

Health & Safety

February 2015

CAUTION CAUTION

TWU Goes Into Action

WORKING IN THE COLD CAN BE HAZARDOUS

In preparation for this year's Cold Season, the union's Health and Safety Department produced a bi-fold pocket guide to protect yourself and other members from the ravages of cold, wind and snow when working on the job, either together or separately.

The pocket guide has been in the field since late 2014.

The pocket guide quotes the federal **Occupational Safety and Health Administration [OSHA]** guidelines for working in harshly cold weather.

OSHA strongly recommends actions that employers should take to protect workers from cold stress, hypothermia, frostbite, and other problems associated with cold conditions.

Wind Chill is described as a particular hazard. **[This is totally left out of the MTA/NYCT Bulletins and Cold Weather Plans.]**

There are recommendations for protective clothing. Also, work shields to protect from wind chill are highly recommended by OSHA. They further recommend the use of buddy systems and frequent cold weather breaks into warm areas. Here again, the MTA/NYCT leaves out this "buddy plan" system.

The TWU 100 pocket guide makes it clear that if these conditions are producing hypothermia, frost bite and /or cold stress and the supervisor is not

providing protection; the **SAFETY DISPUTE RESOLUTION FORM** should be used.

Call the TWU Safety Hotline with any issues regarding your safety at work: 1-888-302-3727



Local 100 Members

Working in the Cold Can Be Hazardous

The Occupational Safety and Health Act (OSH Act) requires employers to comply with hazard-specific safety and health standards. In addition, pursuant to Section 5(a)(1) of the OSH Act, employers must provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm. Below are Federal OSHA's Recommendations



Anyone working in a cold environment may be at risk of cold stress. Some workers may be required to work outdoors in cold environments and for extended periods, for example, snow cleanup crews, sanitation workers, police officers and emergency response and recovery personnel, like firefighters, and emergency medical technicians. Cold stress can be encountered in these types of work environment. The following frequently asked questions will help workers understand what cold stress is, how it may affect their health and safety, and how it can be prevented.

How cold is too cold? A cold environment forces the body to work harder to maintain its temperature. Whenever temperatures drop below normal and wind speed increases, heat can leave your body more rapidly. **Wind chill is the temperature your body feels when air temperature and wind speed are combined.**



is as if the air temperature was 28°F.

Cold stress occurs by driving down the skin temperature and eventually the internal body temperature (core temperature). This may lead to serious health problems, and may cause tissue damage, and possibly death.

What are the risk factors that contribute to cold stress?

Some of the risk factors that contribute to cold stress are:

- Wetness/dampness, dressing improperly, and exhaustion
- Predisposing health conditions such as hypertension, hypothyroidism, and diabetes
- Poor physical conditioning

NYCT Ready for WINTER ?

NYC Transit has winter plans for buses and subways (as seen at right).

Subway Plan

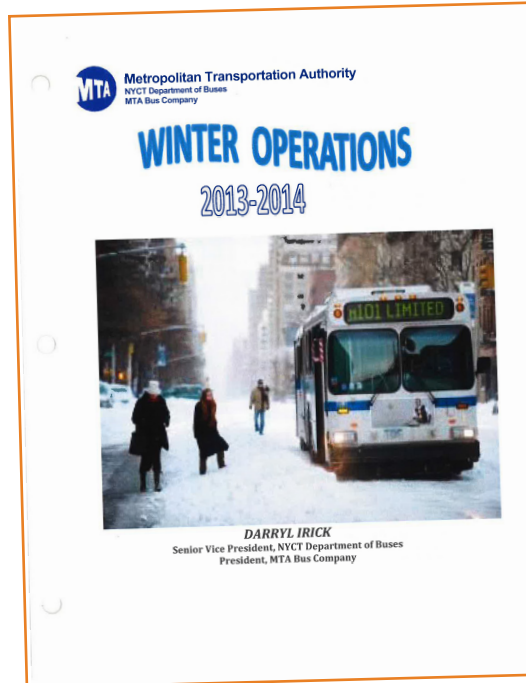
On the subway side, the plan differs depending on the temperatures. They make recommendations for temperatures between 30 to 11 degrees, and 10 degrees and below. Also for ice in the yards; when the forecast calls for ice and freezing rain; when there is a forecast of snow with accumulations of five or more inches, and for a Declared Emergency.

