

The Muni Health and Safety Project

A 26 Year Research Collaboration with the
Transport Workers Union Local 250A and the San
Francisco Municipal Railway

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Health Conference”

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This presentation is dedicated to
Ray Antonio, TWU Local 250A
and the Muni transit operators -
patient mentors and valued
colleagues.

The occupation of a transit operator in an urban mass transit system is a classic example of a **high demand, low latitude** occupation.

Constantly Conflicting Demands:

- Public safety
- Constant vigilance
- Traffic
- Adherence to schedule
- Productivity
- Passenger needs and satisfaction

Public Safety is paramount.

Biennial CDL Medical Exams

Public safety is the reason for the federally mandated biennial medical exams required for maintenance of a commercial drivers license.

Biennial CDL Medical Exams (cont.)

The medical standards and exams:

1. Result in a super healthy worker effect
2. Ignore the impact of work on operator health and safety

Biennial CDL Medical Exams (cont.)

Several million CDL exams are done annually in
the U.S. -

the Muni Health and Safety Project is the only
program in the U.S. that utilizes these required
exams for surveillance of occupational health and
safety for commercial drivers.

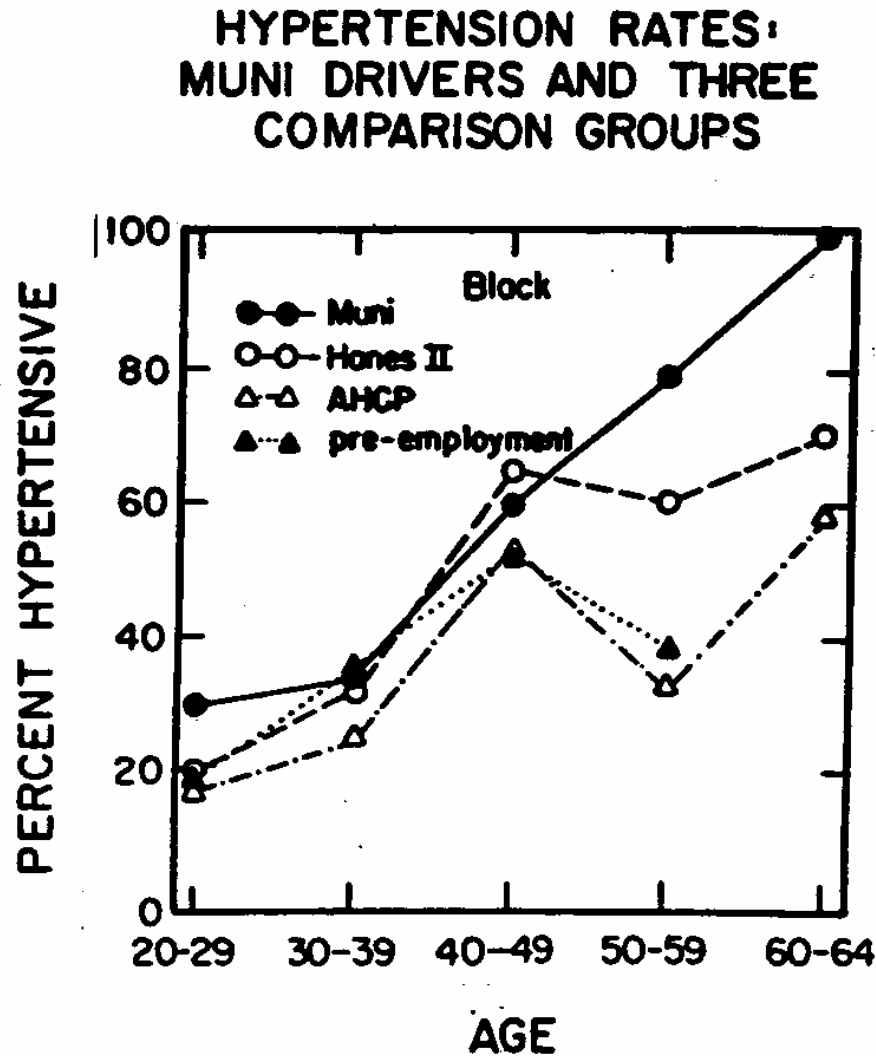
The Muni Health and Safety Project

- 26 years of multidisciplinary collaboration
- Researchers from San Francisco General Hospital, UC San Francisco, and UC Berkeley
- TWU Local 250A
- San Francisco Municipal Railway

