
Electronic Monitoring in the Workplace: Supervision or Surveillance?

Produced by: Massachusetts Coalition on
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Introduction

This survey project was conducted by the Massachusetts Coalition on New Office Technology from 1987 to 1989. It was initiated to provide Massachusetts public policy makers and the general public with an empirical description of: a) how electronic monitoring is being used by Massachusetts companies, and b) how employees say electronic monitoring affects their productivity, job satisfaction, health, and individual rights.

What is Electronic Monitoring?

Electronic monitoring refers to the use of computerized or electronic systems to keep track of an employee's work performance and activities. There are three main forms of electronic monitoring which were considered in the survey:

COMPUTER MONITORING:

The computer counts the number of keystrokes, error rate, time it takes to complete each task, time in between each task, and time away from the machine. Supervisors receive printouts of statistics.

SERVICE OBSERVATION:

Supervisors listen in on phone conversations between an employee and a customer. New technology makes it possible to listen in without being detected.

TELEPHONE CALL ACCOUNTING:

Employers receive computer printouts of the time, length and destination of local and long distance phone numbers dialed from each extension in the system.

Other Terms Used in this Report

VDT: VDT stands for video display terminal. It is the basic computer terminal with a video screen and a keyboard. Other names commonly used to describe a VDT include CRT, Word Processor, PC, and tube. All are different names for the same piece of equipment.

HEADSET: Headsets are used at work by employees whose job requires constant phone use. Headsets are more comfortable than using a phone receiver and make it possible for employees to use both hands to write or key information while talking to a customer on the phone.

Methodology

The goals of the survey project are:

- 1) Identify the variety of industries and companies in Massachusetts where electronic monitoring is taking place.
- 2) Collect data on how monitoring is being used: What information is being collected? For what purpose?
- 3) Describe what monitored employees think about the practice. Do employees believe electronic monitoring is an effective tool for supervision?
- 4) Document any abuses of the practice which violate individual dignity and rights.

Note that the purpose of the survey project was not, as with some studies, to compare the experience of selected workers who are monitored to those who are not. The purpose was to go directly to monitored workers and ask them what it feels like to be monitored.

The survey project was executed in three stages: questionnaire design and pilot, questionnaire distribution, and analysis.

Stage 1: Questionnaire Design

The questionnaire was designed with input from over one dozen scientific and academic researchers. Once drafted, it was piloted with a group of heavily monitored workers. Improvements were then made before finalizing the text.

Stage 2: Distribution

The objective in the distribution stage was to cover every industry in which monitoring is known or thought to be used. Unions provided invaluable assistance distributing the survey to their members.

However, the majority of white collar workers are not unionized. Therefore survey questionnaires were also distributed through leafletting outside office buildings and subway stops and by mailing questionnaires to graduates of office skills programs throughout Massachusetts.

For a further description of the survey population sample, see the section in the report on who answered the survey.

Stage 3: Analysis

A computer-based statistical analysis was conducted to produce frequency distributions and cross tabulations. Every cross tabulation reported is statistically significant, using a chi-square test, at the .05 level.

All percentages have been rounded to whole numbers to simplify reporting.

Section I: Background Information

Section I describes the survey respondents:

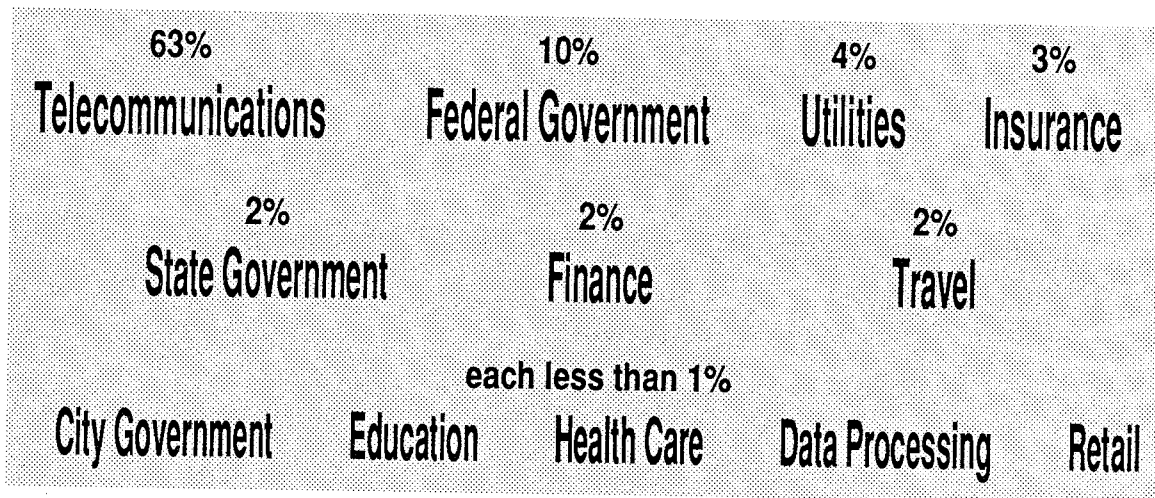
- ☐ Who answered the survey?
- ☐ What kinds of jobs are they in?
- ☐ To what extent are they electronically monitored at work?