Cold Stress Precautions

On January 9, 2015, NYCT President Carmen Bianco sent a COLD STRESS to all employees. This was followed by a "Sign and Symptoms of Cold Related Stress" information piece. They define Hypothermia and the bulletin clearly says; this requires "IMMEDIATE MEDICAL ATTENTION." The term "frostNip" is then used to describe a pre-frostbite stage. No action is then called for. Frostbite is then described. **TWU does not recognize the term "frostNip" and neither does OSHA.**

All outside workers know from simple common sense: when the wind chill temperature warrants extreme caution, working on elevated structures should be discontinued, unless it's an emergency job. Then the "buddy system" is a must.

According to OSHA: "Employers can assign workers to tasks in pairs (buddy system), so that they can monitor each other for signs of cold stress. Employers should give workers frequent breaks in warm areas. Acclimatize new workers and those returning after time away from work, by gradually increasing their workload, and allowing more frequent breaks in warm areas, as they build up a tolerance for working in the cold environment."



Winter Operations Plan

10/2014



Joseph Leader
Senior Vice President,
Department of Subways

Shift workers needed for research study

Researchers at The Rockefeller University are conducting a study with shift workers to gain a better understanding of how shift work and stress influence the body's metabolism.

You may be eligible if you:

- Are over the age of 18
- Work at least 4 consecutive nights/days of a minimum of 8 hours between 7am-7pm or 8pm-8am
- Do not consume more than 3 cups of regular coffee or 5 sodas a day
- Do not have a BMI over 30
- Do not engage in active drug use

Participation includes:

- Completing a one-time survey
 - Salvia collection
 - Photo food journal
- Wearing an ActiGraph, a device worn around your wrist, that records your activity and sleep for one week

Compensation is provided

For more information, or to see if you are eligible to participate, please contact our recruitment specialist at 1-800-RUCARES or Rucares@rockefeller.edu

You called, we answered . . .

Turn Down the Noise!

A call came into the TWU Safety Department on Nov 28th, 2014 reporting concerns about excessively loud noises on buses. Bus operators reported that complained of a painfully loud ringing source when starting the Bus.

Safety Director for Buses, Frank Austin, along with the Bus Safety Committee, examined buses at all bus depots and made an alarming discovery, that revealed a potential of future hearing loss and other medical issues due to the loud noise. A letter went out to the Chief Maintenance Officer of the M.T.A. Department of Buses, describing our concerns. We employed a decibel meter to test the level of noise. We discovered the levels to be at 97 percent, with 100 percent being the highest. Tests were performed on a bus with the technical support team from the MTA and the TWU and a solution was found, involving an adjustment to the kneeling alarm. After the adjustment, we retested, and the decibel meter now reads 87 percent which meets the guild lines (but it's still too loud).




Kneeler alarms on the Nova Buses were adjusted. effective Dec 5, 2014 (see Maintenance Directive at right).

This effects over 530 New York City transit buses.

During this inspection we also discovered the low air alarm on the Orion 7 series buses has a problem. When the decibel meter was set up to test, the findings were unacceptable. There will be a Maintenance Directive to correct this problem very soon, which will fix the problem for over 850 NYCT buses.

Less Noise in Stations, Too!

Local 100 applauds transit for disconnecting those high-pitched alarms from the Emergency Doors in Stations. They served no purpose other than annoying passengers and workers alike.

METROPOLITAN TRANSPORTATION AUTHORITY NYCT DEPARTMENT OF BUSES/MTA BUS		
	TECHNICAL SERVICES BULLETIN	Code: 88-292
	Subject: Nova Kneeling Alarm Adjustment	Date: 12/05/14
		Page: 2 of 5
		Re MD: 88-154-14
<p>1. After the bus is lifted and safely secured on jack stands, remove the dust pan from under the front right side of the bus (figure 1).</p>  <p>Figure # 1</p> <p>2. Cut the 2 tie-wraps that secure the wire harness to the kneeler alarm and disconnect the connector (figure 2).</p>  <p>Figure # 2</p>		
<small>TSB 88-292 Nova Kneeling Alarm Adjustment E1, E2, E3, E4 - 02</small>		



Brake Shoe Repairs

Over the past couple of years, NYCT has decided to reverse its consolidation strategy of having all Brake Shoes repaired in two locations. They are now being rehabbed in all bus locations. Here is a photo of the repair machine that is the centerpiece of the work. According to all reports asbestos is not part of any materials in the brake shoes.