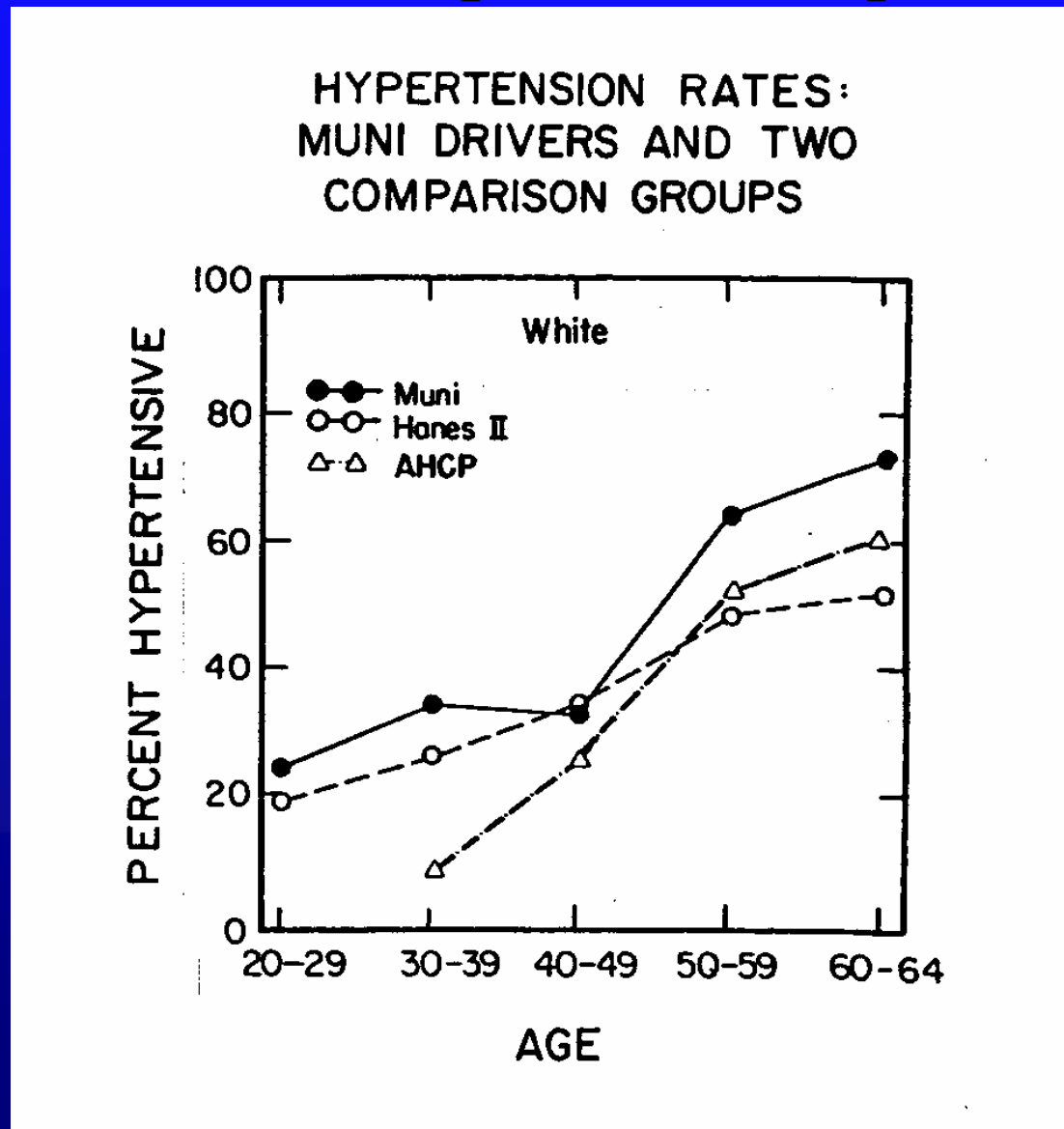
Areas of Study Include:

- Stress and hypertension epidemiological studies
- Objective measures of stress in the work environment
- Musculo-skeletal injuries and impact on workers compensation
- Maladaptive coping mechanisms - off duty use of alcohol
- Impact of work on family life

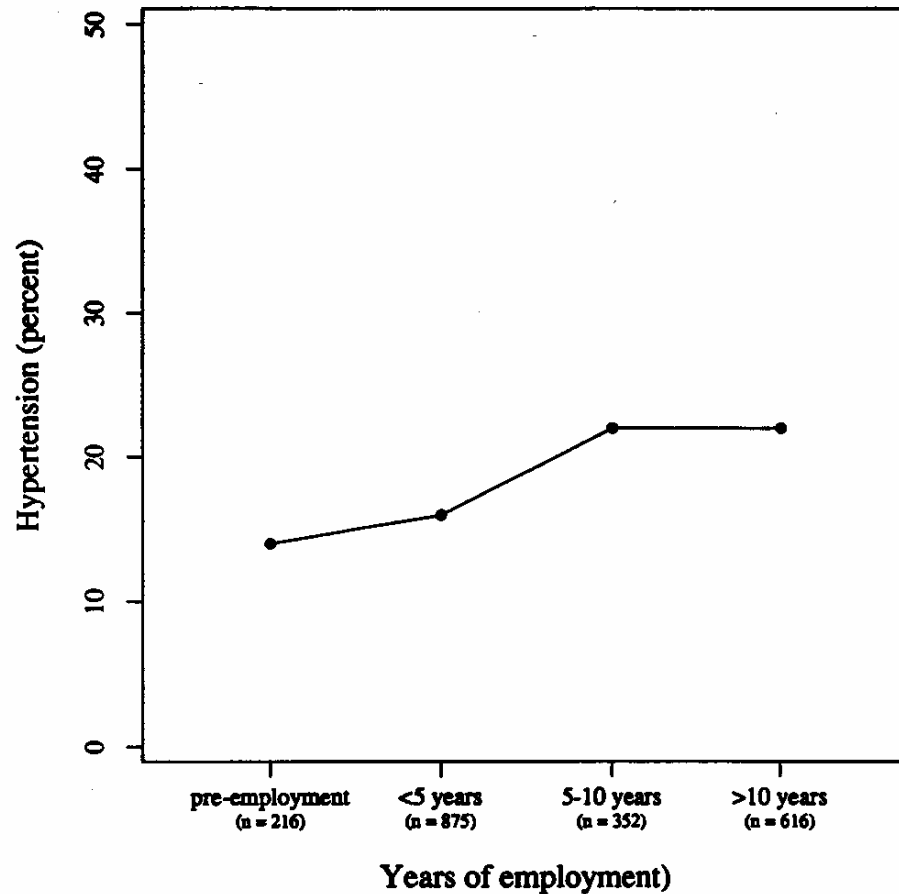
Hypertension Rates Among African-American MUNI Drivers and Three Comparison Groups



Hypertension Rates Among White MUNI Drivers and Two Comparison Groups

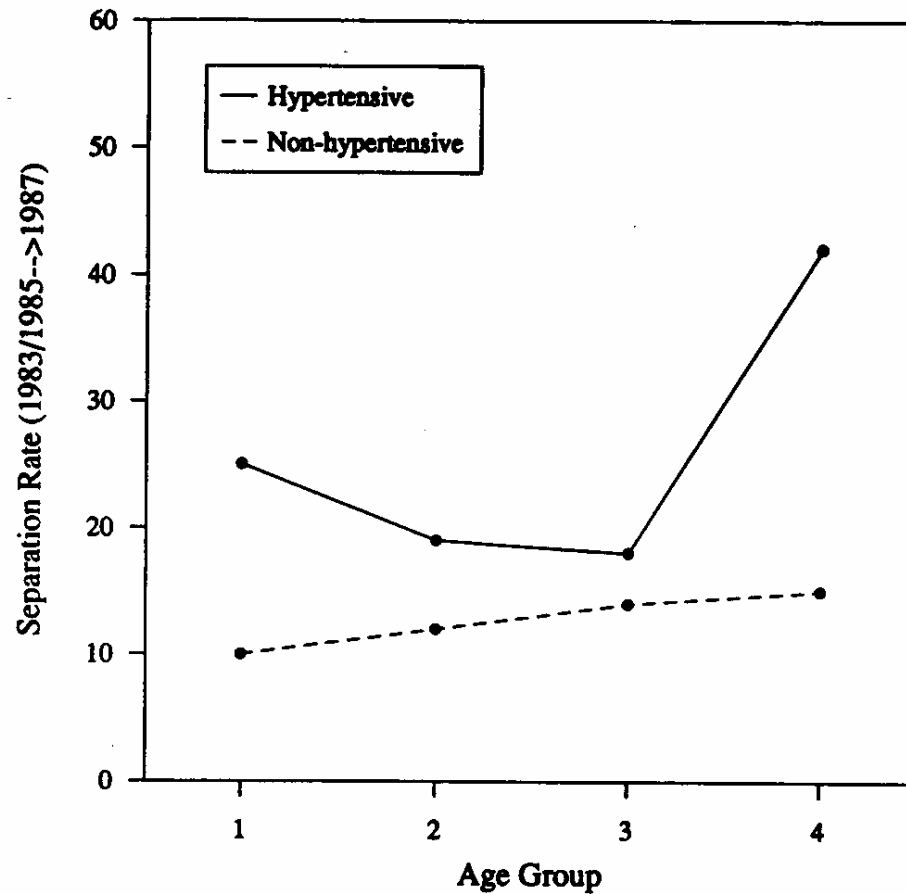


Hypertension by Years of Employment



Hypertension (DBP>95, SBP>160, meds)
by years of employment.