Who Answered the Survey?

686 people filled out a survey questionnaire.

87% received the questionnaire through their union; 13% received it through random leafletting.

Respondents work in the following industries:*



Individuals from 49 different companies responded.

*The largest industry concentration among respondents is telecommunications. This is because: a) telephone companies make heavy use of electronic monitoring, and b) the industry is much more highly unionized than most other service sector industries. Unions provided invaluable help distributing survey questionnaires.

The emphasis on telecommunications means the survey results give us a picture of employee opinions in an industry where monitoring has been used for many years. Those insights are highly useful to employees facing monitoring for the first time and to public policy makers, researchers, managers and unions looking to understand the effects of monitoring on the workforce and production.

But we must emphasize that the phone companies are by no means alone in making heavy use of electronic monitoring. The practice is increasingly widespread in the industries listed above. And note that the survey results cover 49 companies.

The National Institute for Occupational Safety and Health estimates that at least two-thirds of VDT users are electronically monitored. Furthermore, more and more jobs—from social workers to truck drivers, cashiers to stock brokers—will be subject to electronic monitoring in the near future.

To What Extent Are They Electronically Monitored?

There are three forms of electronic monitoring which this survey covered...

Computer Monitoring:

The computer counts the number of keystrokes, error rate, time it takes to complete each task, time in between each task, and time away from the machine. Supervisors receive printouts of statistics.

Service Observation:

Supervisors listen in on phone conversations between an employee and a customer. New technology makes it possible to listen in without being detected.

Telephone Call Accounting:

Employers receive computer printouts of the time, length and destination of local and long distance phone numbers dialed from each extension in the system.

85% of respondents are computer monitored.

81% are monitored through service observation.

18% are monitored through telephone call accounting.

69% are subject to both computer monitoring and service observation.

Generally, respondents in jobs which require almost constant use of a VDT or headsets are most likely to be electronically monitored.

Section II: How Electronic Monitoring is Used in Supervision

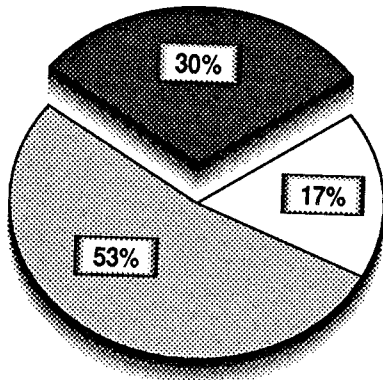
One goal of the survey project is to document how monitoring is used in supervision. Respondents were asked to describe the following:

- ☐ What information about your work is collected through electronic monitoring?
- ☐ How is that information used to supervise and evaluate your work?

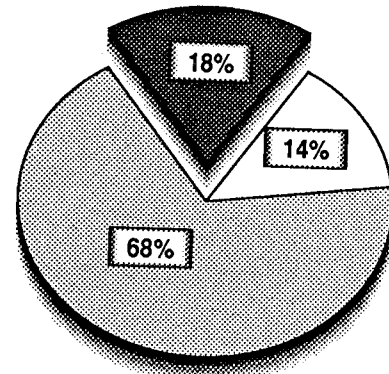
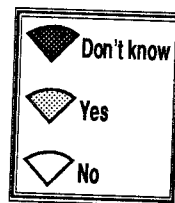
Monitoring is being used for supervision. But survey data shows substantial variation in how much employees know about what information is collected and how it is used. For further discussion of the Right to Know, see Section IV.

What Information is Collected Through Electronic Monitoring?

