

During the past year, the handbook which we worked on so diligently a year ago has now been widely distributed - 2nd printing; Scientific Congress held - printed report next month; vaccine production seminar just concluded and methodology & is available within months; a ^{laboratory} diagnostic manual ^{will} ~~complete~~ along towards completion.

Eventful year - productive year. I believe we can take some justifiable pride in the accomplishments. I regret to say, however, that this has probably been the easiest year of the program - the honeymoon, if you will - with many hopes and comparatively few recognized problems.

The problems are now becoming apparent - the hopes are not reality, by any means. It will take a greater effort from us in the coming year ^{than} ~~and~~ in the year just. ~~We have a goal~~ Unlike so many programs, we have a very clearly defined goal and a very clearly defined time in which to reach that goal. Sir Wm. Kefauver, ^{D-C} ~~secretary~~ ^{Secretary}, stated the case rather clearly at the time. Bd. in Jan. when he observed that for the prestige and further growth of the W-H-O, this program cannot fail - One eradication program was declared and is clearly not to prosper within, I suspect, my lifetime; a second program has been embarked upon by unanimous decision of the Assembly. A second failure in meeting expectations could be disastrous.

^{is fitting that we meet in}
Brazil for ~~economic~~ ^{program} I suspect that this is the most important ~~problem~~ of all. It is the bone of our D-C who has and does worry incessantly regarding the program here and its progress and probable success. However much we have endeavored to reassure him, he is certain that the Indians in the Amazon represent the insuperable obstacle which ~~spell~~ ^{spell} down to the program - ^{an} ~~they~~ ^{they} cannot be found, but ~~also~~ ^{are} vaccinated. To persuade him that smallpox ^{eradication} ~~is not~~ ^{is} malaria eradication, that ~~it is the disease~~ the logistics, the strategy, etc. are totally different - that Indians in the Amazon are of essentially no consequence - has proved futile. It must be shown. We say to our Brazilian colleagues that we shall do all possible to support you.

We look forward to our brief stay in Brazil and thank you Mr. Keay for your most cordial hospitality.

1. 1967 - SE was launched ^{with a 10 yr. target date -} SE representing 1 of 2 programs of Ford. WHO involved with
At the instigation of the U.S. delegation, ~~it was~~ the WHA formed it, a principle program of WHO -
toned down from the principle program.

2. Why? Smallpox in perspective - now sometimes thought of as a "lesser" problem - tetanus, cholera, typhoid
Today
Most lethal disease known to man - ~~potentially~~ ^{capable of} infecting ~~95%~~ ^{everyone} - 40% mortality in unvaccinated
before vaccine - variolae.
No respect of climate
No subclinical infection (polio, tuberculosis)

Today - it is not as major a problem as many other diseases -
World-wide 115,000 cases reported 1967 - Actual total - perhaps 2 million - deaths ~ 200,000
Today - ^{only} 29 endemic countries

Almost a paradox - why?
Throughout the world - vaccination is practised. No country can afford not to.
U.S. - 16×10^6 vacs. - cost small $\$20 \times 10^6$ / yr.
^{The response evoked by} A single case of smallpox today ~~is~~ ^{typical} ~~is~~ ^{is} wholly commensurate with the respect ^{that} the disease itself.
1967 - Germany - 1 case - 107 people isolated
1965 - Washington 1 suspect case - 1000 people under surve.; a special ward opened;
about 20,000 specially vaccinated (do we do this in malaria, Hx. polio)
Not forget Int'l travel - cholera vac. needed some areas; y.f. in others. Smallpox is needed in all.

3. Prospects for erad. - long recognized as the single disease known to man as being most susceptible to eradication.
Man to man - no insect vectors, no animal reservoir
Once infected - permanent immunity - not like malaria.
Risk + lesions obvious - detection simple
Vaccination highly effective $> 80\%$ @ 10 yrs. (2-3 years)
Technique - vacc. of sufficient no. of pop. - disease dies out - not everyone. Critical mass of
population necessary to keep the disease going.

4. Today - recognize 29 endemic countries in 4 principle regions
- a. Brazil
 - b. 23 African countries
 - c. Asia - Afghan. - India - Nepal - Pakistan complex
 - d. Indonesia.

Strategy - attack disease in these countries - augment present activities
strengthen programs in adjacent countries to restrict export
Objective - smallpox free - India + Pak vac. 30% - 50% success 5-10%

5. Progress - end 1st year

5 year program S. America. -

- Brazil - ^{WHO} 10% vaccination - 1967
 38 x 10⁶ " - 1968
 35 x 10⁶ " - 1969

Africa -

U.S. Assistance to 19 countries W + Cent. Africa - WHO providing petrol in half of these.

in 14 mos., ~~38~~ ²⁸ x 10⁶ of 115 million vaccinated. Evidence already appearing to be falling sharply.

WHO programs beginning or started in Congo (K), Rwanda, