

This public comment was a letter sent from the Public Safety Committee of the American Academy of Sleep Medicine. There were 3 concerns raised.

1. The use of biomathematics models embedded within actigraphy to provide a fatigue score has not been shown to be a valid measure of fatigue or fitness for duty. Although actigraphy can reflect the individual's sleep-rest and wake periods, which is useful data, the embedded biomathematical model has not been validated at the individual level. In addition, individual differences, sleep disorders, motivational factors, and/or use of caffeine or other medications can influence fatigue levels independent of activity trackers and biomathematical models. The use of actigraphy and biomathematical models to determine fitness for duty has the potential to cause harm (i.e., the fatigue score could be low, when actual fatigue is high) due to the lack of validation at the individual level and the lack of accounting for individual factors that contribute to fatigue. We therefore suggest that a validation study be conducted to determine the sensitivity and specificity of the biomathematical models against objective measures of fatigue (e.g., the psychomotor vigilance test) in taxi drivers at the individual level before implementation in a larger study. We further suggest that individual-level variables, such as those described above, be accounted for in the protocol.

CDC response: The study as designed is to determine alertness changes in response to the fatigue scores. One group of drivers will be provided the sleep and health training designed for drivers. Both groups of drivers who will be able to see fatigue scores on the actigraph will be instructed during the consent process (and included in the informed consent form) not to rely on fatigue scores and to listen to cues their body is sending related to drowsiness or fatigue. The study is designed to collect additional data on individual differences, sleep disorder history, motivational factors such as tips received, and/or use of caffeine or other medications – data that is collected each data collection period in either the Work and Health Survey or the Daily Sleep and Activities Diary which tracks measures of sleepiness, drowsiness, and alertness independent of the actigraph. Data from each data collection period can serve as validation for the subsequent data collection period.

2. The generalizability of the collected data to a real-world environment is unclear. Many factors, including mechanical issues with on-road vehicles, weather, traffic, and passengers may affect driving performance. We therefore suggest assessment of additional variables that may impact overall performance.

CDC response: We ask many additional questions that measure real-world environment, such as job demands, safety climate, make and model of vehicle and associated safety features, motor vehicle crashes, and passenger violence. All of the drivers will be in San Francisco, which has mild weather, and all drivers will be experiencing traffic as it is highly populated. Due to the burden on the American people we need to balance the number of questions we are asking with level of knowledge gained. We believe based on our experience with this workforce and the feedback we received from drivers, researchers and taxi/rideshare company management that we have an appropriate balance of questions.

3. This study will provide important information about the duration for which each taxi driver is able to perform work and to remain active during each shift, and the effectiveness of associated interventions, but it will not adequately address multiple other factors that contribute to fatigue in taxi drivers and other drivers for hire who transport passengers. We therefore urge that other fatigue assessment and mitigation strategies be incorporated into this important protocol that will influence public safety.

CDC response: Our randomized controlled trial study is designed to be quite comprehensive. The training itself provides several fatigue assessment and mitigation strategies: there are modules on health and safety risks from not getting enough sleep, the science of sleep and fatigue, the science of circadian rhythm and its effects on the body, personal considerations that focus on health, fitness, and other personal aspects of fatigue, the science of getting good sleep (with evidence-based strategies) and how it affects alertness, safe work practices that include scheduling and driving hours, special considerations and mitigation strategies for driving during the day, special considerations and mitigation strategies for driving at night or in the evening, strategies for driving safely in general, and a concluding module that provides injury statistics. This training was adapted from previous NIOSH trainings on nurses and law enforcement officers authored by Claire Caruso and include sleep medicine physicians and fatigue science and transportation experts as co-authors. In the training we educate about different instruments used to assess fatigue, in addition to listening to the body's cues for rest.

The actigraph will not only measure sleep duration, but also sleep efficiency and sleep onset and waking. We will use this data to reinforce the importance of scheduling and consistency for good sleep hygiene in addition to duration.

