

# Link



## Dear Colleagues

After four years of planning including two years of construction, NSL OilChem Waste Management's (NOC) new \$40 million wastewater treatment complex which started trial testing in November 2018 culminated in its grand opening on 25 July 2019.

Gracing the event was the Guest-of-Honour, Dr Beh Swan Gin, Chairman of the Economic Development Board. This new complex is one of NSL's largest investments and was built to support the growth of Singapore's chemicals industry. Located in Tuas, this complex is specifically designed to treat a wide spectrum of industrial wastewater from industries such as petrochemicals, pharmaceutical and automotive. It is the company's second industrial wastewater treatment plant and has the operating capacity to eventually treat 1,000 cm<sup>3</sup> per day- one of the largest in Singapore.

The brain of our wastewater treatment operation is in our team of lab and R&D staff who works together to devise cost-effective treatment solutions for wastewater to comply with Public Utilities Board's (PUB) trade effluent standards and specifications for discharge into the public sewers. To beef up the plant operations, a team of qualified technical staff is currently being recruited. The complex is also well-equipped with highly sophisticated process monitoring system to ensure robustness of every stage of the operation.

I am confident that with our dedicated technical team and state-of-the-art technology that we have put in place, we will be able to manage the increasingly challenging industrial wastewater treatment in Singapore and comply with the requirements of our clients, befitting the business tagline of

 **YOURS COMPLIANCE IS  
OUR RESPONSIBILITY.** 

2019 is a year of change, after residing 14 years along Robinson Road, NSL Headquarters has shifted to its new office along Outram Road on 16 September. While the new office is smaller, the high ceilings and long panels of windows make the office spacious, bright and airy. However, the drawback is that lunch places are quite a distance away. Housing three meeting rooms, two breakout areas and spacious work stations, this new space will serve as the corporate office for NSL's overall operations.

## Dr Low Chin Nam

# A Note from Executive Director



Previous  
Issue  
**Jul 2019**  
**Issue 29**

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# Official Opening of Industrial Wastewater Treatment Complex

On 25 July, NSL OilChem Waste Management (NOC) officially opened its new Industrial Wastewater Treatment Complex at 7 Tuas Avenue 10. Gracing the event was the Guest-of-Honour, Dr Beh Swan Gin, Chairman of the Economic Development Board. The opening ceremony was attended by 250 guests consisting of industry partners, customers, management and directors of NSL Group. Initiating the event was a speech by Professor Cham Tao Soon, Chairman of NSL Ltd and the grand launch of the plant. This was followed by a guided plant tour and a scrumptious lunch at Raffles Marina.

The new facility is an expansion of NOC's wastewater capability and capacity and is constructed in response to customer's demand of treating challenging trade effluents. It is designed to treat a wide spectrum of industrial wastewater with high mineral content (TDS), high chemicals content (COD) from pharmaceutical, petrochemicals, chemical and automotive industries. Additionally, industrial wastewater with high biological oxygen demand (BOD) from the food and beverages industry can be treated.

Congratulations to the management and staff of NSL OilChem Waste Management!





Opening speech by Chairman



NSL Board of Directors, Dr Beh and Jeffrey



The Guest-of-Honour is Dr Beh Swan Gin, Chairman of EDB



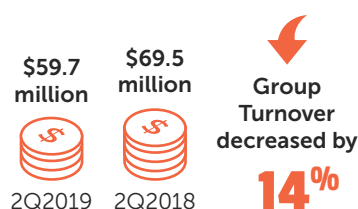
## Plant Tour of The New Facility



## Lunch Buffet at Raffles Marina



# NSL Recorded A Loss Before Tax of \$1.4 Million in 2Q2019



Group incurred a loss before tax of **\$1.4 million**

in 2Q2019. Higher profit was reported by the Environmental Services division but was partially offset by lower dividend income recorded by the Group.



NSL Group registered a Group turnover of \$59.7 million in 2Q2019 which is a decrease of 14% from \$69.5 million in 2Q2018. This is due to lower sales reported by both the Precast & Prefabricated Bathroom Unit (PBU) and Environmental Services divisions.

Group incurred a loss before tax of \$1.4 million in 2Q2019 compared to \$1.6 million in 2Q2018. Higher profit was reported by the Environmental Services division due to insurance income of \$3.3 million in relation to the 2017 fire incident, but was partially offset by lower dividend income recorded by the Group.