Walkaround Inspections

Meet to Discuss Better Ways to Protect Workers Against Hazards

The union's safety and health department has completed its first round of Walk Around Inspection Training: the Bus division in early 2014 and the Subways at the end of 2014.

In both instances, Dave Newman, industrial hygienist with the New York Committee for Occupational Safety and Health [NYCOSH] conducted this specialized training.

Subway Safety and Health Director Tom Carrano assembled the union members to be trained and helped in the actual delivery of the materials.

The centerpiece of the training materials was the "Job Safety and Health Shop Floor Action Plan"

The plan contains:

- Attachment G Safety Procedures Memorandum of understanding [2002-2005]
- 1.9 Safety Committee



- 1.9 Health and Safety Committee Line of Authority
- Safety Rule Dispute Resolution Form
- Policy Instruction: No. 10.30.3 Safety Committee [2/23/09]
- Safety and Health Inspection Tracking Matrix
- Appendix B Monthly Meeting Report Sheet.

Scientific article exposes Serious Air Problems in Subways

A scientific/medical article by researchers from New York University and the University of Massachusetts has found that "Black Carbon [BC] and Particulate matter [PM] in NYC's subways are considerably higher than ambient urban street levels, and further monitoring and investigations of BC and PM subway exposures are warranted." The Report, published in the Environmental Science and Technology, is further proof that the air problems for all transit workers in the subways is very dangerous. We call it simply Steel Dust; but this report expands the problems. While passengers suffer from these problems, TWU 100 members are working there for their total working lives.

ENVIRONMENTAL
Science & Technology

Article

pubs.acs.org/est

Black Carbon and Particulate Matter (PM_{2.5}) Concentrations in New York City's Subway Stations

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Supporting Information

ABSTRACT: The New York City (NYC) subway is the main mode of transport for over 5 million passengers on an average weekday. Therefore, airborne pollutants in the subway stations could have a significant impact on commuters and subway workers. This study looked at black carbon (BC) and particulate matter (PM_{2.5}) concentrations in selected subway stations in Manhattan. BC and PM_{2.5} levels were measured in real time using a Micro-Aethalometer and a PDR-1500 DataRAM, respectively. Simultaneous samples were also collected on quartz filters for organic and elemental carbon (OC/EC) analysis and on Teflon filters for gravimetric and trace element analysis. In the underground subway stations, mean real time BC concentrations ranged from 5 to 23 $\mu\text{g}/\text{m}^3$, with 1 min average peaks $>100 \mu\text{g}/\text{m}^3$, while real time PM_{2.5} levels ranged from 35 to 200 $\mu\text{g}/\text{m}^3$. Mean EC levels ranged from 9 to 12.5 $\mu\text{g}/\text{m}^3$. At street level on the same days, the mean BC and PM_{2.5} concentrations were below 3 and 10 $\mu\text{g}/\text{m}^3$, respectively. This study shows that both BC soot and PM levels in NYC's subways are considerably higher than ambient urban street levels and that further monitoring and investigation of BC and PM subway exposures are warranted.



2nd Study Confirms Steel Dust Fears

A new study out of the UK by Matt Loxham (published in the Oxford Journals) underscores our long held concerns about steel dust in the subways. Loxham, who spoke at a Local 100-sponsored Conference on the Health Status of Transit Workers in Brighton, England in 2013, concludes of his work in the London Underground:

"The results indicate that, although the mucous layer appears to confer some protection against underground PM, ALL PBECs nonetheless detect PM and mount an antioxidant response. The combination of increased ROS-generating ability of the metal-rich (steel dust) ultrafine fraction and ability of PM to penetrate the mucous layer merits further research."

Local 100's Dr. Frank Goldsmith said that this and the Black Carbon report (see left) shows that "underground steel dust is not benign and not simply a nuisance. It is dangerous and requires greater research and regulation."

Ebola Scare Came and Went in NYC; TWU Is on Top of It

October 2014 brought yet another potential danger to the transit system, Ebola.

A young doctor who had been working heroically in Africa on the Ebola epidemic, brought in back to New York. He initially tested negative for the virus, but days later developed a fever and went immediately to a hospital. But he had not self-quarantined. And he had actually taken the subway, which through the media into a frenzy and caused great concern among riders and of course the workers.