Separation Rate by Age Group

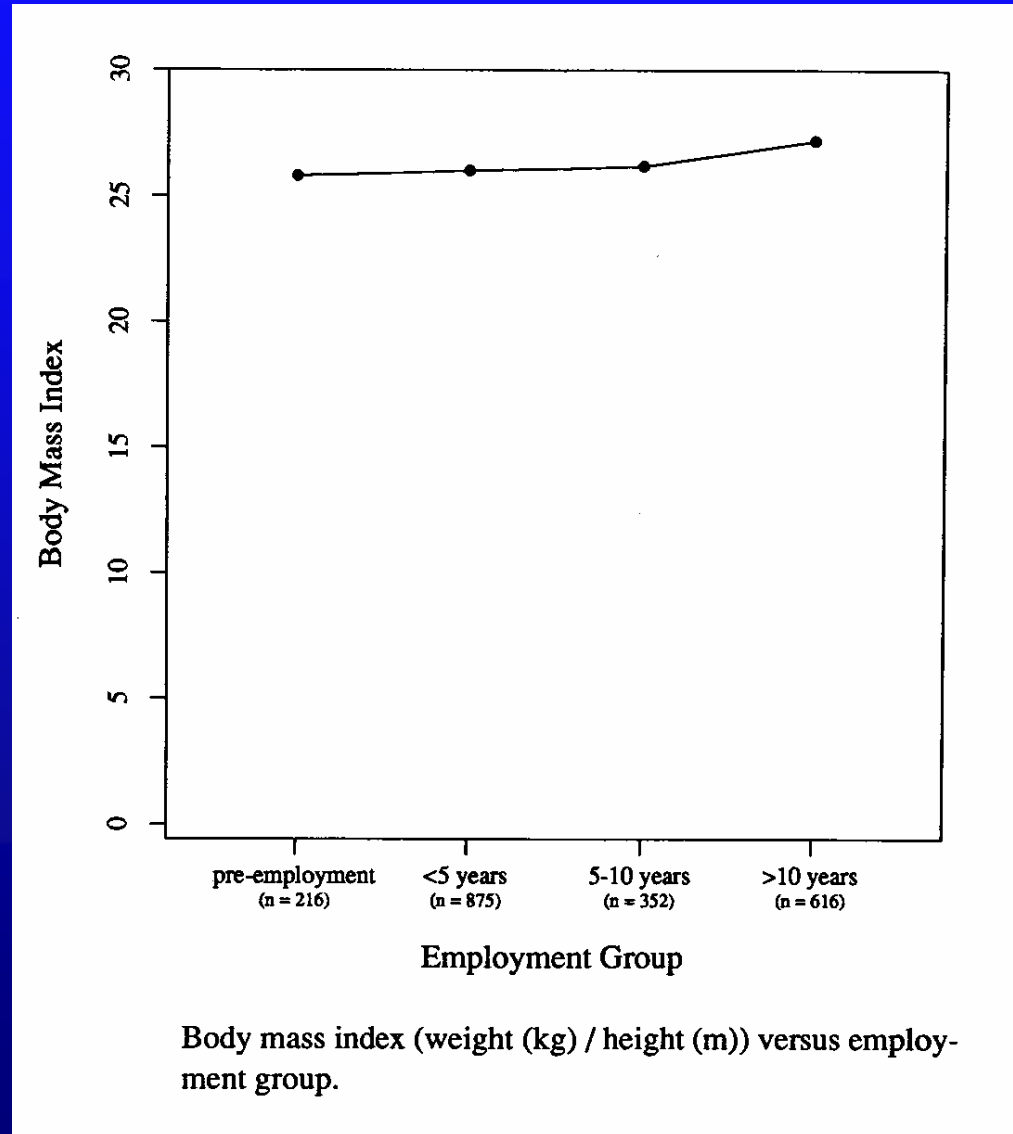


Separation rate (1983/1985-->1987) by age group for hypertensive and non-hypertensive groups.

