



PHYSICAL ACTIVITY LEVELS OF UN STAFF GLOBALLY, 2018

Dr. Esther Tan
Senior Medical Officer, Public Health



**Division of Healthcare Management
and Occupational Safety and Health**



Background and Aim of Survey

- **Physical activity levels** can help prevent various chronic disease and mental health conditions.
- Such conditions amongst staff can lead to excessive workplace absenteeism, lost productivity, increased job stress – outcomes not desirable by the employer nor the employee.
- **Two-fold objectives of this survey** was to
 1. Collect self-reported baseline information about the physical activity levels of UN staff worldwide, and how many individuals are meeting existing WHO recommendations.
 2. Use the opportunity to collect baseline info on other lifestyle risk factors



WHO RECOMMENDATIONS



Recommendations:

In adults aged 18-64, physical activity includes leisure time physical activity, transportation (e.g. walking or cycling), occupational (i.e. work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

The recommendations in order to improve cardiorespiratory and muscular fitness, bone health, reduce the risk of NCDs and depression are:

1. Adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate - and vigorous-intensity activity.
2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
3. For additional health benefits, adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate - and vigorous-intensity activity.
4. Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.





Methods

- **22-question survey** in both English and French was developed in surveymonkey, and sent by broadcast email to all UN staff globally.
- Results analyzed if they were between ages 18-64 years.
- No identifying information was collected to preserve anonymity.
- Survey ran for one month (mid-Sept to mid-Oct 2018)

- **Type of data collected** included:
 - Demographic data, including age, duty station, and department
 - Specific info about level of physical activity, amount of time spent doing such activities
 - Additional information surveyed included BMI, chronic illness, and smoking habits, use of fitness tracking devices.
 - Participants had opportunities to provide comments



Example of Questions in English and French



10. What is the **average** intensity of exercise you've done in the **last three months**?

Quelle est l'intensité moyenne de votre activité physique (ces trois derniers mois)?

- I do not exercise - Je ne fais pas d'exercice
- Moderate-Intensity (brisk walking, dancing, housework, etc.) - Int
- Vigorous-Intensity (running, fast cycling, fast swimming, competi
à vive allure, sports de compétition, etc.)
- Both moderate and vigorous intensity exercise - Activité physique

13. Are you able to achieve a total of 150 minutes of moderate activity or 75 minutes of vigorous activity per week?

Note: 2 mins of moderate activity is equivalent to 1 min of vigorous activity.

Êtes-vous en mesure d'atteindre un total de 150 minutes d'activité physique d'intensité modérée ou de 75 minutes d'activité physique d'intensité élevée par semaine?

Note: 2 minutes d'activité physique d'intensité modérée équivaut à 1 minute d'activité physique d'intensité élevée.

- Yes, I perform a combination of moderate and vigorous exercise that is equivalent to **at least 150 mins of moderate exercise or 75 mins of vigorous exercise** per week - Oui, j'effectue une combinaison d'exercices d'intensité modérée et élevée équivalant à au moins 150 minutes d'exercice d'intensité modérée ou 75 minutes d'exercices d'intensité élevée par semaine
- No, I perform a combination that is **less than 150 mins of moderate activity or 75 mins of vigorous exercise** per week - Non, j'effectue une combinaison de moins de 150 minutes d'activité d'intensité modérée ou 75 minutes d'exercice d'intensité élevée par semaine



Survey Response Rate & Demographics

- Response rate - 5,829 out of 35,540 staff (16.4%) participated in survey
- Respondents from over 205 duty stations, 73 departments, 21 PK/political missions
 - 127 individuals (2.2%) did not indicate duty station
 - 2,054 (35.2%) were based in Geneva, New York, Washington DC





Key Findings of Survey



- Of the total number of respondents that answered the question regarding the amount of physical activity they've completed in the last three months (4,032 individuals):
 - **Only 38.7%** (1,560) of UN Staff **met the WHO recommendations on physical activity level**
 - *This contrasts with WHO's finding in 2016 of **72%** of world population meeting the guidelines*



Results: Key Finding

	Muscle strengthening for at least twice a week	Muscle strengthening for less than twice a week
Moderate activity for at least 150 min/week	399 (33.9%) ¹⁶	777 (66.1%)
Moderate activity for less than 150 min/week	89 (14.0%)	549 (86.0%)

	Muscle strengthening for at least twice a week	Muscle strengthening for less than twice a week
Vigorous activity for at least 75 min/week	386 (71.6%) ¹³	153 (28.4%)
Moderate activity for less than 75 min/week	15 (46.9%)	17 (53.1%)

	Muscle strengthening for at least twice a week	Muscle strengthening for less than twice a week
Moderate/vigorous activity for at least 150 min/week	775 (70.7%) ¹³	321 (29.3%)
Moderate/vigorous activity for less than 150 min/week	36 (37.9%)	59 (62.1%)