After taking into account income tax and non-controlling interests, the Group reported a loss attributable to equity holders of \$1.4 million in 2Q2019 compared to a profit of \$1.5 million in 2Q2018.

Group turnover in 1H2019 was \$119.7 million, a 23% decrease from \$154.5 million in 1H2018, due to lower revenue by both the Precast & PBU and Environmental Services divisions. The Group incurred a loss before tax of \$5.8 million in 1H2019 compared to loss before tax of \$3.9 million in 1H2018. The higher loss was mainly due to losses incurred by

## Financial Highlights

(Continuing Operations)

Group Turnover  
Group Profit Before Tax  
Group Profit Attributable to Shareholders  
Earnings Per Share (cents)

THE GROUP					
Quarter ended 30 June			6 months ended 30 June		
2019	2018	Change	2019	2018	Change
\$S'000	\$S'000	%	\$S'000	\$S'000	%
59,706	69,536	(14)	119,670	154,515	(23)
(1,429)	(1,584)	(10)	(5,849)	(3,906)	50
(1,404)	(1,541)	(9)	(5,179)	(4,610)	12
(0.38)	(0.41)	(7)	(1.39)	(1.23)	13

the Environmental Services division. Consequently, the Group reported a loss attributable to equity holders of \$5.2 million in 1H2019 as compared to \$4.6 million in 1H2018.

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The Precast & PBU division's turnover declined by 14% due to lower volumes reported by the Dubai and Finland operations. For 1H2019, turnover decreased by 24% as delays in the commencement of major projects in Singapore, Malaysia and Dubai resulted in lower sales volume. The precast operation was in losses in 2Q2019 and 1H2019 due to low sales volumes as a result of delays in the commencement of major projects in all its geographical locations.

The Environmental Services division turnover decreased by 21% and 22% in 2Q2019 and 1H2019 respectively. This was mainly due to lower sales reported by the Recycled Fuel Oil (RFO) and slop businesses as a result of weak market demand. Ongoing plant maintenance to improve long-term operating efficiencies also adversely impacted production volume in the RFO and Slop businesses during these periods.

The division recorded a profit of \$1.5 million in 2Q2019 compared to a profit of \$0.8 million in 2Q2018. The improvement was attributable

to insurance income of \$3.3 million in relation to the 2017 fire incident. However, it incurred higher operating losses in the RFO and slop businesses as a result of lower sales and softer RFO price. For 1H2019, the division recorded a loss of \$1.1 million compared to a profit of \$1.6 million in 1H2018. The decline was mainly due to poor performance from RFO and slop business as a result of lower sales and softer RFO prices. However, the waste treatment operation recorded improvement in pretax performance following the restatement of the incinerator license.

## Outlook

The precast business in Singapore and Malaysia is expected to face operational challenges due to the disruption in labour supply which may affect production in 2H2019. Revenue of Dubai operation is expected to be satisfactory in 2H2019 on the back of healthy order book. Business outlook for the division's PBU business in Finland is expected to remain stable.

In the Environmental Services division, the RFO and slop businesses continue to face challenging market condition amidst weak demand and low RFO price. Operational disruptions due to the plant maintenance, which will lead to improved operating efficiencies, is ongoing and is expected to complete by early 2020. The division's \$40 million organic wastewater treatment facility in Tuas is under commissioning. The plant is expected to be operational in 4Q2019 and utilization will gradually ramp up.



Reception area

# NSL Moves Office to Outram

On 16 September, NSL shifted into its new office at Outram Road. Spanning 5,931 square feet, the new space houses three meeting rooms, two breakout areas and work stations. The interior of the office was designed in line with NSL's corporate identity; with blue and grey as its main colour palette.

Before the big shift, NSL staff bid goodbye to the old office of 14 years and were treated to a sumptuous lunch spread at the old office located along Robinson Road.