The union was prepared. Local 100 President John Samuelson issued the following statement immediately after the news broke about the Ebola Doctor. Following is that statement:

A Message from President Samuelson on the Confirmed Ebola Case

President Samuelson (Oct. 23, 2014) released a statement to all members of TWU Local 100 on the confirmed case of Ebola in a young doctor who recently returned from Guinea. Here is the text of the statement:

“The inevitable has happened. New York has its first confirmed case of Ebola, a young doctor who treated Ebola patients in West Africa, and returned symptom free to JFK 10 days ago. But, he developed symptoms today, and is now in Bellevue Hospital being treated. I have been in touch several times this evening with MTA CEO Thomas Prendergast, who was at Bellevue with other City and State officials to determine the facts of the doctor’s movements since arriving back to the States.

“The NYC Health Commissioner, Mary Bassett, has confirmed that the doctor used the subway to travel from Manhattan to Williamsburg, but this was done yesterday, Wednesday, before he came down with symptoms of the disease. Ebola patients are only contagious when they develop symptoms. When he had fever this morn-

NY DOC HAS EBOLA

First confirmed city case of deadly virus

Union Maintains Vigilance, Readies for Next Crisis

While the Ebola scare is over in New York, TWU’s vigilance is not. Local 100’s Frank Goldsmith, Director, Occupational Health, and TWU International Representative Sean Doyle continue to attend meetings with high level U.S. government health officials to be ready for the next health crisis in the best interest of the health and safety of TWU transit, airline and railroad workers.

ing, he called for an ambulance and was transported to Bellevue Hospital.

“Ever since the Ebola crisis hit America with the much-covered cases in Dallas, our union has been preparing for the event that became public this evening. Your union’s officers and safety representatives have attended every City and State sponsored Ebola educational seminar held in the City. We assisted our International Union in hosting an Ebola educational summit in Washington, DC today (Oct. 23) for TWU Local union leaders.

“Our Local 100 Director of Occupational Health, Dr. Frank Goldsmith, has been closely monitoring the situation, and has disseminated as much information as possible to your officers and safety representatives. Earlier this week, the union began passing

out literature to the membership in RTO on safety protocols for dealing with potentially infectious waste in the system. Your union is as prepared as we can be to ensure your safety during this potential crisis. We will be sending out more information tomorrow (Friday).

“Transit workers have always dealt with crises calmly and professionally. We kept our heads during 9/11, and have dealt with all sorts of weather emergencies, including Sandy, in the same manner.

“But this is different. This is something no one in New York has ever had to deal with.

“There is no need for panic, but there is need for concern and vigilance.

Be fully assured, we will protect your safety at all costs.”

Arc Explosion Hurts 3 Transit Workers; 1 Taken To Burn Unit

On October 30, 2014 Power Distribution Maintainer Wilbert Cummings suffered serious burns to his right hand, face and legs in a third rail explosion. It was during a Fast Track Operation near Union Square. The two other transit workers had less serious burns.

Local 100 President John Samuelsen, MOW Vice President Tony Utano and other union officers visited Brother Cummings at the Cornell Medical Center Burn Unit on East 68th Street.

Today, Brother Cummings is still making his recovery. He has the full support of the Union with all appropriate benefits to him.

New Yorkers who suffer these type of injuries are fortunate to have a state-of-the-art Burn Center at the New York-Presbyterian Hospital/Weill Cornell Medical Center on East 68th Street.

The Division of Burn, Critical Care and Trauma Surgery provides a vital service to the City, and offers critically-ill patients a unique expertise and compassionate care from highly skilled surgeons who are at the top of their field.

For three decades, the nationally acclaimed Burn Center has been setting the standard for excellence in burn care. With an average of more than 1,000 inpatients and 4,000 outpatients per year is known not only for providing the highest level of medical care, but also has earned a reputation as one of the most compassionate centers in the world. Since its founding in 1976, the Burn Center has had a close and unique relationship with the New York City Fire Department and works closely with the New York Firefighters Burn Center Foundation, which has continuously supported the development of the center's program, to educate the public on fire hazards



and prevention. In addition the unit established an extensive community outreach program.

