

PROCESSED

NOISE IN THE UNDERGROUND



1. WHAT DOES DEAFNESS MEAN?



This is what happens when someone goes deaf. Sometimes a person cannot hear someone talking. Sometimes a person has to ask people to talk louder. Many workers go deaf because they work in noisy places.

When you go deaf you:

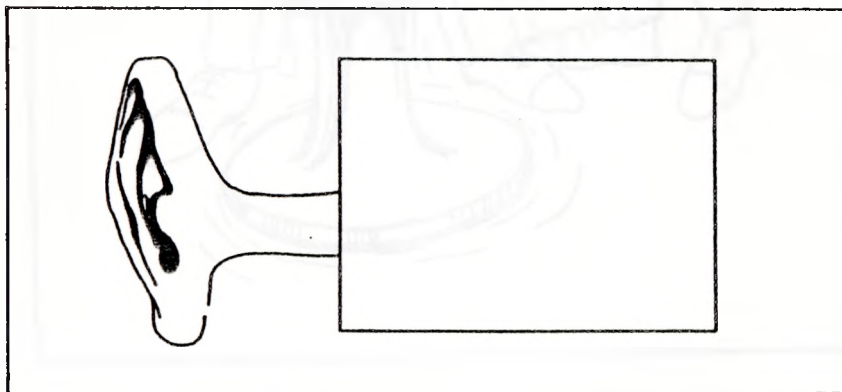
- Do not hear what people say so that friends, family and mine officials think that you are rude or stupid
- Cannot hear your children speaking
- Cannot hear birds sing or hear music on the radio
- Cannot hear what goes on at union meetings which makes it difficult to remain a member
- Shout at people because you cannot hear yourself clearly
- Hear ringing in your ears which is so loud that you cannot sleep properly

If you have any of these problems you may be going deaf. This booklet tells you how the noise in the mine can make you deaf. It can take a few years to go deaf. It does not happen to everyone. But it could happen to you.

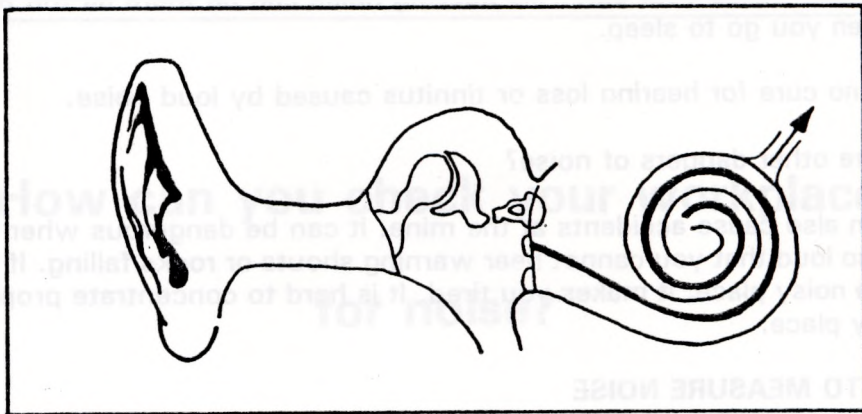
In this booklet you will find out how to check if your workplace is too noisy. You will also find out how to control noise. You will read about what your union is doing about noise on the mines.

2. HOW DOES NOISE AFFECT YOUR EARS?

Here is a picture of the ear.



The ear has different parts. The outer ear is the part that you can see.



The other parts of the ear are inside your head. When you hear too much noise, the parts of your ear inside your head get damaged. When this happens you go deaf. When you start going deaf you stop hearing high sounds like the noise of a whistle. You may not notice that you cannot hear as well as before. You will still hear people talking. But if you keep hearing too much noise, the inside parts of your ears are damaged even more. The parts get so badly damaged that you cannot hear anything.

Why is noise dangerous?

Too much noise damages your ear and makes you deaf. When this happens to you, the doctors say that you have a hearing loss.

*Temporary hearing loss

If you work in a noisy place, the noise can start damaging the inside parts of your ear. This means that for a few hours after you have stopped working, you will not hear properly. But after a few hours in a quiet place, you will hear properly again. This is called temporary hearing loss. Temporary hearing loss means that the damage to your ears will not last forever.