Lunch celebration before moving out



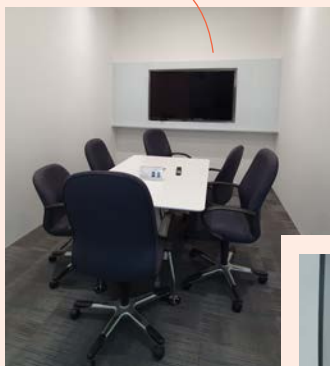
Packed and ready to move



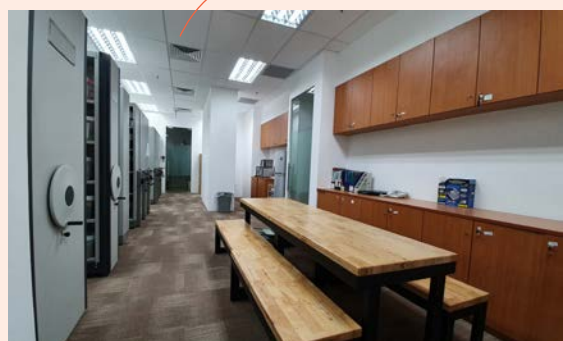
Conference room



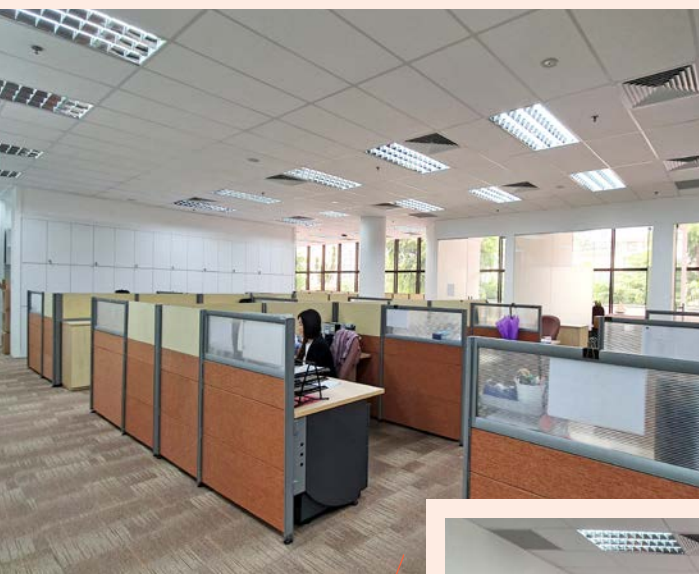
Meeting room with inbuilt screens for presentations



Breakout area



Spacious work stations





# Eastern Pretech Group Updates

## Singapore

By Wilson Chong

### EPS Awarded Contract for ASM Front-End Manufacturing Singapore Pte Ltd

Eastern Pretech Singapore (EPS) was awarded the contract to fabricate and deliver precast hollow-core slab for the proposed new erection ASM Front-End Manufacturing Singapore Pte Ltd. A total of 32,740m<sup>2</sup> hollow-core slab will be utilised for this six-storey factory at Woodlands Avenue 6. Delivery commences from July 2019 to end of October 2019. The main contractor is Boustead Project Pte Ltd.

### EPS Secures Project for NTUC Fairprice Fresh Food Distribution Centre

EPS was awarded the contract to fabricate and deliver precast hollow-core slab for the proposed new erection of NTUC Fairprice Fresh Food Distribution Centre, a seven-storey factory at Sunview Road. A total of 23,320m<sup>2</sup> hollow-core slab will be utilised and the delivery is estimated to commence from mid-November 2019 to March 2020. Main contractor is United Tec Construction Pte Ltd.

## Dubai

By Henrik B. Jensen

### Dubai Clinches Project for Saudi German Hospital

Dubai Precast was awarded the order for design, supply, delivery and erection of coloured pre-finished solid and sandwich cladding panels for four new buildings at Saudi German Hospital in Dubai. The order is for 14,000m<sup>2</sup> of façade walls. Production is expected to start in 4Q2019 and project to be completed in 1Q2020.



## Finland

By Jussi Raunio

### Parmarine Supplies Bathroom Units for Sockerbruket Apartment Block

Parmarine was awarded the contract to supply 269 bathroom units for Sockerbruket apartment block located in Ängelholm Sweden. Deliveries will take place from 2019 to 2020.





# Facts You Never Knew About Our Precast Business

## Advantages of the Precast Concrete System

Apart from quality control, the advantages of precast concrete system are faster completion time, reduction of site labour and wastage.

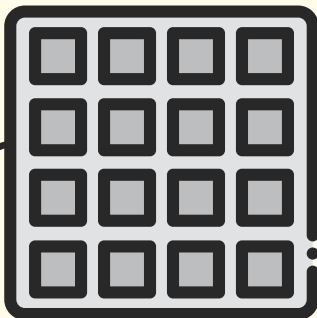


## Precast Concrete is Environmentally Friendly

Concrete is a sustainable building material. It is made using water, sand, aggregate and cement. Water, sand and aggregate naturally exist in our environment. For the production of cement, the raw materials such as limestone, clay, sand and iron ore are kilned, gypsum is added and the mixture is finely ground.