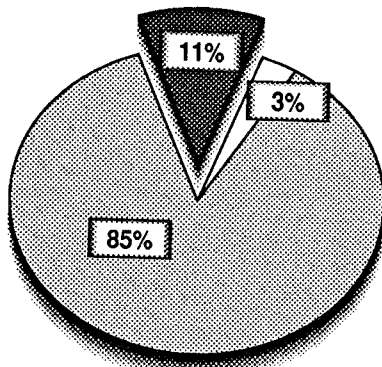
Number of keystrokes



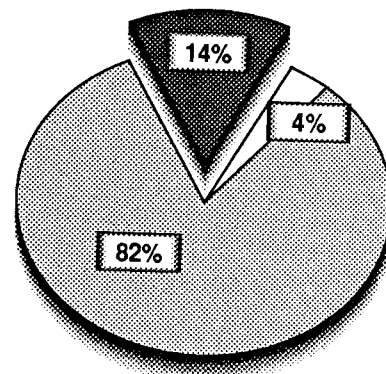
Number of errors



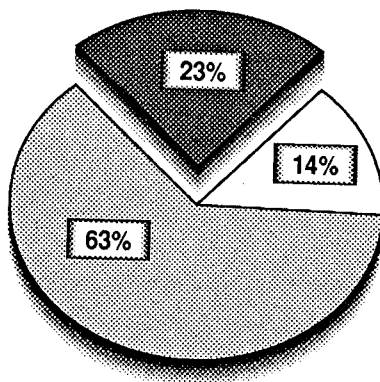
Number of tasks completed



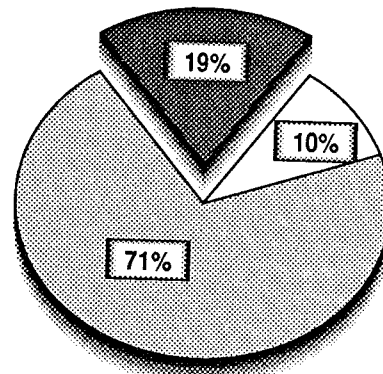
Time to complete each task



Time in between each task



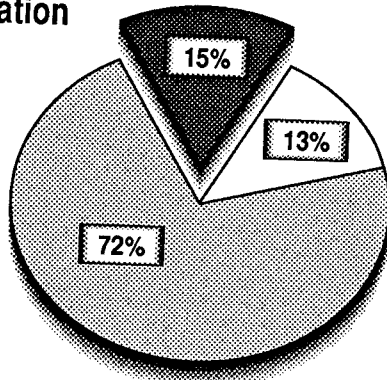
Time away from the workstation



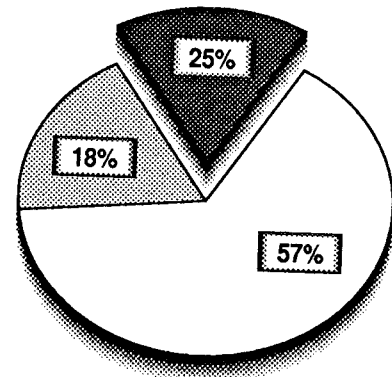
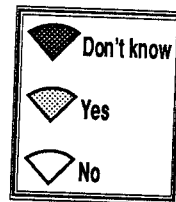
The information described above is collected through one of the three forms of electronic monitoring: **computer monitoring**.

How is the Information Collected Through Monitoring Used?

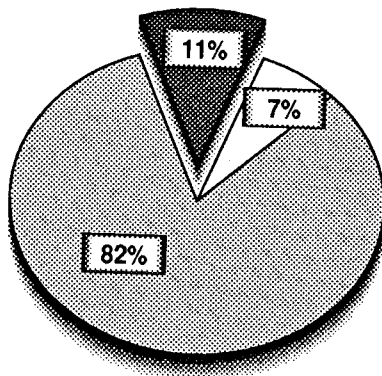
As the main basis of performance evaluation



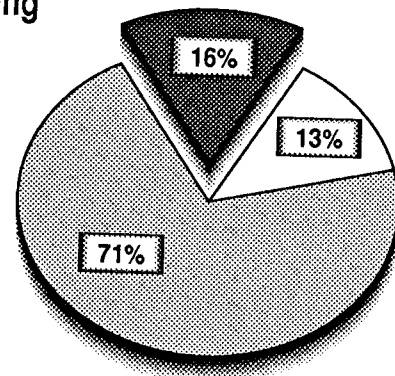
To determine promotions or raises



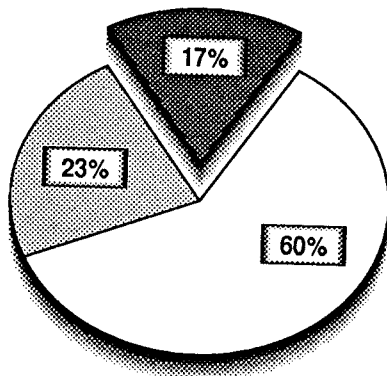
To give employees direct feedback



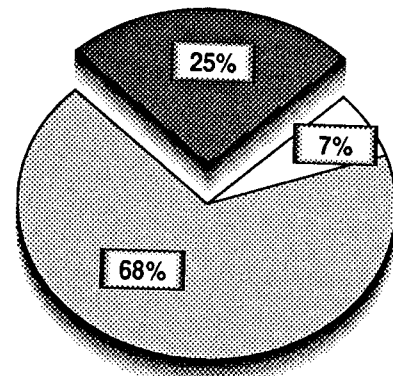
To determine who needs additional training



Statistics posted publicly



As a basis for disciplinary action



Section III: Does Monitoring Provide Effective Supervision?

The aim of the survey project is not only to describe how monitoring is used in supervision, but to determine whether it is an effective tool for supervision. This section examines the following questions:

- ☐ Does electronic monitoring help supervisors do a better job?
- ☐ Does monitoring improve the quality of service provided?
- ☐ Does monitoring improve employee satisfaction?
- ☐ Does monitoring fully and fairly measure work performance?
- ☐ Does monitoring improve productivity?

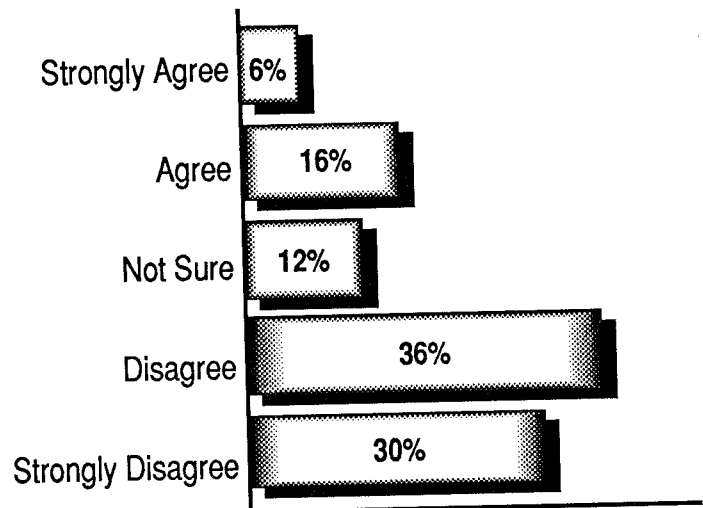
The data shows in every category that electronic monitoring is not an effective tool for supervision. It does not ensure high productivity, quality service or employee satisfaction. Nor is it an accurate measure of work performance.

Effective Supervision?

Here's a look at what employees have to say about whether monitoring helps or hurts supervision.

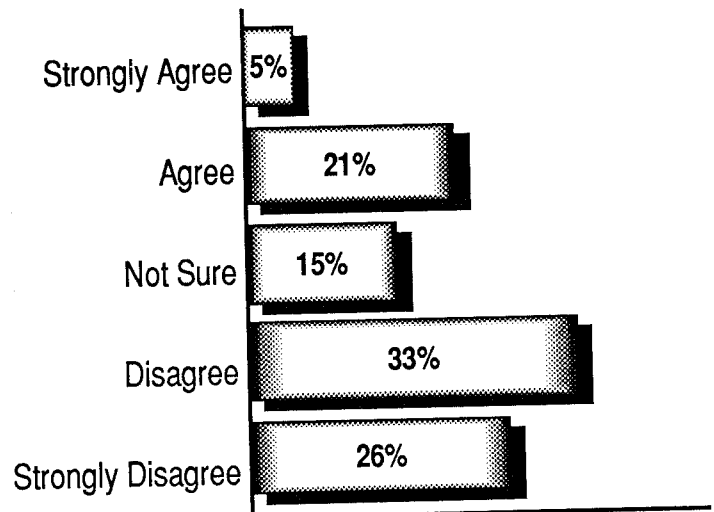
"Electronic monitoring helps me work more productively."

Two-thirds of respondents disagree with this statement.



"Electronic monitoring enables my supervisor to help me do a better job."

Almost 60% of respondents disagree.



When the data was examined for a relationship between improved productivity and the use of electronic monitoring as the *main basis* of performance evaluation, NO RELATIONSHIP was found.

