Noise Might Damage Unborn Child

BY WILLIAM HINES

Washington — The possibility that damage to an unborn child can result from exposure of its mother to excessive on-the-job noise during pregnancy has been raised by testimony at a recent congressional hearing.

Experiments with rats and other laboratory animals have shown that an overly noisy environment for the mother can stunt the skeletal development of a litter of infants, said Dr. Jean Tache of the University of Montreal, and "up to now we have no reason to believe that it does not apply also to humans."

Tache, of the Institute of Experimental Medicine and Surgery at the Canadian school, made his statement in testimony before a Senate subcommittee on government regulation headed by Sen. Thomas J. McIntyre D-N.H. The committee was looking into reffects of excessive environmental noise on workers.

Tache made the point that the notion that "stress is all in our heads" is incorrect.

"I would like to say that stress is something that

happens in our bodies," he said. "During stress the size of our organs changes, they are modified; the adrenal (gland) is enlarged, the lymphatic system increased in size."

That noise is a stressful condition cannot be doubted, Tache said. The reaction to noise is largely a glandular one that differs from one person to another because of a lot of factors as diverse as heredity and personal experience.

The difficulty with trying to measure the effects of extreme noise levels on human beings, Tache said, is that moral and ethical considerations enter the picture

"You can always use humans for experiments where the stressful agent is of moderate intensity and will induce moderate stress," he said.

"But if it were to cause very intense stress, I think it would be immoral. I think our best way of finding what stress does is by working on animals." "At least one study" has shown that excessive noise

"At least one study" has shown that excessive noise can bring about "modification of the skeletal development in the fetuses," Tache said.

It would be immoral, he added "to submit a pregnant woman to stress (if) it may endanger the fetus. This is the type of test we cannot do. But this we have to conclude: "If it applies to the rat, to the rabbit, to the squirrel monkey . . . we have no reason to believe that it does not apply also to humans."