Dec. 1949

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Industrial Health Programs Pay Dividends

MANFRED BOWDITCH
Director of Health and Safety,
Lead Industries Association,
New York, New York

I TRUST that you will not be disappointed when I tell you that I have not come here for the purpose of citing statistics on the costs of industrial health programs, the extent of ill-health in industry or the dollar savings that may be effected through the impingement of such programs on this aggregate of ill-health. Sufficient reasons for not doing this are to me three basic facts.

The first of these is that, although a goodly number of such cost estimates have been published, among them the quite recent and useful one of the New Jersey Department of Health, it is still true that, because of the variables inherent in the problem, each program is in great degree a law unto itself in the matter of cost.

The second it that we *have* no worthwhile statistics on the extent or cost of ill-health in industry, let alone the costs of those physical and mental conditions which, while perhaps not so recognized, are anything but conducive to sound morale. And, in my opinion, we will never have such statistics, even as to those diseases properly designated as occupational, until they are made reportable by law as are tuberculosis and other communicable maladies. To point up this second fact, let me tell you of a little incident. The president of one of the member companies of our association had remarked to me that I should secure from our members reports of all their lead cases. When I broached this to the medical director of another of our companies, a far-flung and admirably operated organization, he came back with "How can *you* get them when I can't get them myself?"

My third and final fact is the obvious one that, with so frail a foundation as to costs, any thesis that I might seek to build in terms of dollar savings would have little validity.

So there will be no statistics. This does not mean, however, that I cannot express to you the most sincere conviction that any industrial health program, soundly conceived and administered in the light of the real needs of the company and its workers, will pay dividends quite as real as, if less tangible than, those which go out to the stockholders. I have that conviction and I hope to make clear to you why I have it.

Keynote address before Second Gulf Coast Regional Conference on Industrial Health, Houston, Texas, October 6, 1949.

Experiences in Industrial Health

BUT BEFORE I undertake this exposition, I ask your indulgence in one or two digressions. Firstly, as is the wont of us old gaffers, I would like to reminisce a bit. When I entered the employ of the Medical Department of the General Electric Company at Lynn, Massachusetts, in 1925, I became, so far as I have ever been able to determine, the first industrial hygienist ever to be employed on a full-time basis by any industry in this country. Honesty compels me to add that, being no tread-fearing angel, I undertook this work knowing next to nothing about industry and even less about hygiene. I was actually hard put to it to know how to describe myself, for industrial hygienists, now so numerous that they have their national and local associations and can hold regional meetings such as this one, were then very rare birds indeed. Yet despite these handicaps, it was almost no time before I was aware of two heart-warming satisfactions. I knew that I was doing something definitely worth the effort, and there was apparent evidence that what I was doing was improving morale.

If there are amongst us here any younger hygienists who sometimes feel that they are a bit behind the eight ball or are not wholly convinced that their efforts are appreciated, a couple of illustrations of what I have just said may have the germs of helpful suggestion. On thus finding myself a neophytic atom in the G.E. colossus, I got myself a little notebook and started wandering through the works, looking for situations that seemed to call for correction from some viewpoint of health. Having satisfied myself as to the proper corrective, I would approach the man in charge and ask him to have the change made. The answer was almost invariably, "Why sure!"—and the date was noted in my little book. When a month had gone by without visible change in the situation, Mr. Doe would be reminded that on such and such a date he had promised to do this or that. Sometimes a second month would elapse, with a second reminder, this time citing two dates, and after enough of this had gone on, I was gratified to learn that it was being said around the plant that, if you told Bowditch that you would do something, you might as well do it, as he would plague the daylights out of you until you did.

And then one day a woman worker turned up

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participation of the workers themselves in the solution of their own hygienic problems, it is to be hoped that there will come an ever clearer realization that, when health is mixed with politics, the former is invariably the loser.

Having been a state-employed industrial health worker for fifteen years, and therefore perhaps knowing whereof I speak, I venture to suggest that, despite their obvious importance and accomplishments in the development of industrial hygiene services, somewhat the same hope might be expressed with regard to the governmental agencies. All of us are, I am sure, painfully aware of the prolonged jurisdictional wrangling that has marred the record on both federal and state levels, and all of us who have the cause of industrial health at heart must be glad of the apparent lessening of this quite indefensible bickering.

Advances in Industrial Health

I SEEM to have managed to throw quite a few bricks. Now, with your permission, I would like to pin on some well-merited posies in each of the above categories, for in at least partial compensation for the over-all lag which I am perhaps too prone to deplore, there have been many truly remarkable advances, for which due credit should be given.

Among the industrial physicians there are of course a goodly number who constitute the true leaven of the loaf. It was DR. JOHN J. WITTMER of New York's Consolidated Edison Company who said recently, "It is certainly the responsibility of industry to see to it that 'manpower' receives such care and consideration as is appropriate to its top position in the scheme of our industrial economy. I can't conceive of a plant manager in this day and age, ordering, installing and operating mechanical equipment without (1) determining exactly what was required of the equipment, (2) securing the best equipment for his needs, (3) having it installed by competent mechanics, and (4) establishing an operational maintenance program to insure optimal efficiency and useful life. Is there any moral or practical reason why we should do less for the individual, without whom the equipment could not have existed, let alone be operated?"