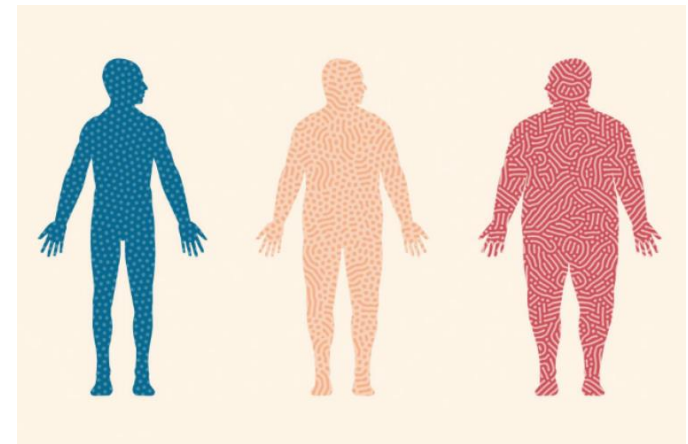


Other Results: Body Mass Index (BMI)

- A total of 3880 participants reported their BMI:

Classification	Responses	Percentage
Underweight	108	2.78%
Normal	1678	43.25%
Overweight	1411	36.37%
Obese	592	15.26%
Extremely Obese	91	2.35%

- The above is very similar to WHO 2016 data:
 - Overweight 38% of adults
 - Obese 11% men, 15% women

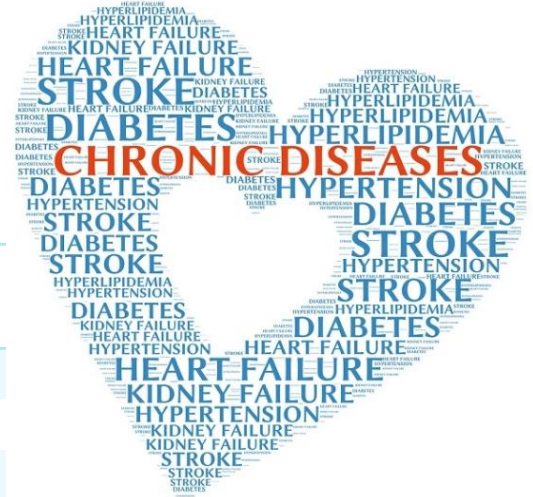




Other Results: Prevalence of Chronic Diseases

- 898 of 5751 individuals (15.6%) reported that they had been diagnosed with a chronic medical condition.

Medical condition	Responses	Percentage	International average
Hypertension	312	36,7	40% ⁵
Diabetes	132	15,5	8,5% ⁶
Heart disease	82	9,6	5.7% ⁷
Osteoarthritis	61	7,2	4.7% ⁸
Cancer	33	3,9	
Chronic Obstructive Pulmonary Disease	15	1,8	11.7% ⁹
Other	441	51,8	-