The Burn Center team is comprised of more than 180 staff members from multiple disciplines, many of whom have decades of service to the Center. These include physicians, nurses, physical and occupational therapists, social workers, nutritionists, psychiatrists, chaplains, aides and volunteers who are well-equipped to handle the physical and emotional challenges of caring for victims of burn injury, survivors and their loved ones.

The trauma and critical care surgeons in the Division of Burn, Critical Care and Trauma must be prepared every day to deal with a wide range of emergency situations, such as a call to the Emergency Department to evaluate a victim of a motor vehicle collision or a construction worker who has fallen from a scaffold; a call to the operat-

ing room for emergency surgery on a patient with a perforated appendix; or to manage patients or to perform a tracheostomy in the Surgical Intensive Care Unit.

As a Level I Trauma Center, the New York-Presbyterian/Weill Cornell center is the busiest in New York City, with the full range of resources necessary to care for the most severely injured and critically ill patients. Often, these patients require the expertise of our trauma and critical care surgeons who are specially trained to address multiple organ system injuries and high-risk surgical cases. In addition, our division is ready to accept critically ill patients who are referred to us from other hospitals.

It is very important to our members and union that a medical facility like this is available. As President Samuelsen said: "We take precautions, we take many safety and health precautions, but industrial accidents will occur when you're dealing with this environment of iron and steel; and adjacent train traffic. The 3rd rail is incredibly dangerous when it's live."

Firefighters Skin Bank
Established nearly 30 years ago, the New York Firefighters Skin Bank is the only comprehensive skin bank in New York State, providing allograft skin grafts to patients throughout the region. Allograft skin grafts enable burn victims to fight infection, maintain their fluids and body heat, and control pain.



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Earl Phillips

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Latonya Crisp-Sauray

Recording Secretary

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Safety & Health Department Officers

Tom Carrano

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Dr. Frank Goldsmith

Director, Occupational Health

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Keith Cummings, Harold Boro, Tommy McNally, Tom McGlynn,
Dennis Jones, Steve St. Hill,
Vanessa Jones,
Lawrence Rafolovich

TWU Hotline: 1-888-302-3727; Workers' Comp: 212-873-6000 Ext. 2133

Diesels Increase Risks to Workers, Community, Students

Mt. Sinai School of medicine in cooperation with TWU Local 100 finished conducting a limited number of field tests on school bus operators in West Chester County. The results of these tests are described (below) by the authors of the study which included the industrial hygienists who conducted the tests, Alice Freund and Norman Zuckerman.

The following report was given at the quarterly meeting of the Mt. Sinai advisory Committee, of which TWU Local 100 is an active participant.

More testing is clearly needed.

Occupational Exposure to Diesel Exhaust in the New York Metropolitan Area

Diesel exhaust, a product of diesel fuel combustion in engines, has been associated with adverse health effects on the respiratory and cardiovascular systems, in addition to lung cancer. Major sources of diesel exhaust include diesel-powered cars, buses, trucks, generators, industrial equipment, among others. Our study aimed to characterize occupational exposure to diesel in professional drivers who work in a large metropolitan area. In this study, black carbon (BC) – a major constituent of diesel exhaust – was measured using a microaethalometer (microAeth®), a real-time optical device that measures BC concentration in the air. Four unionized school and paratransit drivers from the New York metropolitan area wore the microAeth® for 24 hours in fall 2014, capturing both occupational and non-occupational exposure, while also documenting their work activities throughout the day. In addition, the drivers wore a global positioning system (GPS) to capture their location throughout the study period to learn more about the spatial and temporal patterns of their exposure to BC. Using the microAeth® software, we were able to visualize the exposure levels for each of the 24 hour periods. Preliminary data indicate that the drivers are exposed to higher levels of BC during their occupational time compared to their non-occupational

Occupational and environmental exposure to diesel exhaust in urban areas

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Demetrios M. Papazaharias
Leon Hsu
Alice Freund
Norman Zuckerman
Roberto G. Lucchini

December 11, 2014



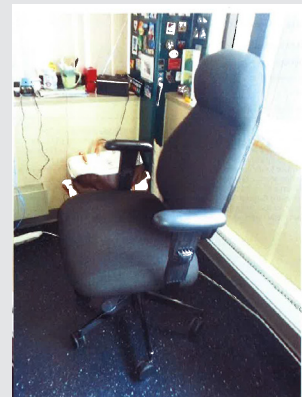
time, with peaks related to certain operations. Further analysis is needed to establish the contribution of factors, such as traffic and occupational activity. Since the microAeth® is able to clearly detect exposure differences between occupational and non-occupational time, we will use the methodology in this study to characterize the exposure to diesel in other worker populations. In future research, we aim to examine the health outcomes of diesel exposure in this population.