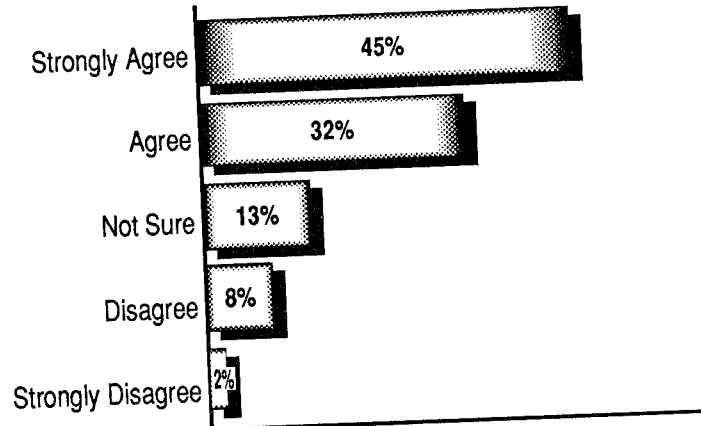
Employee Satisfaction

The impact of electronic monitoring on employee satisfaction is disastrous.

Electronic monitoring...

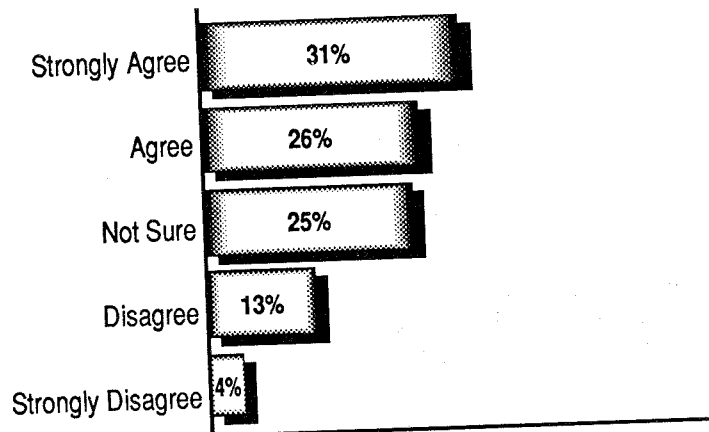
"Lowers morale"

Over three-fourths agree.



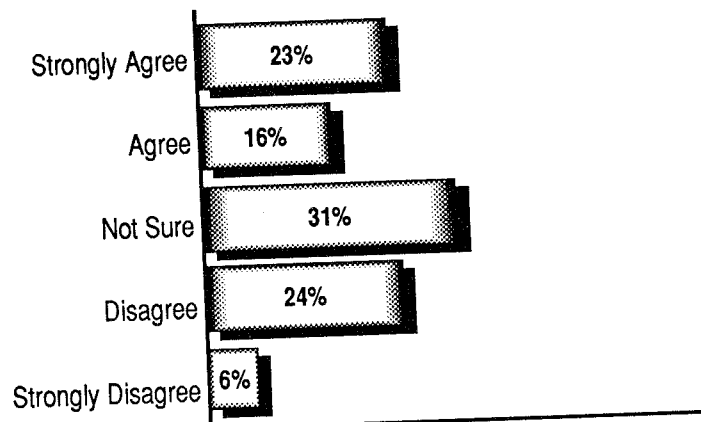
"Increases turnover"

Over half agree.



"Increases Absenteeism"

Almost 40% agree.



An Accurate Measure of Work Performance?

Respondents report that monitoring does not fully and fairly measure their work performance. Electronic monitoring does not “see” the human side of the job— the unexpected circumstances and normal ups and down during the work day. At the same time, employees also don’t believe monitoring is an objective measure of their work.

75% of respondents say monitoring does not allow for normal ups and downs in their work pace.

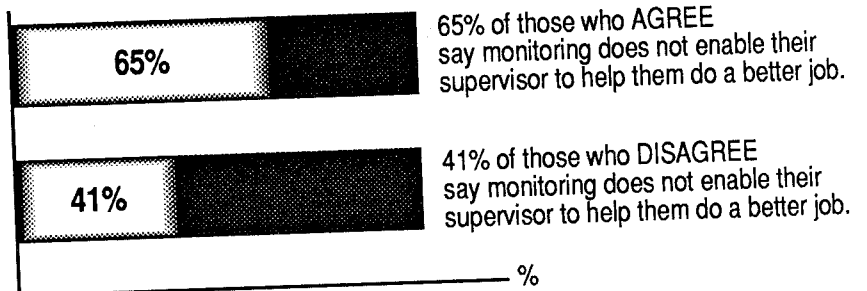
60% say production standards do not take unexpected problems into account.

57% say monitoring does not ensure their work performance will be evaluated objectively.