And another doctor, whom I am not at liberty to name, wrote me not long ago about two lead cases, saying of one that he "was annealing steel wires in lead baths, but in addition drinking leaded water out of his own faucets in a country home." To say that such etiological detective work is a credit to the profession seems to me but the faintest sort of praise.

I need not be told of the extreme difficulties faced by the medical schools in seeking to fit industrial medical instruction into an ever more crowded curriculum, and I am aware of the success that has met these efforts in some quarters. Confining mention to examples of medical school activity within the state of Texas, the industrial hygiene research laboratory being established by DR. NAU at Galveston bids fair to be a most valuable addition to a group of institutions of which we have all too few, and the privilege of learning at first hand from DR. KEMP of his plans for the future of industrial medical teaching and research at Baylor has added not a little to the interest of my first visit to Houston.

As to the industries, I have already indicated that there are those whose sights in terms of medical and health service are at a commendably high level. Since so revolutionary a change could not have come about without the sanction of an enlightened management, it seems appropriate to mention here the transfer last winter of the Socony-Vacuum Oil Company's human relations activities from its industrial relations department to its medical department, the purpose being to permit the traditionally confidential doctor-patient relationship to aid in solving personal problems adversely affecting the work of the company's employees. And as an example of excellent yet economical co-operative health activity for the benefit of industry at large, I would like to cite the fact that the smaller companies may secure the benefits of membership in the Industrial Hygiene Foundation of America for as little as fifty dollars a year.

That labor is now ready to join with management and medicine in advancing the cause of health and safety in industry on a truly sound basis is evidenced by the Washington meetings being held in an effort to establish a permanent conference for that purpose, with representatives of the American Federation of Labor, The Congress of Industrial Organizations, the National Association of Manufacturers, the U.S. Chamber of Commerce and the American Medical Association participating. Judging from what one of the medical members of this group has told me, the labor approach to the problem is on a high plane.

It seems most unlikely that the recently created National Advisory Committee on Industrial Health, with ten distinguished members, can fail to notably benefit the Federal Government's industrial hygiene activities. Among the state and local units, of which there are fifty-eight in all, it can hardly be expected that all will operate at the same high level of efficiency. Many are, however, doing excellent work, and I consider it a duty of my present position to bring about cordial and mutually profitable relations between these agencies

in the dispensary complaining of back pain. I went to her work station and found that she was one of a group who were winding tape insulation onto quite sizeable coils. And I also noted that, though she was inches taller than any of her mates, the jig at which she worked was at the same height above the bench as all the rest. No appreciable gray matter nor cost were involved in raising the jig to a proper height, or in suggesting a less arduous method of winding, but it was good to learn that the pain had disappeared, and better yet to have this worker say to me one day, "You don't know what it means to know that somebody in the plant cares about such things." Is there any one of us here who does not share my conviction that such simply accomplished improvements pay dividends out of all proportion to their cost?

Industrial Health Programs Lagging

YET WITH this conviction of mine goes another, that industry as a whole has hardly more than begun to appreciate the profit potentialities of comprehensive health programs. Indeed, if this were not so, there would be little occasion for a paper such as this. So let us try to determine why health work in industry has lagged so far behind the industrial revolution itself, for only by so doing may we hope to stimulate it to more rapid growth. This cannot but involve some criticism of the several parties to the problem, in which I assure you that I mean to be entirely fair.

First of all, it is axiomatic that a health program in industry must be under medical guidance, for neither the hygienist nor the nurse is adequate to the situation alone. Such guidance, one might think, should be easy to secure, for there are now many full-time doctors in industry, many more who serve industry on a part-time basis, and still others available as consultants in industrial areas. Why, then, is it not more common? One reason, I believe, is that the concept of industrial medicine as little more than traumatic surgery is still regrettably persistent. I subscribed to the dictum of DR. ALICE HAMILTON when she said many years ago that the company employing a thousand workers should have a full-time doctor, and I still subscribe to it, with perhaps the more modern proviso that it be a half-time doctor and a part- or full-time hygienist or nurse. And I will go a step further and say that if this doctor or team of medical workers charged with responsibility for the health of a thousand industrially employed men and women do not find their time more than fully occupied, some change in personnel is indicated.

In short, it is my considered opinion th all too few industrial medical men are real health-minded. For this we must hold t medical schools at least in part responsib I do not pretend to know too much about me ical education, but I have taught in two our leading schools of medicine, have inform myself of the instruction given at a numb of others, and think it may in all honesty I said that, as far as undergraduate teachir of industrial or occupational subjects is co cerned, it is in most cases quite lamentab inadequate. When we turn to post-gradua courses in industrial hygiene and medicin the picture is somewhat brighter; yet eve here, to judge by reports of enrollment at thre well-known schools that came to me only t other day, it is none too rosy.