Public Health Leaders Affirm Transit Workers Health Rights

The 50,000-member National Conference of the American Public Health Association passed two resolutions increasing the health rights of transit workers.

Resolution #20147 - Diesel Exhaust and Human Health: In this resolution APHA encourages the federal government to establish strong worker regulations against exposure to diesel fumes and, to raise public awareness on the human health dangers of diesel exhaust exposure going beyond the typical means of communication and organize awareness. Resolution LB-14-01 - Strengthening Ebola Response and Protection: This resolution urges the inclusion of all transport workers in federal Ebola regulations; and urges policymakers to invest in worker preparedness and protective equipment.”

Does the Supervisor's chair look like this. . .



. . . and your's like this?



Call the Safety Department and we'll take action!

Union Pushing Clarification of Vision Zero Law

For the second time in two months, a veteran Bus Operator was arrested by Highway Patrol after accidents involving pedestrians, as a result of the Vision Zero law.

The Vision Zero law includes language exempting City and State employees from arrest unless negligence or criminal conduct is involved. But the Police are ignoring that language. The Union is seeking language to clarify the intent of the law.

In the meantime the Union has mounted a public and membership outreach on the crisis.

President John Samuelson immediately issued the following statement within hours of the most recent arrest.

“Once again, Transit Workers are the targets of a problem we did not create. Justice has been turned on its head. Mile-for-mile, Bus Operators are the safest drivers on the road, but now we are being portrayed as a menace ON the roads of the City. Nothing could be further from the truth. However, this is a very serious threat to our union, and we must respond accordingly.

“There is an ongoing misinterpretation and misapplication by the Highway Police of the Vision Zero law. This law was meant to target deliberately reckless drivers on the streets of NYC. When the City Council passed this law, it was not intended to go after Bus Operators. Indeed, an exemption was built into the law for those “engaged in work on behalf of the City, the state of New York....” No one is above the law, including Bus Operators. But it is clear that the spirit of the Vision Zero law passed by the City Council did not envision the arrest of Bus Operators involved in accidents. We do not operate recklessly.



Above, officers and members ready to hit the streets to alert Bus Operators to the “new reality” of Vision Zero. Right, President Samuelson and Secy Treas. Earl Phillips make the union’s point on Bus Op arrests to ABC 7.



“Our Operators are professionals who prevent accidents each and every day. To treat Bus Operators as criminals is an absolute outrage, and a complete miscarriage of justice. It is already bad enough that Bus Operators have to deal with the heavy

hand of the Transit Authority, relentless traffic, equipment with built in blind spots, pressurized schedules, two million passengers carried a day, and unregulated left turns. Now we are the targets of a well-intentioned law gone wrong.”

Fear of Arrest Adds New Tension to Bus Op’s Job

Dr. Howard Rombom, CEO & Clinical Director, of Behavioral Medicine Associates, has treated many transit workers in the aftermath of accidents. He sees the potential arrest of Bus Operators following accidents a dangerous new mix to an already tense job.



The arrest of a bus operator after an incident in which a pedestrian was struck by a bus has instilled a new sense of fear and anxiety into the job. Bus operators will now focus on the possibility that they can be arrested for an “accident.” The presumption of innocence has been eliminated; immediate arrest without a careful review and investigation will cause bus operators and other transit workers to possibly be over-cautious,

focus more on doing no harm than on negotiating the streets of New York. This added fear and tension is not likely to improve safety; in fact, it may decrease effectiveness if drivers are so worried about the consequence of an “accident” that might result in an arrest. By depicting accidents as criminal events, bus operators, and other transit employees have been put on notice they can be arrested and jailed for doing their jobs. Although unintentional, it has increased the stress level of our transit workers.

This recent arrest can only exacerbate the situation in the streets; it puts needless pressure on transit workers. We are advising all transit workers to continue taking care of the public; continue performing their jobs and focus on enabling the New York City public to move about the city safely. Accidents will happen; adding the fear of arrest to an already tense job will only create more problems.