How does this impact on the effectiveness of monitoring as a tool for supervision?

Employees are nearly 60% more likely to say monitoring does not enable their supervisor to help them do a better job when they agree that...

“Production standards do not take unexpected problems into account.”



Section IV: Beyond Supervision... Surveillance

Electronic monitoring is an “information gathering” technology. It can be used to collect information relevant to an employee’s work performance. And it can be used to collect private information about individuals which may not be relevant to their work. In other words, it can be used as a tool for surveillance.

Are there abuses of electronic monitoring— practices where monitoring goes beyond supervision? Are individual employee rights being violated?

- ☐ The Right to Know
- ☐ The Right to Privacy
- ☐ The Right to Human Dignity
- ☐ The Right to Due Process

And how do the abuses impact supervision?

The Right to Know

When electronic monitoring is used for supervision, shouldn't employees be informed about what information is being collected and how that information is being used? Survey data on pages 9-11 show that employees are not fully informed.

One-quarter of respondents do not know if monitoring is being used to determine promotions or raises. And one-quarter do not know if monitoring is used as a basis for disciplinary action.

Results further show that employers have failed to provide sufficient notification of electronic monitoring.

Almost TWO-THIRDS of respondents WERE NOT INFORMED prior to being hired that an electronic monitoring system would be used at their job.

Of those who were not informed:

- ➡ One-half found out after 3 days.
- ➡ One-third did not know after 3 weeks.
- ➡ One-fourth did not know after one month.
- ➡ 10% still did not know after 4 months.

How did they first find out monitoring was being used?

- ➡ 47% were told by their supervisor
- ➡ 24% were told by co-workers
- ➡ 5% were told by their union
- ➡ 3% asked
- ➡ 21% found out from other sources: some figured it out on their own, others learned of the monitoring during training, and some learned about it only after the results of monitoring were announced or after being disciplined.

The Right to Human Dignity

Employee's worst fears about computer technology are coming true: they feel like an extension of the machine rather than that the computer is a tool which helps them do their job better.

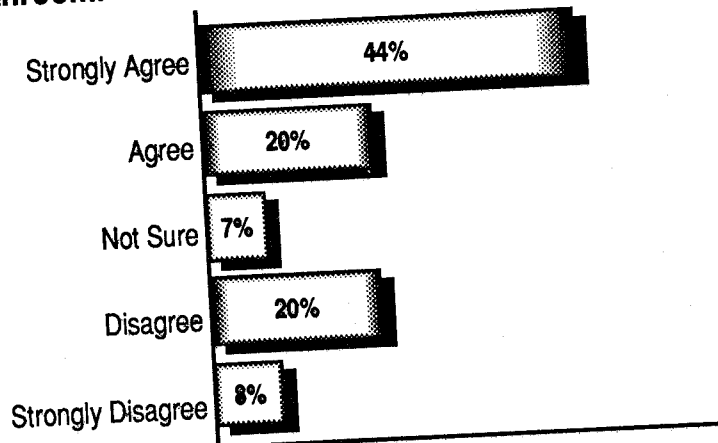
“As a hard working, responsible worker, I resent having my performance evaluated on this basis.”

“I try to do quality work but all they want is speed. The customer is being cheated.”

“I feel like Big Brother is watching me and I feel violated.”

Even personal dignity is being violated.

Almost two-thirds of respondents say, “Monitoring makes it hard to get up for a break, even to go to the bathroom.”



“If I did not have 20 years of service, I would quit! I once had to blow my nose and the supervisor saw the ‘make busy’ signal flashing and immediately came over to my position. This is worse than the sweatshops of the 1920s.”

“I am not a computer, but that’s what I feel like. I would like to handle my customers with dignity and also be helpful. But everything is speed. You lose points if you spend an extra second with customers. If you lose points, you are disciplined.”

Section V: Health

Finally, the survey examined job related health complaints among monitored workers.

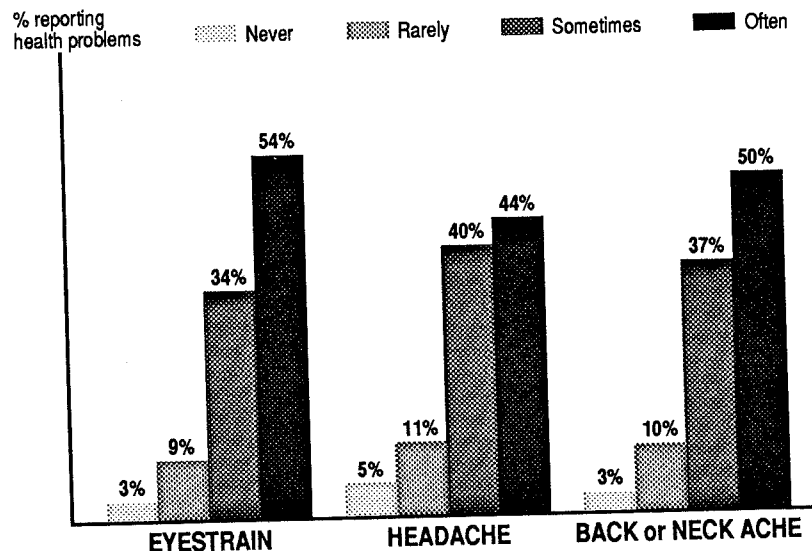
- ☐ Does electronic monitoring increase health problems?
- ☐ What aspects of monitoring are most associated with stress?
- ☐ How does stress affect productivity and employee satisfaction?

Monitored employees report high rates of job-related health problems, including stress. Stress increases when monitoring emphasizes speed, not quality; when monitoring does not allow normal ups and downs; and when employees feel spied on.

And stress was found to significantly reduce productivity and morale.

Common Office Health Problems

Respondents report high rates of the health problems which are most common among VDT users and office workers.



Respondents also report *alarmingly* high rates of tingling and numbness in their hands and fingers: 21% often experience tingling and numbness and 25% experience these symptoms sometimes.

These symptoms in the hands and fingers are the early warning signs of long term injury.*

Other health problems most commonly mentioned by respondents (written in on 10 or more questionnaires) are:

- ▲ Arm and leg cramps, including feet falling asleep
- ▲ Constant fatigue
- ▲ Stomach problems
- ▲ Dizziness
- ▲ Dry mouth and throat
- ▲ Anxiety, tension, frustration and irritability

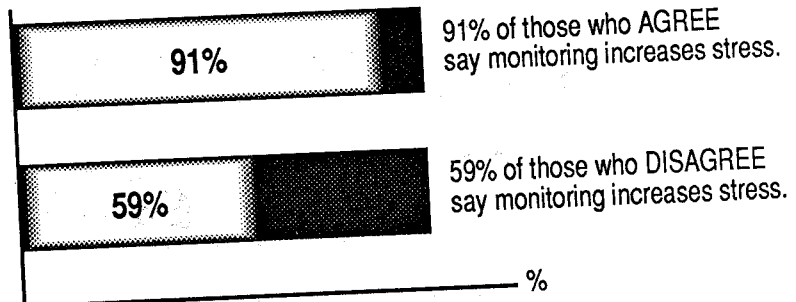
Many of these ailments, including mood changes, are symptoms of stress.

*These symptoms are generally less common among office workers, although reports are rising with widespread use of VDTs. They may develop into a debilitating injury known as carpal tunnel syndrome (CTS). CTS results from the "overuse" of your hands and fingers. If you are experiencing tingling, numbness or pain in your hands call 536-TECH for assistance.

What About Monitoring is Stressful?

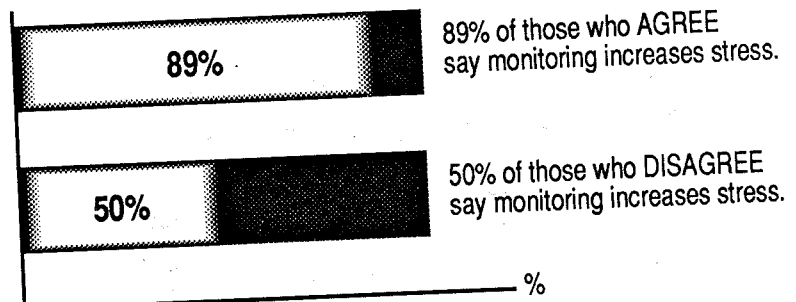
Employees are 54% more likely to say monitoring increases stress when they agree that ...

"I can't do a quality job because I have to work too fast."



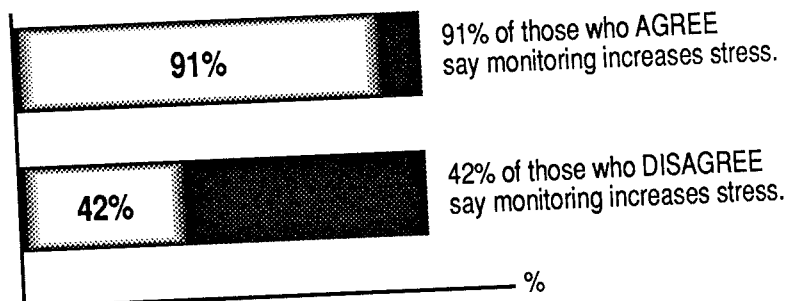
Employees are 78% more likely to say monitoring increases stress when they agree that ...