For each data collection period the survey instruments will collect data on: tenure driving taxi/rideshare and schedule, shiftwork and breaks; other current employment and hours worked; job demands scale, passenger violence and theft, recent motor vehicle crashes and circumstances; taxi/rideshare safety equipment and features, safety training and road safety habits; health such as cardiovascular health, history of sleep disorders, mood disorders, medication use; health and sleep habits; substance use; countermeasures used for driving drowsy, fatigue and sleepiness scales, demographics, and mental health scale. Throughout the day each day within each data collection period we are obtaining a sleepiness rating, a fatigue rating, and a PVT (alertness) score; number of times awake during the sleep period, time spent awake, cause and if the participant was able to fall back asleep; wake up and bedtimes; driving activities, income earned in fares, income earned in tips, number of trips completed; number and length of breaks taken; number and length of naps taken; shift start and end time; caffeinated products consumed, other substances used, medication use, general level of work activity, experiencing/witnessing trauma.

All of these survey instruments taken together provide a variety of fatigue assessment measures, and the training offers a range of fatigue mitigation strategies to incorporate into a driver's daily routine.

Public Comment #2 to 60-day FRN, CDC-2020-0076-0003:

'My name is Shyla Patera. I am an independent living specialist with North Central independent living services in Black Eagle Montana. I see many opportunities through this study undertaken by the CDC. I am really hoping that fatigue and vision issues I am dealt with by our Lyft, taxi, and Uber and other ride share services will lead to benefits for all Transportation providers from fixed route buses to paratransit

drivers! I am hopeful that this study will recruit rural taxi services that drive long-distance to participate. I am also urging the CDC, states and communities study mobility and accessibility options for disability and transit dependent riders.'

CDC response: We appreciate your comment. We have designed the study focused on for-hire drivers, but the fatigue-related topics of sleep and fatigue, body rhythms and your body clock, personal considerations, good sleep and alertness, safe work practices, shift driving, night driving, day driving, and safe driving are certainly applicable to all drivers who transport passengers for a living. The study is limited to license taxi/rideshare drivers in San Francisco, California, but the findings can generally be applied to rural taxi/rideshare drivers as well. Your desire for federal, state and community-level entities to study mobility and accessibility options for disability and transit dependent riders is duly noted.

Public Comment #3 to 60-day FRN posted September 17, 2021, Vol 86, No. 178, pp. 51892-3; CDC-2021-0097-0001

'I oppose this latest attempt to get more taxpayer dollars to somehow be sent to wuhan china by this fat cat bureaucracy that works for china more than it works for the good of the U.S.A. We don't need this study at all. Taxi drivers know what they are getting into. Nothing will be advanced for them by this study by fat cat bureaucrat politicians (they claim to be scientists but the cdc has become politicians pushing agendas these days.) I don't support one penny more for this out of control officious attempted dictators at this agency. They want to rule all of America, control our brains, our bodies, and get every cent they can to make themselves rich if you work at the cdc. None of them are helping the average American. None of them. They are takers and abusers at the cdc. I object to every penny they get into this agency. I am in favor of the cdc complete and total shut down. They are not scientists at this agency at all. They are politicians making themselves into millionaires. This program needs total shut down. Malignant evildoers exist at the cdc, not good americans. This program has no intent, no relevancy for americans. It has no benefit for americans. It is just more fat cat bureaucracy. Fire some of the thousands who work at this agency and shut down most of this agency immediately. It is a blot on America.'

CDC response: No comment.

Public Comment #4 to 60-day FRN posted September 17, 2021, Vol 86, No. 178, pp. 51892-3; CDC-2021-0097-0001

'As someone who drives long distances on a semi regular basis, I understand how taxing it can be. When someone does a task over and over again they can start to lose track of important details that can be life threatening. Compound that with driving a vehicle to a destination you are not familiar with and long hour it cannot be safe. I support drivers only being able to drive a limited number of hours in a period of time, for the driver's and public's safety and well-being.'

CDC Response: We appreciate your concern for drivers' wellbeing. You are referring to hours of service regulation, which is typically regulated by municipality for for-hire drivers. The purpose of our study is to evaluate interventions designed to empower drivers to make informed decisions when assessing their sleepiness and fatigue levels and take breaks and/or naps when needed, in addition to adopting lifestyles (and work scheduling) where quality sleep and rest are prioritized.