## 2.5 million m<sup>2</sup> of Hollow-core Slabs and 1,400 Projects

We had fabricated and supplied more than 2.5 million m<sup>2</sup> of hollow-core slabs and 1 million m<sup>3</sup> of various types of precast concrete components to 1,400 projects in Singapore since 1983.



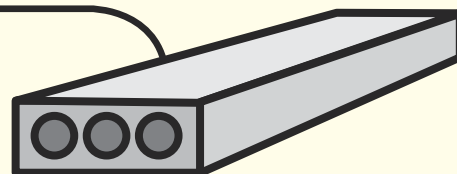
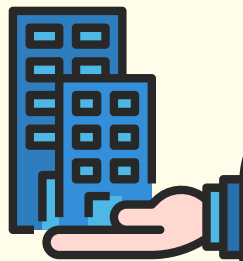
## 30,000 kg Precast Concrete Waffles Slab

We had delivered 30 tons (ie 30,000 kg!) a piece of precast concrete waffle slab for Micron Semiconductor Project in 2016.



## Iconic Projects

We supplied our precast components to commercial buildings, residential, public institutions and industrial building. Some examples of our iconic projects are ITE Central, Resorts World Sentosa, Pan Pacific service suites, SMRT, Klang Valley Mass Rapid Transit Sungai Buloh-Kajang Line.



## 17m Hollow-core Slab

The longest precast concrete we had ever produced is 17m hollow-core slab for one petroleum project at Jurong Island

# 37 Years

of experience in this business, incorporated in 1982



# New Fashion at Marina Bistro

By Ng Ai Li

Raffles Marina, namely our Marina Bistro underwent a uniform revamp for the entire service team this past August. The previous bright blue shirts were swapped for navy blue polo tees and the black long pants were replaced by khaki bermuda shorts to give an airy, fresh nautical feel. The new look is a perfect fit for the alfresco dining concept of Marina Bistro.



The head honchos at Marina Bistro also traded their black long pants for more earthy tones. To suit the new casual laidback nautical theme, our managers now sport khaki coloured pants with a white polo, to keep the look clean and more professional.

Over on the Banqueting side, the classic thick padded black jacket was changed with a form fitting baby blue shirt and black slacks. The contrasting dark blue lining on the collar and shirt pocket gives of a crisp, smart vibe.

