing referral pathways, SOPs for OD reporting, integrating occupational health and safety modules in undergraduate and postgraduate curricula to foster early competency development, and encourage medical practitioners to upskill by taking MMOHS or other relevant postgraduate training.

4. **Aligning with SHENA's Strategic Vision and Global Commitments**
   Efforts to enhance OD reporting and management directly support SHENA's strategic vision to promote a safe and healthy working environment across all sectors. These initiatives also align with Brunei Darussalam's global health and labour commitments, including the **United Nations Sustainable Development Goal (UN SDG) 3.9**, for a substantial reduction in the number of deaths and illnesses caused by hazardous chemicals and pollution by 2030.

   The **ILO Convention No. 155** (Occupational Safety and Health Convention, 1981) and **ILO Convention No. 187** (Promotional Framework for Occupational Safety and Health, 2006). Convention No. 155, for the establishment of coherent national policies on occupational safety and health, including mechanisms for the identification, recording, and notification of occupational diseases. To add, the **ILO Convention No. 187** reinforces the need for

national OSH systems and continual improvement through strategic frameworks and action plans.

Hence, these commitments to global health and labour framework strategically strengthen Brunei Darussalam's national system for occupational health surveillance, particularly in enabling timely and accurate reporting of ODs. Through these efforts, the nation is moving closer to fulfilling these international obligations while safeguarding and protecting its workforce from preventable and often unforeseen occupational illnesses.

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APPENDIX: SCHEDULE 3 OF WSHA, CHAPTER 277

SCHEDULE 3

(section 4(1))

OCCUPATIONAL DISEASES

1. Aniline poisoning
2. Anthrax
3. Arsenical poisoning
4. Asbestosis
5. Barotrauma
6. Beryllium poisoning
7. Byssinosis
8. Cadmium poisoning
9. *(Deleted by S 95/2013)*
10. Carbon bisulphide poisoning
11. Carbon dioxide poisoning
12. Carbon monoxide poisoning
13. Cataract
14. Chrome ulceration
15. Chronic benzene poisoning
16. Compressed air illness
17. Cyanide poisoning
18. Epitheliomatous ulceration (due to tar, pitch, bitumen, mineral oil or paraffin or any compound, product or residue of any such substance)
19. Glanders
20. Hydrogen sulphide poisoning
21. Lead poisoning
22. Leptospirosis
23. Liver angiosarcoma

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SCHEDULE 3 — *(continued)*

24. Manganese poisoning
25. Mercurial poisoning
26. Mesothelioma
27. Nitrous fumes poisoning
28. Noise-induced deafness
29. Occupational skin diseases
30. Occupational asthma
31. Pesticide poisoning
32. Phosphorous poisoning
33. Poisoning from halogen derivatives of hydrocarbon compounds
34. Radiation
35. Rengas wood poisoning
36. Repetitive strain disorders
37. Silicosis
38. Toxic anaemia
39. Toxic hepatitis
40. Tuberculosis.

[S 95/2013]

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