"Monitoring does not allow for normal ups and downs in my work pace."



Employees are more than twice as likely to say monitoring increases stress when they agree that ...

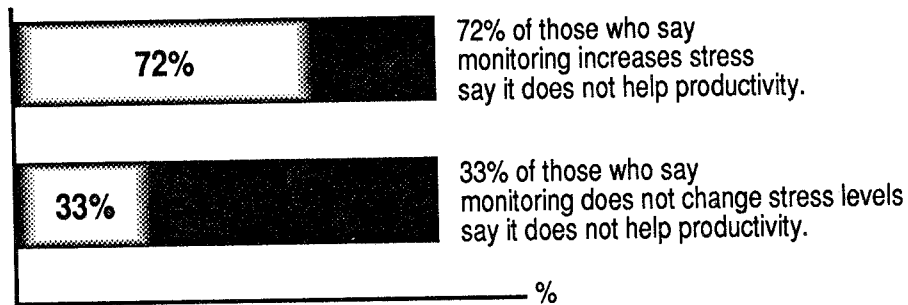
"Monitoring makes me feel spied on."



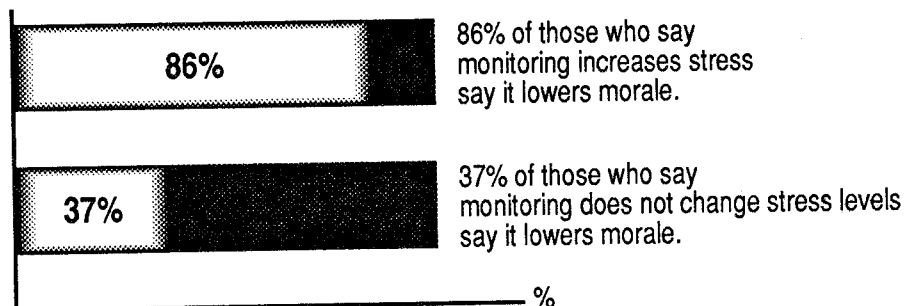
Does Stress Reduce Productivity and Employee Satisfaction?

When employees say monitoring increases stress...

They are twice as likely to report that monitoring does *not* help productivity.



And they are more than twice as likely to report that monitoring lowers morale.



Conclusion

Is Electronic Monitoring Being Used for Supervision or Surveillance?

Electronic monitoring is being used for **SUPERVISION**. Although employees report that it is not an effective tool for supervision.

Electronic monitoring is also being used for **SURVEILLANCE**. Documented abuses of monitoring violate individual employee rights.

Many uses of computer and other “information gathering” technologies potentially threaten individual rights, such as the right to privacy and the right to due process. The solution is *not* to slow down or reverse technological advances. The solution is to establish public policy guidelines for appropriate uses of new technology which protect basic civil and human rights.

Not only will employees’ rights be protected... supervision will improve as well.

Appendix A

Union and Organizational Members of CNOT

State mini {
 AFGE 1164
 AFGE 3428
 AFSCME District Council 93
 AFSCME 804
 AFSCME 1067
 AFSCME 1526
 APWU, Boston
 BGEA — Boston *for employees*
 CWA District 1
 CWA 13
 CWA 1051
 CWA 1302
 CWA 1366
 IBEW 455 } *Telephone Co.*
 IBEW 2222

IBEW 2313
 IBEW 2321
 IBEW 2324
 IBEW 2325
 IFPTE 149 — *engines.*
 OPEIU 6
 OPEIU 453 } *office & pet employees*
 SEIU 285 } *public sector*
 SEIU 509 } *+ health.*
 SEIU District 925
 TCU District 336 } *transit*
 TCU District 1089 } *Amtrak & Conrail.*
 UAW District 65
 UFCW 1459
 UWUA 387 } *Clerical, shops, and.*
 } *Retail.*
 } *utility workers*

Boston NOW
 Boston Women's Health Book Collective
 Cambridge Women's Commission
 Coalition of Labor Union Women
 Massachusetts NOW
 9to5
 Office Technology Education Project
 Reproductive Rights Network
 The Stone Center, Wellesley College
 Women for Economic Justice
 Women's Services Center, Pittsfield
 Working Women's Program of the Everywoman's
 Center, UMass, Amherst