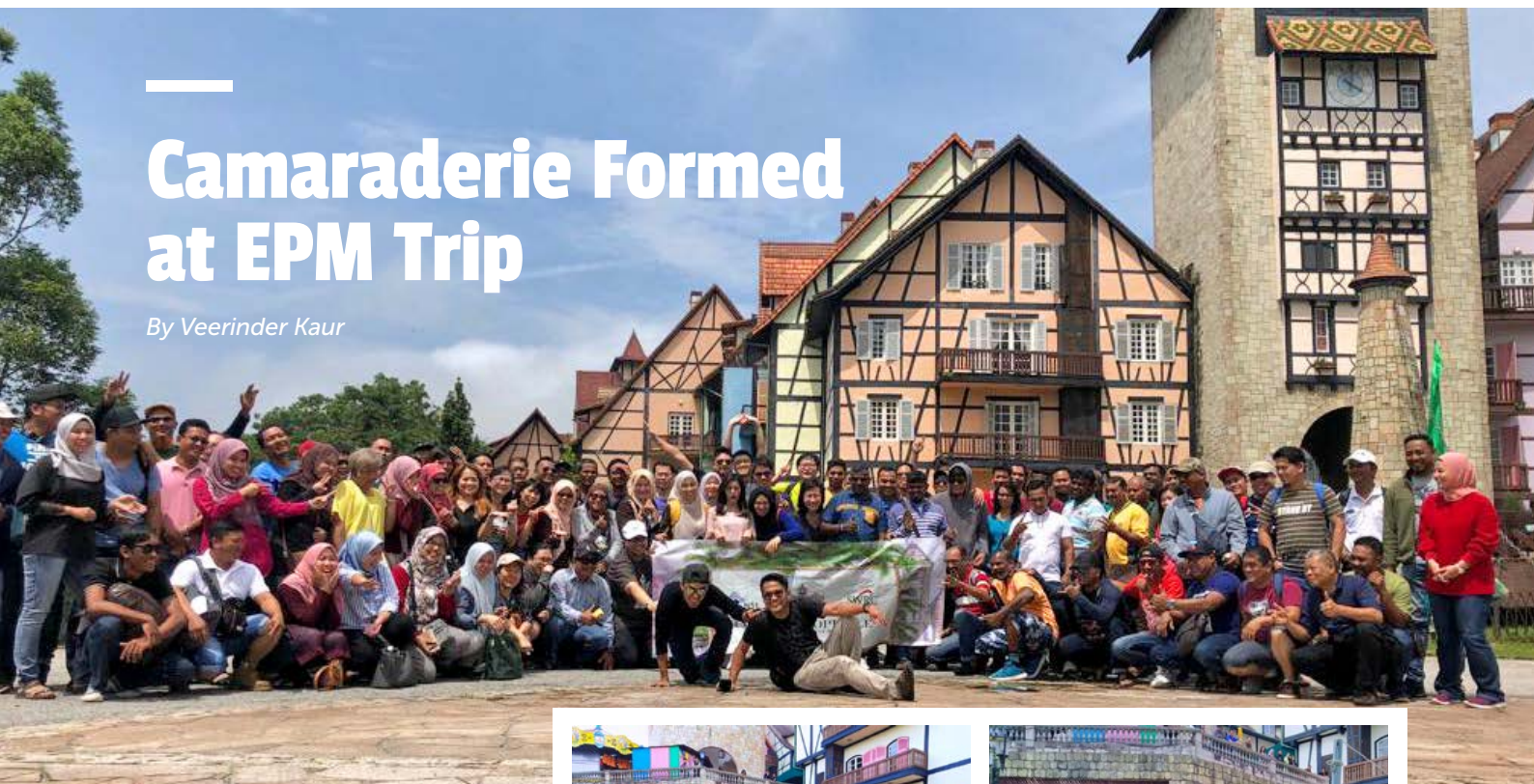


That rounds up the uniform changes over at Raffles Marina. The next time you are at Marina Bistro, take some time to admire the new attire our staff are sporting.



# Camaraderie Formed at EPM Trip

By Veerinder Kaur



From 6 to 7 July, Eastern Pretech Malaysia held a company trip at Colmar Tropicale in Bukit Tinggi, Pahang. 105 staff from Kuala Lumpur, Seelong, Beranang and Sungai Petani came together for a weekend of fun. To kickstart the trip, a telematch was held between five groups where strong camaraderie was formed between teammates. The winners were awarded gift hampers. The first day finally came to close with a buffet dinner at the resort's ballroom, as staff snapped selfies to capture the beautiful moments shared.

The next morning kicked off with a wonderful breakfast buffet selection, after which staff headed to a Japanese Village located near the resort. Staff had the opportunity of trying on kimonos and immersing in the Japanese culture. To commemorate the end of the trip, everyone gathered to take a group shot. It was definitely a trip to remember, as staff went back with fond memories!



Having fun during the telematch



Winners of the telematch



Staff in kimonos







# My Family's Favourite Recipe – Winners

NSL's My Family's Favourite Recipe contest results are out! The NSLink Editorial Team would like to congratulate the winners for their creativity in achieving all the wonderful culinary creations. Employees showed us how they can cook up a storm at home with their very own recipes.

## Your vote counts!

7 shortlisted entries were put to a poll and 152 employees voted for their favourite dishes. 20 lucky voters were also given a token of appreciation.

## Prizes

### 1<sup>st</sup> prize

WMF Boston 30 pieces cutlery set

### 2<sup>nd</sup> prize

Smeg 1.7L electric kettle

### 3<sup>rd</sup> prize

Bodum 3 piece French press set

### 4 Consolation prizes

Wiltshire 2 in 1 oil and vinegar sprayer

The top 3 winners are:

### 1<sup>st</sup> Prize Winner



**Name:**

Kamariyah Binti Kasam

**Company:**

Eastern Pretech Malaysia

**Family dish:**

Spicy Stinky Beans with Shrimp

### 2<sup>nd</sup> Prize Winner



**Name:**

Guganathan Rathinam

**Company:**

NSL Chemicals Ltd

**Family dish:**

Chicken 'Dum' Briyani

### 3<sup>rd</sup> Prize Winner



**Name:**

Chong Ka Vui

**Company:**

NSL OilChem Waste Management Pte Ltd

**Family dish:**

Steamed Stuffed Mushroom with Gravy

### 4 Consolation prizes



**Name:**

Kammy Kwan

**Company:**

Raffles Marina Ltd

**Family dish:**

Burger Patty



**Name:**

Nor Hidayah Daud

**Company:**

Eastech Steel Mill Services (M) Sdn Bhd

**Family dish:**

Malaysian Spicy Tomato Chicken



**Name:**

Steven Lee

**Company:**

Eastech Steel Mill Services (M) Sdn Bhd

**Family dish:**

Orange Chiffon Cake



**Name:**

Kelly Lim

**Company:**

NSL Ltd

**Family dish:**

Frog Leg Porridge





# NSL SRC Events

## Bowling Competition

On 15 June, 24 staff from the various subsidiaries came together for a bowling event at Bukit Batok Civil Service Club. The bowlers were split into three categories: Male, Female and Team. After three games the winners emerged!

Here are our winners:

### Male category

- 1st:** Andy Khoo (NSC)
- 2nd:** Khairul Salleh (NOC)
- 3rd:** Ngiam Tee Leng (NOC)

### Female category

- 1st:** Karrina Goh (NOC)
- 2nd:** Jin Chao Hui (NOC)
- 3rd:** Kammy Kwan (RML)

### Team category

- 1st :** From NOC - Mohd Radhi bin Abd Rahim, Zul Azhar Bin Mohamed Sayee, Khairul Salleh Bin Selamat, Muralitharan A/L Subramanian
- 2nd :** From NSC - Andy Khoo Chin Beng, Hao Xusheng, Guganathan Rathinam, Shafiee Bin Shukor
- 3rd :** Mixed Team from NSL and NSC - Christopher Chang, Arrich Cheong, Karthikeyan, Mira Franco



Top winner of the Female Category



Top winner of the Male Category



Winners of the Team category





## Terrarium Air Plant Workshop

The Terrarium Workshop is one of the most popular SRC workshops, 83 staff participated in the second run of the creative workshop that was held in the various offices. Participants were taught the basics of taking care of air plants and walked away with their beautiful self-made air plant terrariums.



## Brush Lettering Workshop

Staff put their creative minds to the test with their penmanship and drawings. They were rewarded with a personalised artwork at the end of the workshop.





## Manual Handling



In the Workplace Safety and Health Report 2018<sup>1</sup>, it was reported that there were 326 cases of work-related musculoskeletal disorders cases in 2018. This forms the majority of 563 cases of Occupational Diseases reported in 2018. Although there is a reduction from 337 cases in 2017, the number of cases is still high. Hence, we should understand the causes and take preventive measures to prevent occurrences.

### What are work-related musculoskeletal disorders (WRMSD)?

WRMSDs are disorders or illnesses of the hand, arm, neck, shoulder or back, which could be caused by awkward postures or over-exertions when doing manual handling of heavy loads or due to repetitive actions. Repetitive actions may result in injuries when too much stress is placed on the same set of muscles, joints or tendons repeatedly without providing sufficient recovery time. Workplace Safety and Health Council (WSHC) has provided a set of guidelines on improving ergonomics<sup>2</sup> in the workplace to reduce WRMSD. Highlighted on the right are some measures that we can take to reduce over-exertions, awkward postures and repetitive actions.

#### To reduce over-exertions:

- Load handled by one person should be less than 25kg.
- For heavy and bulky items, get the help of another co-worker to assist to handle the item together.
- Use the correct lifting techniques when lifting. Always squat down to lift a load, never lift a load by bending the back. Always keep the load close to your body.
- Use mechanical aids or equipment, such as trolley or pallet jacks when transferring heavy or bulky items.
- Suitable gloves, like anti-slip gloves should be worn to improve the grip on the load, and to protect the fingers from cuts.

#### To reduce awkward postures:

- Heavy items should be stored at easier to access height.
- Provide workstations at suitable height or with adjustable height to reduce the need for worker to bend or stretch to reach for things.
- Place all required tools or items in front of the worker to reduce the need for the worker to turn to the sides.
- Use ergonomically-designed hand tools.

#### To reduce repetitive actions

- Schedule job rotations for workers exposed to repetitive actions such that different muscles would be used for other job.
- Schedule regular breaks for workers for them to relax their muscles.

1 <https://www.mom.gov.sg/~media/mom/documents/safety-health/reports-stats/wsh-national-statistics/wsh-national-stats-2018.pdf?la=en>

2 [https://www.wshc.sg/files/wshc/upload/cms/file/2014/WSH\\_Guidelines\\_ImprovingErgonomicsintheWorkplace.pdf](https://www.wshc.sg/files/wshc/upload/cms/file/2014/WSH_Guidelines_ImprovingErgonomicsintheWorkplace.pdf)



## How Lack of Sleep Affects Your Health

A worldwide study placed Singaporeans among the top for sleeping the least. What's the reason for this and how does a lack of sleep affect a person's health? Dr Tan Ngiap Chuan, Director, Research, SingHealth Polyclinics, answers.

Researchers from SingHealth Polyclinics (SHP), a member of the SingHealth group, embarked on a search for answers to find the reasons for Singaporeans not sleeping enough and the effects it places on their health. They discovered some interesting information.

Dr Tan Ngiap Chuan, Director, Research, SHP, who led the study, said, "There are many studies out there, but none were done to compare sleep patterns of residents in two local housing estates with different population profiles. Our study helps us identify common factors that lead to the loss of sleep among Singaporeans."

A standard questionnaire was used by researchers on 350 people, aged 21 to 80, who visited the Sengkang and Bukit Merah polyclinics, and the findings were published in an international medical journal.

**They found that 44 per cent of participants – young people and those over 40 – slept less than seven hours a night on weekdays.** A large proportion of this group were students and full-time workers.

This group, however, appeared to catch up on their sleep on weekends. "They seemed to make up for it on Saturdays and Sundays. We found that just over a quarter were sleep-deprived on weekends," said Dr Tan.

**By contrast, those without fixed work commitments, such as homemakers, retirees and the unemployed, more often had consistently adequate sleep on weekdays and weekends.**

Those who got enough sleep tended to have regular sleep times, fall asleep relatively easily, exercise regularly and not smoke.





## How Lack of Sleep Affects Health

The body heals and repairs itself during sleep. Prolonged lack of sleep can therefore impact the body in many ways.

### Physical Impact

- Daytime fatigue
- Poor stamina
- Higher risk for obesity and chronic diseases such as hypertension, diabetes and metabolic syndrome
- Shortened life expectancy

### Mental Impact

- Less effective cognitive perception, affecting performance
- Impaired judgement and reaction time, affecting safety
- Memory and concentration difficulties

### Emotional Impact

- May cause mood disorders, depression and anxiety

## Lifestyle Affects Sleep

The study also found that modifiable factors, mostly lifestyle practices, were responsible for affecting people's ability to get enough sleep. Among these were:



Sleeping in the same room as children



Studying or leisure reading late into the night



Using computers or mobile devices in the bedroom or in bed



Drinking caffeinated beverages before bedtime



Smoking

Those who used computers or mobile devices prevalently – surfing the Internet or playing computer games in the bedroom – tended to sleep less than seven hours on weekdays. Interestingly, using one's handphone in bed did not shorten sleep times, although this observation requires further research.

Dr Tan said using computers and electronic gadgets in the bedroom is a modifiable behaviour. Changing it can help improve sleep patterns.

"We plan to come up with a checklist for patients. So if a patient consults us for sleep-related problems, we can quickly go through the common modifiable factors, ask the relevant questions, and offer a quick solution."

But this does not mean the sleep-deprived have to bid goodbye to their devices at the bedroom door. "They can still use their devices, but they should put them away and let their minds rest at least one hour before bedtime. It's like a cooling-off period, so to speak."

## Effects of Caffeine and Smoking

Other lifestyle factors found to affect sleep were drinking caffeine and smoking. People who had caffeinated drinks two hours before bedtime were less likely to get enough sleep.

Smoking has consistently been shown to affect sleep because nicotine is a well-known stimulant. The study also found that smokers, or previous smokers, tended to have less sleep compared with non-smokers.

"Smoking alone significantly increases the risk of vascular diseases. The risk is further heightened by a lack of sleep because insufficient sleep is also associated with cardio metabolic syndrome, a phenomenon where certain risk factors come together and cause a higher likelihood of diseases such as atherosclerosis and diabetes," he said.

"Consulting a physician for sleep-related complaints gives the doctor a chance to persuade the patient to quit smoking as a means to ameliorate sleep insufficiency."

Dr Tan also noted the long-term effects of insufficient sleep, particularly reaction time on the roads. "If more people are able to sleep adequately, it may reduce the number of accidents, and everybody will be safer," he said.

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