*Permanent hearing loss

But if you stay in a noisy place for a long time, your hearing will get worse. After some time you will go completely deaf. This is called permanent hearing loss. Your ears will not recover from permanent hearing loss, even if you never go into a noisy place again.

Hearing loss can cause an illness called tinnitus. This illness is a ringing or buzzing noise inside your ear. This buzzing noise can be there all the time, even when you go to sleep.

There is no cure for hearing loss or tinnitus caused by loud noise.

***What are other dangers of noise?**

Noise can also cause accidents at the mine. It can be dangerous when the noise is so loud that you cannot hear warning shouts or rocks falling. If you work in a noisy place, it makes you tired. It is hard to concentrate properly in a noisy place.

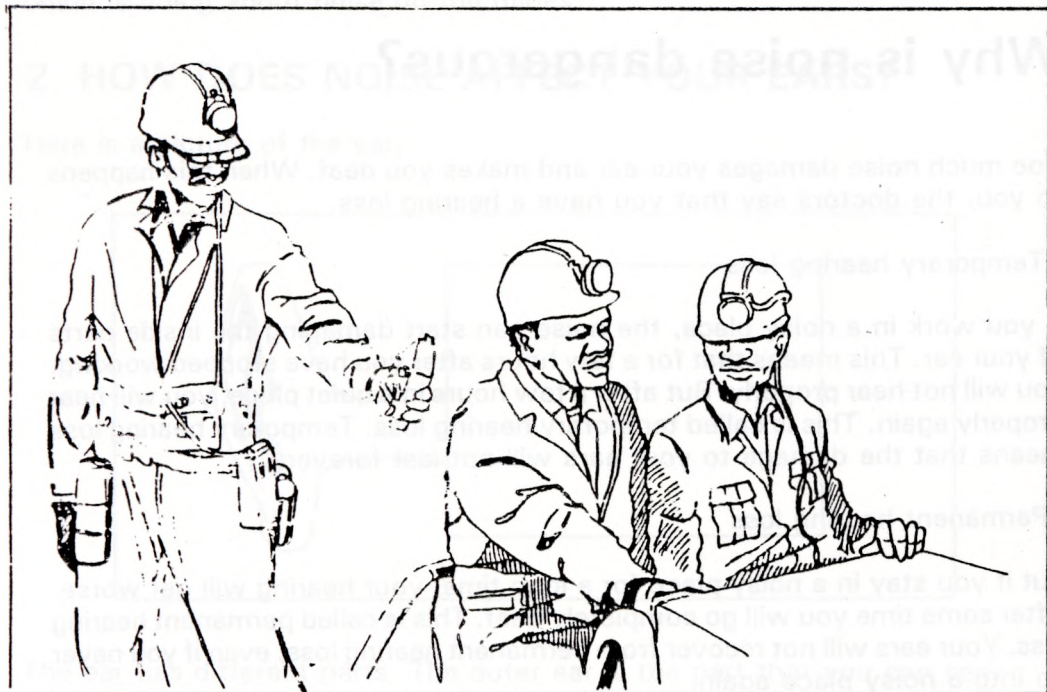
3. HOW TO MEASURE NOISE

You can measure noise to:

- *See if the workplace is too noisy.**
- *Identify which are the noisy machines.**

How do you measure noise?

There are instruments that can be used to measure noise. But you can also check if your workplace is too noisy.



How can you check your workplace for noise?

Answer these questions:

- Do you find it difficult to hear people talking to you when many people are talking at the same time.
- Are there times when the worker closest to you cannot hear you even when you shout?
- After your shift, do you have a ringing noise in your ears?
- Is it difficult to hear your friends after work?
- Do your friends or family say that your hearing is getting bad?
- Do you think that some of the workers who have been working at your workplace for a long time have bad hearing?

If you answer 'YES' to most of these questions then your workplace is too noisy. The noise at your workplace must then be measured with instruments. Contact your union office if you want to measure the noise in your workplace.

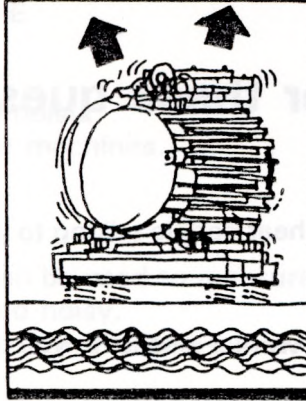
4. HOW TO CONTROL NOISE IN THE WORKPLACE

Some machines and drills make the mine very noisy. But there are ways to lower and control the noise. If the noise is lowered, your ears will be protected from damage.

