

increasingly more severe—air pollution. We have information which leads us to conclude that there are segments of our population who are more susceptible to the effects of excessive air pollution. We can identify two major groups:

- Persons with cardio-pulmonary disease
- The aged population

If there is agreement on the susceptible population it is now necessary to look at the laboratory available to us all.

Over the last several decades a demographic shift has occurred in communities in the U. S. Large cities have become larger; small cities and towns have lost population. One of the major groups who have migrated and continue to migrate to large cities is the younger population—let us say those under 30 years of age. With the younger big city population has come increased birth rates and all other elements attributable to younger people. The percentage of young people in large city populations has increased over the years.

Small cities and towns which have an appreciable exodus of young people have a correspondingly higher percentage of older persons making up their population. Statistics will bear out this demographic shift in small cities and towns throughout the U. S.

To legitimately *predict* a public health problem, a third factor must be focused upon. Small cities and towns are politically weak jurisdictions. Although heard in debate, lacking political muscle they must bow to the more powerful politics of large urban areas, and docilely accept decisions made for them.

In the southwestern U. S. it is in these weak political jurisdictions where massive fossil fuel burning power plants are locating. Conceivably in other areas of the country large automated industrial complexes are being built or planned in or near towns without the towns benefiting from an influx of younger persons. Particulate pollutants and sulfur dioxide will be released into the atmosphere in amounts of hundreds of tons per day. Residing in these same weak political jurisdictions is a higher percentage of older persons who very well may be more susceptible to air pollution insults.

If there is substance to cause and effect of excessive air pollution; if demographic shifts are occurring; if it is legitimate to relate the above stated factors; then one may predict that with increased levels of pollution the mortal-

ity rates of small cities and towns will increase with the passage of time.

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### Health Workers' Morale

One interesting litmus of the morale of health workers may be evidenced by the attendance at a recent conference in New York City. Sponsored by the New York Academy of Medicine, the annual two day spring conference was devoted this year to a timely subject, the Problem of the Aging.

Superficially, the conference bore identical resemblance to those of years past. The printed invitations and registration were unchanged, the parking was impossible, the box lunch was familiarly tasteless and the hall was full.

There was a change, however. The audience, primarily women, sat stolidly through the presentations with a patience that implied that they had never heard it before, or that they didn't mind hearing it again and again. The somber, almost deadly attention, remained unbroken in the most eerie manner.

This is not the way I remember public health conferences! Where were all the ambitious public health workers who used to enliven the meetings by stalking in and out because their own business was so much more important? Where were all the leaders, the "big shots", the "politikers", who used to congregate in far corners, whispering loudly? Where were all the conversations interrupted by the sudden appearance of an important person tugging at the elbow?

Where, in fact, was everybody? In vain one looked about for familiar faces, for veterans of former campaigns, for people with whom to commemorate and rehash old times (by old times I mean events occurring less than five years ago!)

Afterwards, the microphones set up in the corridors for questions stood relatively empty, quite unlike those earlier days when people would line up by the dozens to get their point across. It was creepy.

Perhaps it is well that attending conferences should now be delegated. But though the future of any endeavor rests in the hands of the young, they need continued leadership and stimulation. I guess that where conferences are con-

cerned, public health professionals, like old soldiers, often fade away.

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### Epidemiology and Drug Dependence

In the March volume (63 No. 3) Robert Levensgood, M.D., Paul Lowinger, M.D., and Kenneth Schooff, M.D., publish an interesting article "Heroin Addiction in the Suburbs—An Epidemiologic Study."

Under "Method" it is stated i.e.:

The objectives of this study were to examine the various patterns of heroin abuse in the community and estimate to some degree its prevalence. For these purposes heroin abuse was regarded as an infectious disease and epidemiological methods were applied patterned after the work of de Alarcon in England. As heroin abuse is a practice transmitted from one individual to another it is analogous to an infectious disease and epidemiological methods are applicable.

This may be read to mean that the authors mean: 1) that heroin abuse has close analogies to an infectious disease; and 2) that the epidemiological methods can only advantageously be applied to infectious diseases.

In my view, none of these attitudes can be substantiated.

This does not mean that epidemiological methods cannot be applied in the study of drug dependence, on the contrary, but this is not because drug dependence fruitfully can be regarded as a contagious disease—although, of course, interhuman relationships and "social contagiousness" play a role. The reason why epidemiological methods can, and should, be applied to drug dependence is, in my view, that we have to do with a very complex and multifactorial phenomenon. It is just in the study of multifactorial phenomena that the epidemiological methods have demonstrated to be indispensable, regardless of whether we have to do with contagious diseases or not. Do we not speak rightly of the epidemiology of childbirths, the epidemiology of traffic accidents and the epidemiology of heart infarction, to mention only a few?

I have a special reason for writing