Public Comment #5 to 60-day FRN posted March 10, 2023, Vol 88, No. 47, pp. 15026-8; CDC-2023-0017

'this makes no sense as a project for taxpayer to pay for. the fact is you have done endless studies on truck drivers, which apply equally to taxi drivers. there is no need to duplicate your work for the difference between taxi drivers and truck drivers. they share the same issues with fatigue. this is just a way for this lousy corrupt agency to get more tax dollars for crap projects where they abuse animals in secret labs all over the world, or want to inject kids with vaccines that will kill them or injure them. this agency needs shut down and investigation right now! it has just caused economic chaos in america with inept sloppy negligent work on a vaccine that does not work. this agency is the pits. this agency gets a grade of f minus or zero for its work. this agency is of no value to the american public. this agency in fact is anti american and money mad. i ask for this agency to be shut down. take the trillions they get from all americans away from this corrupt agency now. this comment is for the public record.'

CDC Response: CDC acknowledges your comment towards Docket: CDC-2023-0014. Thank you for your comment.

Public Comment #6 to 60-day FRN posted March 10, 2023, Vol 88, No. 47, pp. 15026-8; CDC-2023-0014

"Dear PrezBo,

You know exactly who to thank for the honorable mention.

obo Financial Crimes Enforcement Network

- FINCEN-2023-0004-0001

- COLC-2023-0002-0001

- for the Advancement of Agency Cybersecurity, Infrastructure Security Agency, and the NSF.

ID CISA-2023-0007-0001, et. al.

Here a USC Title 18.225 Violation that not yet been Adjudicated. You're retired anyways do us all a favor and maybe this will help contain this maniac to keep her mouth shut as well! Plus! You can add it to your wiki after the Federal Reserve work you did! Sounds good to me big man!

In light of the paperwork reduction Act I have prepared these artifacts; namely, to make an example of these criminals who generally place the protection of consumers at risk. State Farm casualty is a oxymoron business ...

- oxymoron, mostly because they are an automobile insurance company trying to commit crimes in the financial space (not their area of specialization), which is supposed to defraud automobile owners, now also they are defrauding real property taxes and the SEC?? So I also have other questions, like why haven't they been charged for gross negligence of property taxes, the Sarbanes-Oxley Rules ...

like put their shareholders at risk to hide the Zucker Ponzi scheme-

</p></p>each unit// 144 of them valued at \$20 million in soho without a certificate of occupancy???

Good luck with that liability, back taxes IO-Years as reported to the NY DFS they also obtained unlawful lines of credit with those artifacts, which is also a breach of USC 18 .21 -

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Block 803, Lot 8, Acris. <lp> </p>No lie</p></p>

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<https://archive.org/details/document-index-tcr-5>

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<https://archive.org/details/2020-05-27-index-and-papers>

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<https://ia902602.us.archive.org/17/items/document-index-tcr-5/document%20index%20TCR5.pdf></br> Best Wishes!</br> BBO. </br>

no play play either</p></p>

Is this what they are thinking??? </p> </p>

<https://memes.getyarn.io/yarn-clip/3458149a-ceb>"

CDC Response: CDC acknowledges your comment towards Docket: CDC-2023-0014. Thank you for your comment.

Public Comment #7 to 60-day FRN posted March 10, 2023, Vol 88, No. 47, pp. 15026-8; CDC-2023-0014

"AT TN Dr. Sala-i-Martin,

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<https://archive.org/details/document-index-tcr-5>

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<https://archive.org/details/2020-05-27-index-and-papers>

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[https://ia902602.us.archive.org/17/items/document-index-tcr-5/document%](https://ia902602.us.archive.org/17/items/document-index-tcr-5/document%27)

CDC Response: CDC acknowledges your comment towards Docket: CDC-2023-0014. Thank you for your comment.

Public Comment #8 to 60-day FRN posted March 10, 2023, Vol 88, No. 47, pp. 15026-8; CDC-2023-0014

"I think this study is a great idea. It couldn't hurt to inform drivers about healthy habits and how to manage their sleep and work schedule. If this study is done it could save many lives in the long run with taxi drivers having a fatality rate at 3.5 times higher than other civilian workers. It is also free of charge to the participants, which would encourage more people to attend. I know I would feel safer in a taxi if I knew there were more resources for my driver to get information on how to be safe."

CDC Response: CDC acknowledges your comment towards Docket: CDC-2023-0014. Thank you for your comment.