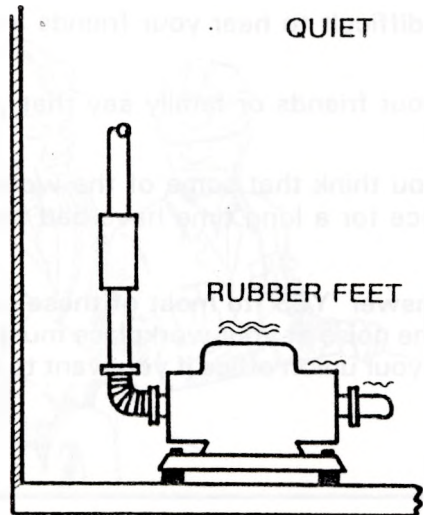
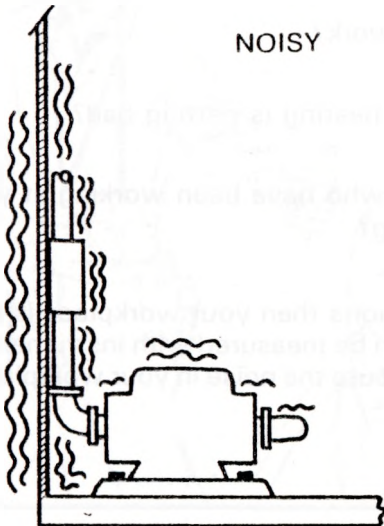
How to lower noise in the workplace?

Some machines are not greased enough. Some machines have loose parts. This makes them more noisy. Machines must be maintained properly so that they are less noisy.

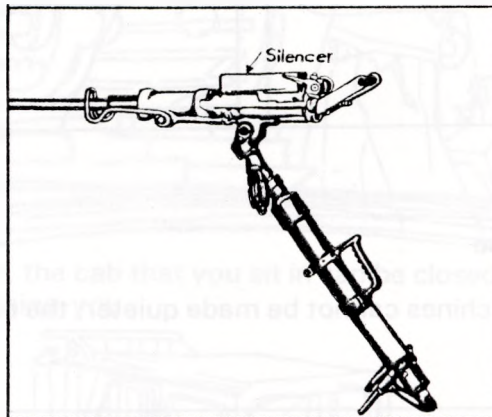
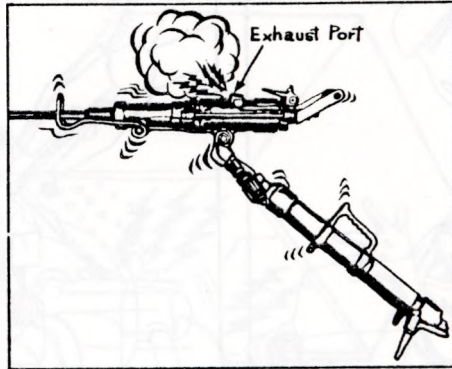
A machine that can shake around is noisy. A machine that is fastened to the



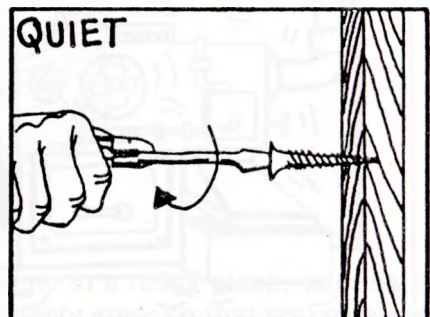
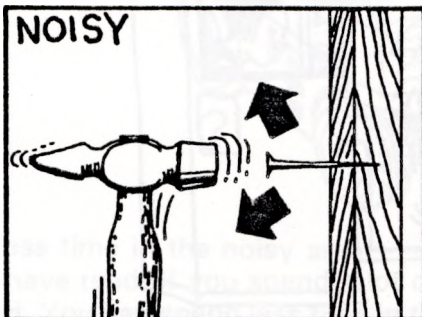
floor by a metal plate is also noisy. To lower the noise, the machines should be fastened to the floor properly so that they do not shake. And machines should also stand on rubber feet.