The old reliable law of supply and dema seems to be working here. What incentive there to the young and aspiring M.D. to spen years of his youth and large amounts of h none-too-ready cash in perfecting himself f work which may well be rewarded, despi his competence, with earnings far less tha he could gain in private practice? This que tion brings us to the steps of industry itsel and it is up these steps that we must pass i seeking to bring about the enlightenment tha will have to come before anything approac ing universally adequate health programs i attained in our manufacturing establishment:

What are the major difficulties here? On I believe, is continuance in some managemen quarters of the old idea that medical servic is a necessary evil, to be secured at the lowes possible cost. If Dr. Jones will do the jo for five hundred dollars less than Dr. Brow Dr. Jones is obviously the man for the jol Another is the inability of the front offic which is used to laying down the law to it production departments, to conceive of dea ing with its medical department in any othe way. Yet most doctors who are really wort their salt are pretty independent critters an have no intention of being told by a mer layman how they should conduct their work It is my firm belief that, if the managers o all our larger industries, in seeking medica and health service, would raise their sight: in terms of professional ability, salary and tha intangible called personality, to the leve achieved by some that I could mention, an having done so, would give their doctors ful front-office backing but otherwise leave them alone, the professions, the schools, the workers and the corporations themselves would all b the gainers.

Labor, in the past, has had relatively littl to say about health programs in industry, bu this situation is changing. With the increase

and our member companies wherever possible. I have been particularly impressed by the Kentucky industrial health survey now being conducted by MR. W. W. STALKER, director of the division in that state.

I hope that, despite the rather rambling nature of my remarks, I have succeeded in making evident my conviction that industrial health programs *do* pay dividends. I realize, however, that, having now been engaged in the promotion of industrial health for nearly twenty-five years, I may be suspected of some little prejudice in its favor. It therefore seems appropriate that I should quote, in conclusion, from two of the men who pay for these programs, for if *they* are for them, as the executive heads of outstanding industrial organizations, it must be for reasons far more practical than mere prejudice. I quote first from an address by MR. WILLIAM B. GIVEN, president of the American Brake Shoe Company, who said at a meeting of the Industrial Hygiene Foundation:

"How effectively or how badly a Medical Department functions should be one of the many useful yardsticks for directors when they are wondering whether the company needs a new head. After all, the most important part directors have to play in management is promptly removing the senior officer when over-all he is found not up to his job—yes, and without wasting time about it.

"By the same token, with today's competition for the most intelligent and efficient workers, stockholders cannot long afford directors who do not realize the importance of top health and safety conditions in their company's plants, nor managements which do not spend whatever money is necessary to give plant people the maximum of health and safety assurance."

And finally, I quote MR. ANDREW FLETCHER, president of the St. Joseph Lead Company, who on a similar occasion spoke as follows:

"Good health is the most important asset in life. I know of no company that has improved working and living conditions of its employees that has not obtained satisfactory returns in dollars as well as in human happiness."

American Industrial Hygiene Association

—News of the Local Sections—

Georgia Section

ON OCTOBER 13, the annual dinner meeting was held at Georgia School of Technology. The meeting was addressed by MANFRED BOWDITCH, Director of Health and Safety, Lead Industries Association, New York City on his experiences in a talk entitled "Twenty-four Years of Industrial Hygiene."

Michigan Section

ON NOVEMBER 15, the MICHIGAN INDUSTRIAL HYGIENE SOCIETY was addressed by DR. PAUL C. CAMPBELL, JR., of the Dermatoses Section of the U.S. Public Health Service, Industrial Hygiene Division. DR. CAMPBELL reported on the investigative work which he has conducted in many industries and particularly on a search for less hazardous chemicals for use in lithography.

Metropolitan New York Section

ON NOVEMBER 2, 1949, VICTOR K. LAMER, PH.D., Professor of Chemistry, Columbia University, gave a paper entitled, "Aerosols" in which he discussed briefly the problems and techniques involved in the generation, size measurement and use of monodispersed aerosols including a consideration of lung retention as a function of particle size.

New England Section

FOLLOWING the annual conference held in Boston on October 28, the following officers were elected: Chairman, DR. F. J. VINTINNER, Division of Industrial Hygiene, New Hampshire State Board of Health, Concord, New Hampshire; Secretary-Treasurer, DR. LESLIE SILVERMAN, Harvard School of Public Health.

Philadelphia Section

ON NOVEMBER 2, GEORGE D. CLAYTON, Chief of the Atmospheric Pollution Unit of the U.S. Public Health Service talked to the section on "Industrial Hygiene in the Study of Atmospheric Pollution."

Pittsburgh Section

ON NOVEMBER 29, H. H. SCHRENK, PH.D., Research Director, Industrial Hygiene Foundation, spoke at the Section meeting on the subject "Air Pollution."

Western New York Section

THIS SECTION has just been organized and is to hold its meetings in Rochester since a large portion of the members live in this vicinity. The next issue of the Quarterly will carry a list of the first officers and the program for the remainder of the year.