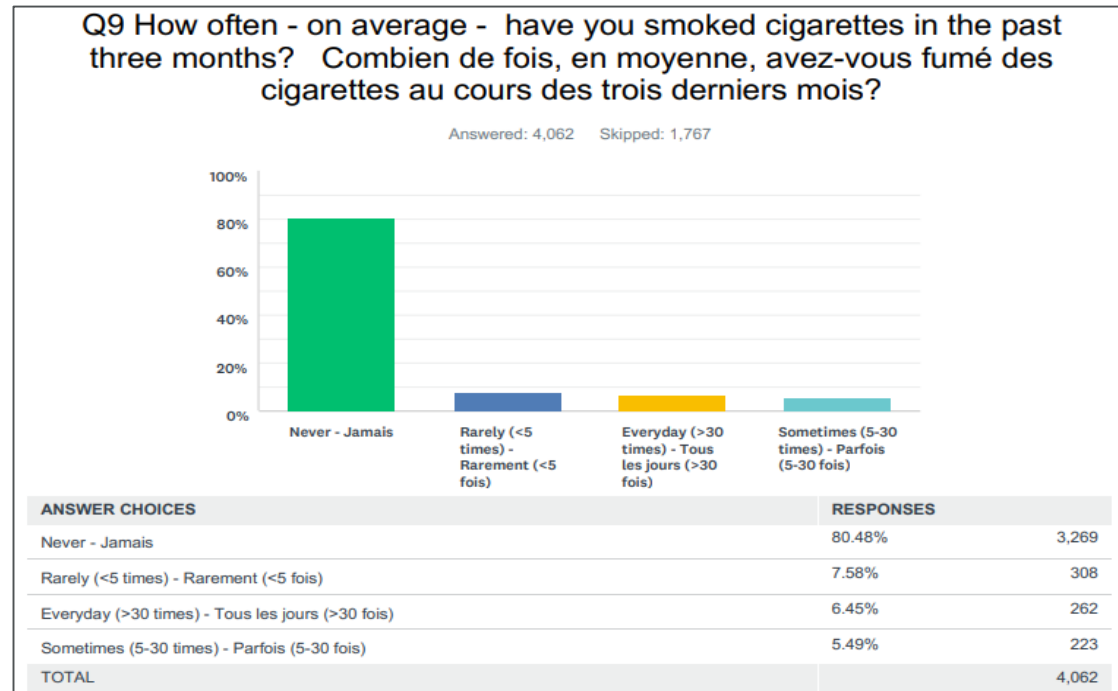


- “Other” mostly indicate different types of autoimmune diseases, hyperthyroidism, asthma, allergies and high levels of cholesterol.
- 61.9% of these individuals received personalized advice from their doctor on physical activity. 78.1% do follow this advice.



Other Results: Smoking Behavior

- 80.5% (3269 out of 4052 individuals) have not smoked in the last 3 months.
- 19.5% (793 individuals) reported that they:
 - Rarely smoked (308 individuals; 7.6%)
 - Sometimes smoked (223 individuals; 5.5%),
 - Daily smoked (262 individuals; 6.45%).



- The global prevalence of smoking in 2016 was 20.5%.



Other Results: Willingness to Engage in More Physical Activities

- Participants were asked whether they would engage in more physical activities if there were opportunities to exercise at work:
 - 74.6% (2,805) - “yes,”
 - 10.4% (389) - “no”
 - 15.1% (566) - “uncertain”
- Thousands of participants also made suggestions on how to improve opportunities for physical activities at work
 - The most common requests were the availability of classes (e.g., yoga, group exercises, etc.), an on site gym, and a changing room with showers.



Top Ten Suggestions for How to Improve Opportunities for Physical Activities at Workplace



	Top Suggestions	Number of votes	%
1	Classes	349	32.7
2	On site gym	212	19.9
3	Showers	122	11.4
4	Sport during working hours	76	7.1
5	Bigger/better equipped gym (HQ)	69	6.3
6	Flexible working hours (esp. lunchtime)	61	5.7
7	Sport competitions/pitch (for games)	56	5.2
8	Activities at lunchtime	44	4.1
9	Better communication/promotion; managerial support & promotion	41	3.8
10	Less workload	37	3.5

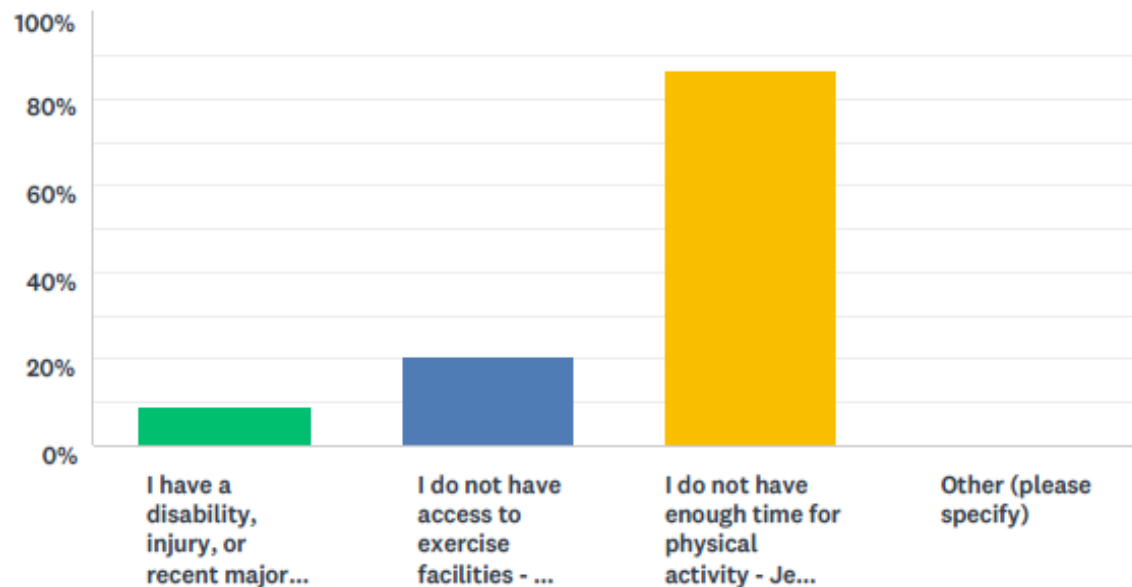




Results: Reasons for Not Exercising

Q15 Please indicate the reason(s) you do not exercise. Choose all that apply. Merci d'indiquer la/les raison(s) pour laquelle/ lesquelles vous ne faites pas d'exercice. Choisissez tout ce qui correspond.

Answered: 394 Skipped: 5,435



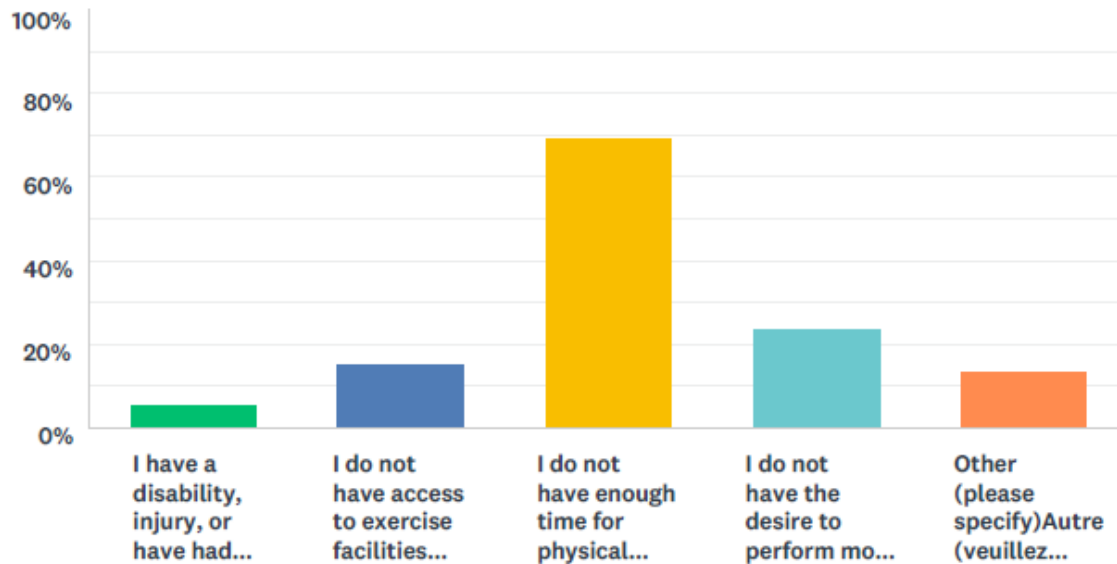
ANSWER CHOICES	RESPONSES	
I have a disability, injury, or recent major surgery - J'ai un handicap, une blessure, ou ai subi une intervention chirurgicale majeure récente	8.88%	35
I do not have access to exercise facilities - Je n'ai pas accès à des salles d'exercice	20.30%	80
I do not have enough time for physical activity - Je n'ai pas assez de temps pour une activité physique	86.29%	340
Other (please specify)	0.00%	0
Total Respondents: 394		



Results: Reasons for Limited Exercising

Q16 Please indicate the reason(s) why your exercise activity is limited.
 Veuillez indiquer la/les raison(s) pour lesquelles votre activité physique est limitée.

Answered: 771 Skipped: 5,058



ANSWER CHOICES

RESPONSES

I have a disability, injury, or have had recent major surgery - J'ai un handicap, une blessure ou ai subi une intervention chirurgicale majeure récente	5.71%	44
I do not have access to exercise facilities - Je n'ai pas accès à des salles d'exercice	15.18%	117
I do not have enough time for physical activity - Je n'ai pas assez de temps pour faire une activité physique	69.52%	536
I do not have the desire to perform more physical activity - Je n'ai pas le désir de faire plus d'activité physique	23.74%	183
Other (please specify)Autre (veuillez préciser)	13.62%	105

Total Respondents: 771



Limitations

- Only 16.4% response rate (5,829 out of 35,540 individuals from over 205 duty stations) and not all staff completed all questions of the survey as they were optional.
- Data was collected from both staff in HQ locations as well as in the field. Variance in geographical location could make it difficult to generalize the findings for the UN population in its entirety.
- Potential responder bias. The survey was optional, therefore those who took the initiative to complete it may be more inclined to value physical activity and be more physically active. Results may not extrapolate to entire UN staff population.



Conclusions

- Our staff are at risk of a low-activity lifestyle. Results of the survey reveals that our global staff population have overall low levels of meeting the WHO guidelines on physical activities.
- Message of increasing activity levels amongst UN staff still an important one.
- Survey should be repeated annually as an key indicator for DHMOSH of staff health and wellness, as well as to measure effectiveness of any health promotion program
- Further analysis to be done to determine any factors that contribute to differences such as duty station/geographical locations.



Acknowledgements

- This survey was developed, conducted and analysed by the DHMOSH Public Health unit under Dr. Esther Tan's lead
- Interns: Molly Braine, Christine Korbely, Bhavya Chauhan
- Editorial: Michael Almendral





Thank you!

For any questions:
dos-dhmosh-public-health@un.org