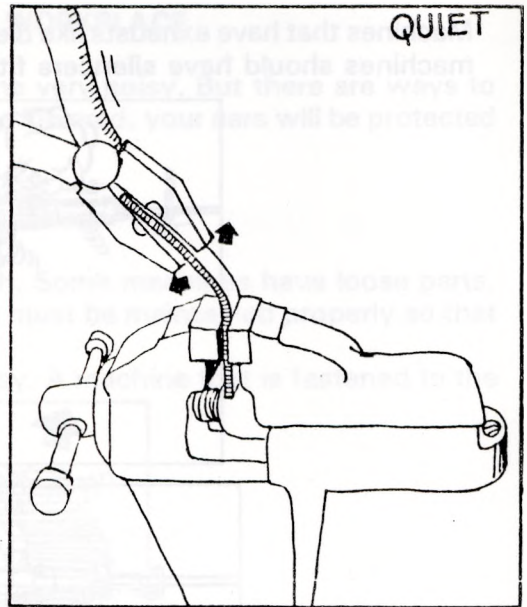
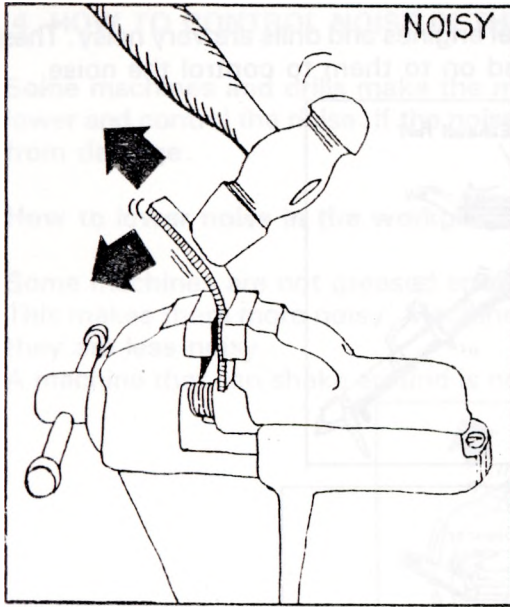


Machines that have exhausts like diesel engines and drills are very noisy. These machines should have silencers fitted on to them to control the noise.



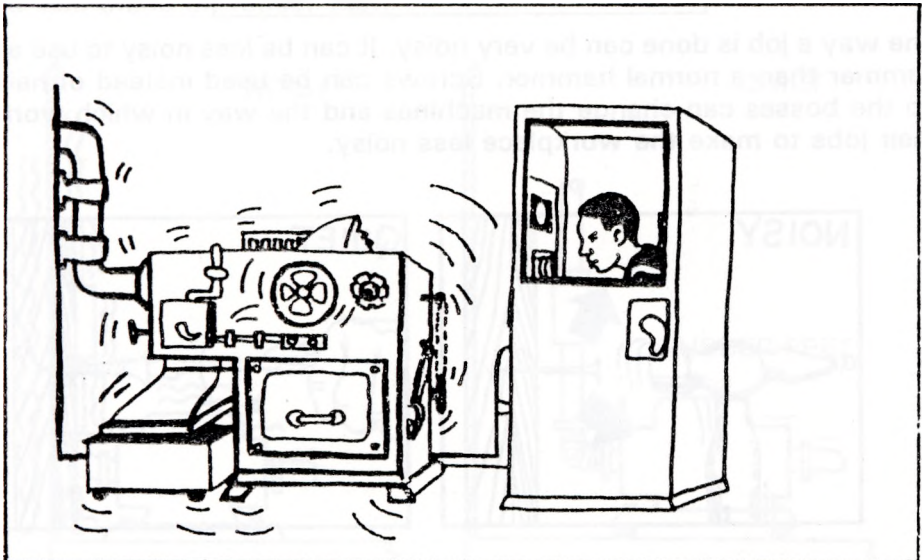
The way a job is done can be very noisy. It can be less noisy to use a rubber hammer than a normal hammer. Screws can be used instead of nails. So the bosses can change the machines and the way in which workers do their jobs to make the workplace less noisy.