These results are consistent with the extensive world literature demonstrating that urban mass transit operators are at very high risk for cardiovascular disease. E.g. Danish urban bus drivers have:

1. The highest rates for overall hospital admissions
2. The highest rates of hospital admissions for cardiovascular disease

Body Mass Index by Employment Group



Cigarette Smoking by Employment Group

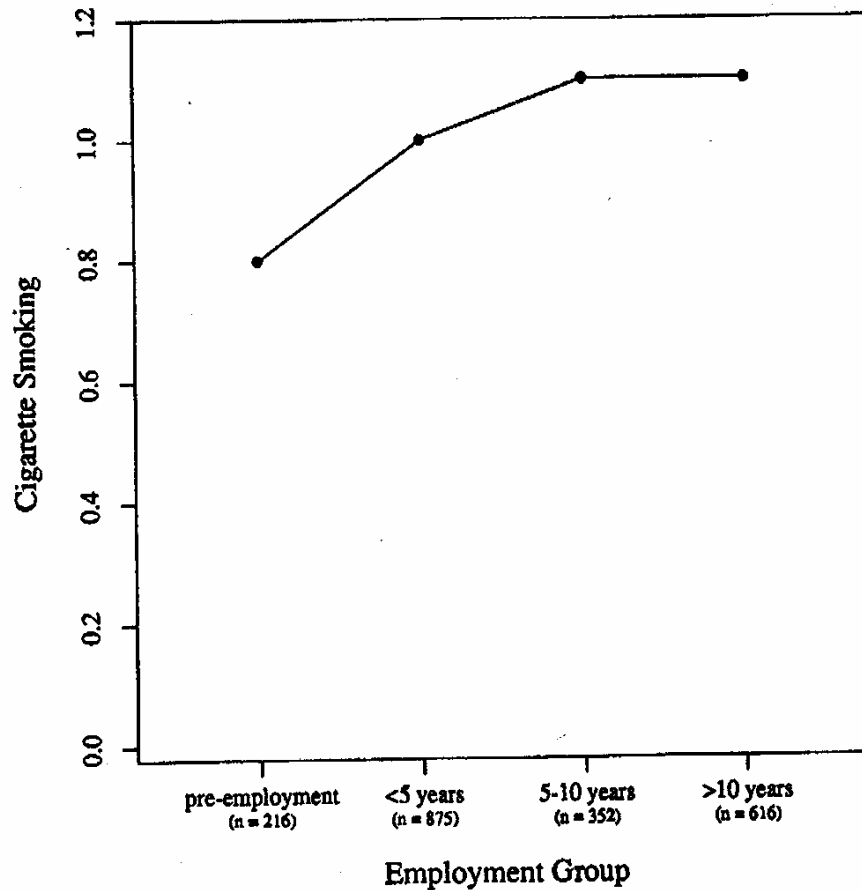


Figure 2. Cigarette smoking (current smoking packs/day) versus employment group.

Alcohol Consumption by Employment Group



Alcohol (drinks/weeks) by employment group.

Impact of Work on These Behaviors

- Unwinding
- Maladaptive coping mechanism

Impact of Work on Family Life

Bertil Gardell would talk about the "price the worker pays to work."

To this important concept, it should be added "the price the family pays for a worker to work."

Despite extensive literature demonstrating the impact of work on cardiovascular disease and fatigue in commercial drivers, recent initiatives of the DOT in regard to hypertension and fatigue focus solely on individual behavior.

Impact of the Muni Health and Safety Project

1. Validated both worker and management's perceptions about stress and cardiovascular disease
2. The Working Committee - a labor, management, researcher committee set up to facilitate the research project became a means of thinking about interventions
3. Union contract language
4. Cable Car and Line 22
5. JLMB

National

1. Has been a model for other transit unions
2. Resolution 49
3. DOT hypertension regulations

International

1. Organized, with Bertil Gardell, the first international meetings of transit unions and researchers
2. Initiated an international network of scientists and transit unions - joint working group on health and safety in urban transport (comprising ITF affiliates' representatives and academic researchers)
3. Ongoing efforts with ITF on issues of health and safety



“The relationship between stress and health: a guide for organizers and shop stewards in the bus industry”

Stress is a trade union issue.



This information is produced by the joint working group on health and safety in urban transport (comprising ITF affiliates' representatives and academic researchers).

An Agenda for Action

1. Promote worker collaboration on broader basis
2. Influence DOT to mandate that data from the biennial medical exams be used as surveillance for health outcomes
3. Promote a paradigm shift on the part of the DOT from focusing solely on personal and lifestyle behavior to examining the impact of work on health outcomes
4. Guaranteed and adequate rest breaks
5. Shortening the hours worked without decreasing income
6. Creating a center for transportation worker health and safety
7. Promoting a transit first policy