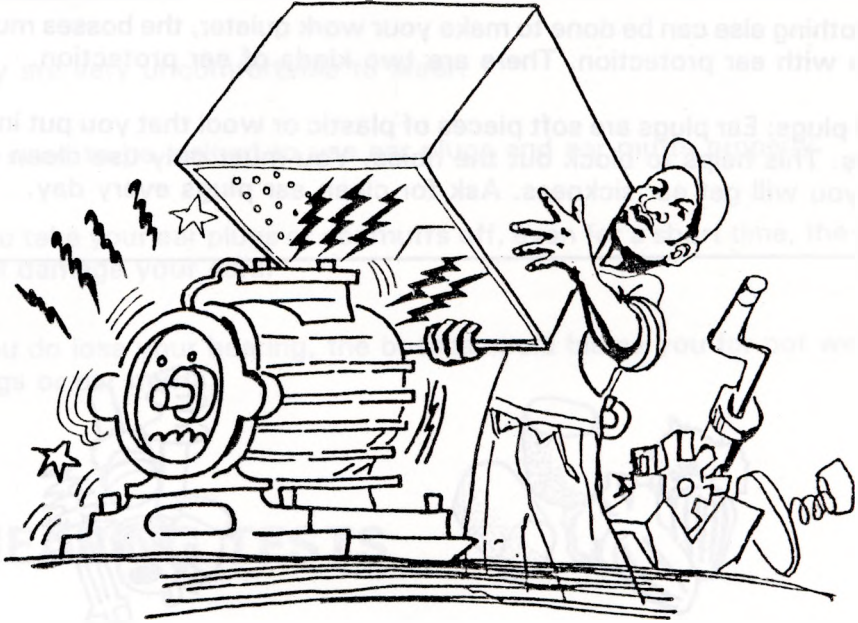
How to control noise

If the job and the machines cannot be made quieter, the noise can be stopped from reaching you.



* Some machines do not need operators. These machines can be moved to a room where there are no workers.

* Noisy machines can be put into a box. This stops the noise from getting to you.



* If you are a driver, the cab that you sit in can be closed. This stops the noise of the engine reaching you.



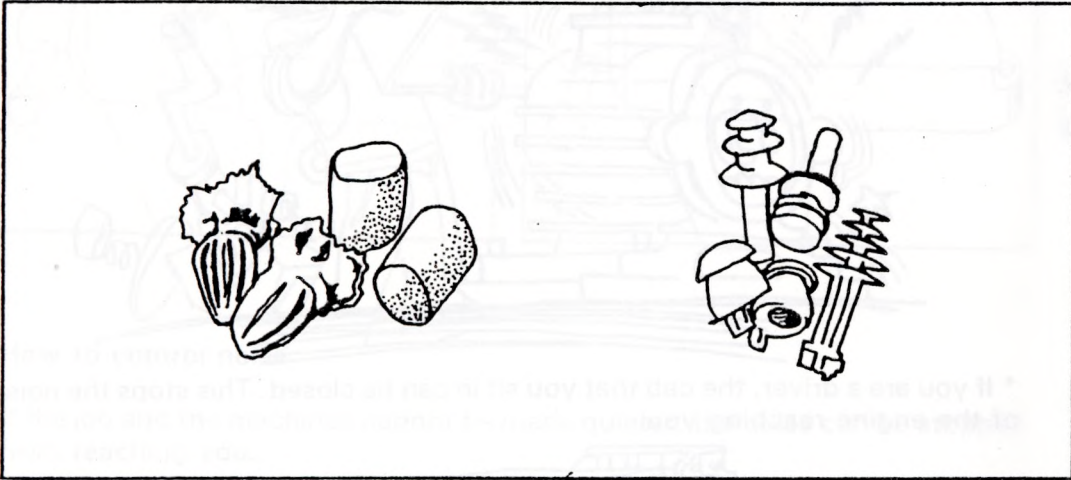
Spend less time in the noisy area

As you have read, if you spend a lot of time in a noisy place, your ears get damaged. You can spend less time in the noisy area, so that your ears are not completely damaged.

Protecting your ears.

If nothing else can be done to make your work quieter, the bosses must supply you with ear protection. There are two kinds of ear protection.

Ear plugs: Ear plugs are soft pieces of plastic or wool that you put inside your ears. This helps to block out the noise. You must only use clean ear plugs or you will get ear sickness. Ask for clean ear plugs every day.



Ear muffs: Ear muffs are placed over your ears to block out the noise. They give you more protection than ear plugs. But they are very hot to wear underground.



There are many problems with ear plugs and ear muffs.

- Ear plugs and ear muffs do not protect your ears from all the noise.
- They are very uncomfortable to wear.
- You need to be trained to use ear plugs and ear muffs properly.
- If you take your ear plugs or ear muffs off, even for a short time, the noise will still damage your ears.
- If you do lose your hearing, the bosses could blame you for not wearing ear plugs or ear muffs.

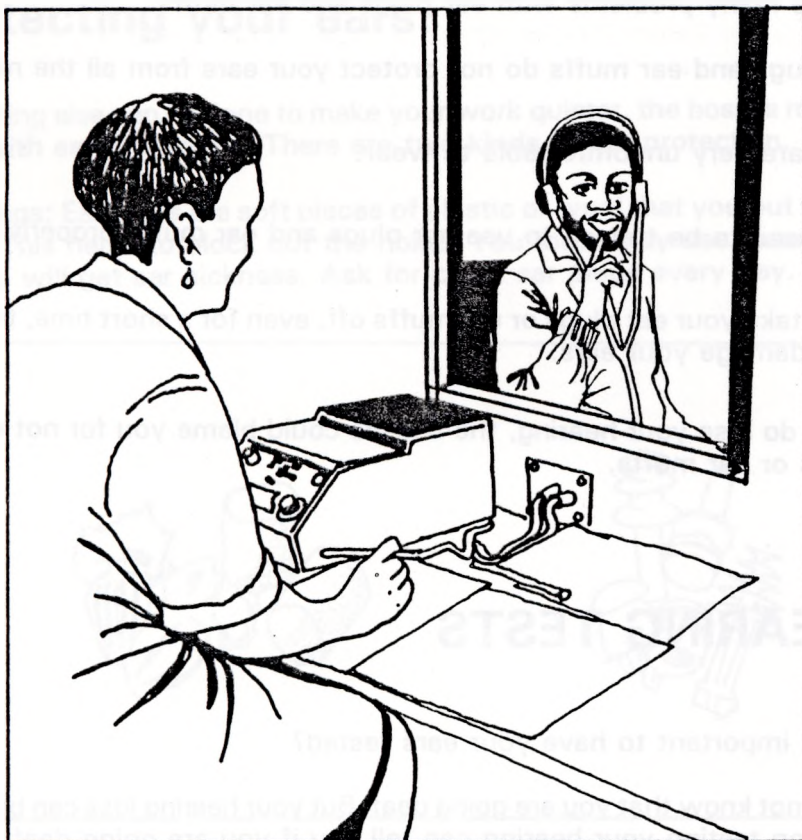
5. HEARING TESTS

Why is it important to have your ears tested?

You may not know that you are going deaf. But your hearing loss can be tested. The person testing your hearing can tell you if you are going deaf.

How do you test hearing?

Your ears are tested to see how good your hearing is. Your hearing is tested with a machine called an audiometer. This test is called an audiometric test. When your hearing is tested on this machine, you have to put on ear muffs. These are joined to a box. The box sends different noises through the ear muffs into your ears. For example you will hear a high whistling noise or a noise like a deep voice. The person testing your ears will make the noises louder and softer. She will ask you if you heard the noise. The person then writes down what noises you can hear. She will then tell you how bad your hearing is.



Hearing test on the mines

The Chamber of Mines is doing a hearing test on workers in some mines. The bosses can then find out if some workers are deaf. After the tests, bosses may transfer workers who are deaf to other jobs. The new jobs could pay less. In some cases the mine bosses will fire workers who are deaf. From this we can see that the mine bosses control the workers instead of controlling the noise.

6. COMPENSATION

Workers who go deaf from the noise at work can get compensation.

How do you get compensation?

You have read about audiometric tests. The test measures what your hearing loss is. If the test shows that you are very deaf and you can prove that there is loud noise where you work, then you may be able to claim compensation.

What are some problems with compensation?

It is not easy to claim compensation for hearing loss. This is a story about a man who got compensation for going deaf. But he also had a lot of problems.

Mr Ntuli worked underground as a machine-drill operator for 12 years. He earned R320 a month. When he was 32 years old he had tests done at the mine hospital to see if he was deaf. The tests showed that he was totally deaf in one ear and that he had bad hearing in the other ear.

The mine claimed compensation for Mr Ntuli. But they also dismissed him. The mine bosses said that he could not work safely if he was deaf. He got R1200 cash when he got home. Now he gets paid R120 a month until he reaches 65 and gets pension.

This story shows 3 bad things about compensation.

*Victimisation:

If you try to claim compensation, you may be moved to a surface job at lower wages. The mine bosses may even dismiss you. Mr Ntuli was dismissed because he could not hear properly.

*Low compensation:

You have to be very deaf to claim compensation. When you start going deaf you cannot claim any money. It is only when you can hear very little that you can claim. Even then you may get very little compensation for deafness. Mr Ntuli only got paid out R120 a month.

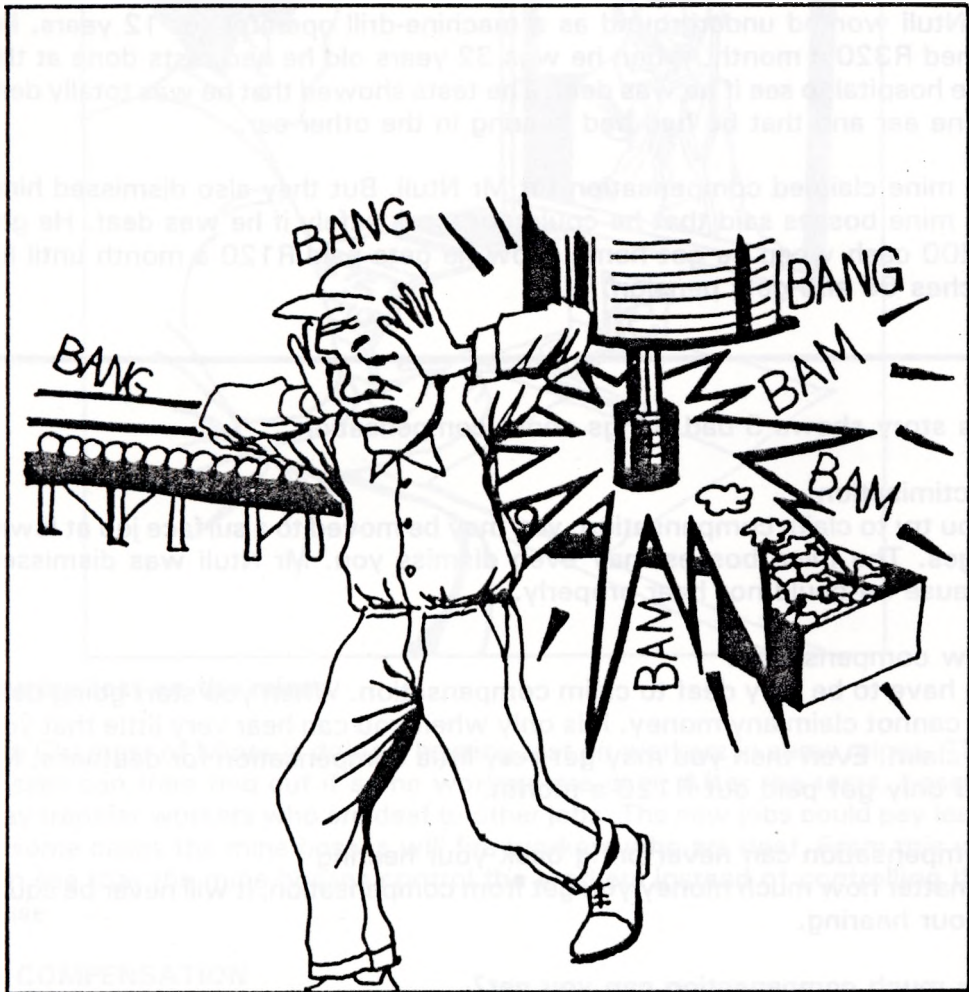
*Compensation can never bring back your hearing

No matter how much money you get from compensation, it will never be equal to your hearing.

How much compensation can you get?

If you are totally deaf, you are classified as partly disabled. This means that you can claim a monthly pension. But the amount of money you can get, depends on what you earn. If you earn a low wage you will get very little compensation. If you have lost some of your hearing you may get compensation. But you will be given a lump sum of money and you cannot claim a monthly amount. The lump sum will depend on your wages.

7. WHAT CAN THE UNION DO?



Your union is taking the problem of noise seriously. This booklet is one way of finding out how noise damages your hearing. Safety stewards and workers can use this booklet to start discussing noise at meetings. Here are some ideas for discussion.

- Are there any workers in your section or department who have a problem with hearing?
- What machinery is very noisy?
- Are there ways to make the machinery in your workplace quieter?
- Do workers get compensation for deafness? What are the problems with compensation?
- Are there lots of accidents in your department? Could noise have anything to do with these accidents?

By discussing these questions on your mines, you will find out more about the problems of noise.

You have a right to complain about noisy areas at your workplace. The law says that the bosses must keep a complaints book at each shaft. If you work in a very noisy area, your safety steward can fill in the complaints book. If the bosses do not do anything about the complaints, your safety steward can raise this problem with the union.

Hearing test on the mines

The union and the workers should be able to get the results of noise tests from the bosses.

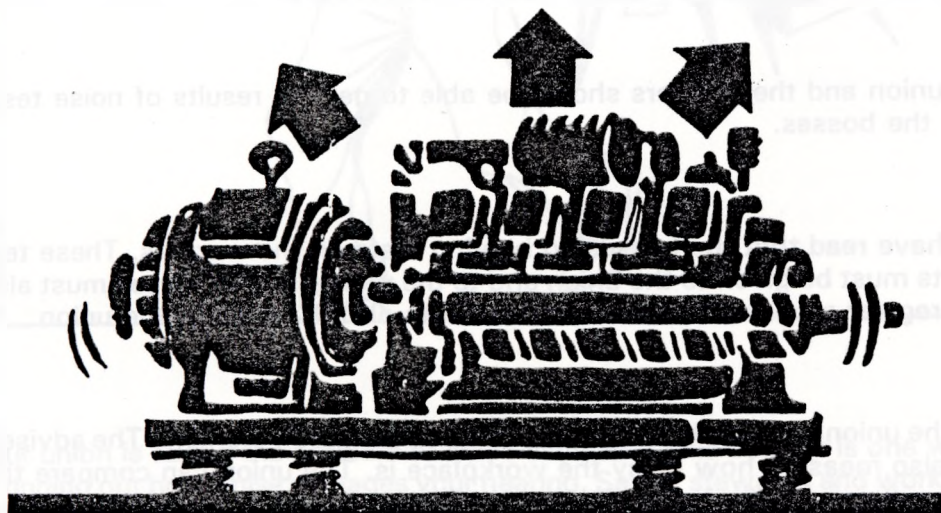
You have read that the bosses do hearing tests on the workers. These test results must be given to the union and to the workers. The bosses must also give regular reports of noise measurements on the mines to the union.

But the union can get their own advisers to do tests on workers. The advisers can also measure how noisy the workplace is. The union can compare this information with the bosses' reports. In this way the union can check that the bosses' measurements are correct.

Noisy machinery

Union members should negotiate to make machines quieter. Here are some ideas to use for negotiations.

- The union can make sure that machines are properly looked after.
- The union can negotiate that workers spend less time in noisy areas.
- The union can negotiate to check out new machinery. If the new machines are more noisy, the union can try to stop the mines from using this machinery.
- The union can negotiate that machines and equipment are built in a way that makes them less noisy.
- The union can make sure that bosses give the workers ear plugs or ear muffs. Union members should check that ear plugs and ear muffs are changed and cleaned often. As we have read, ear plugs and ear muffs do not protect the ears completely from the noise. The union should negotiate that ear plugs and ear muffs should only be used for a short time. During this time, the bosses must investigate other ways of making the machines quieter.



NUM Noise survey in 1986

Another way of testing noise in the mines is through surveys.

The union has arranged a noise survey in the mines during 1986. This means that the union will get advisers to test the workers. The Technical Advice Group (TAG) will do audiometric tests on about 500 machine operators. These workers will be tested for hearing loss. This survey will find out how many workers are going deaf from noise in the mines.

TAG is also going to measure how much noise there is in the mines. After the survey the union can use these results to negotiate improvements for all workers on the mines.

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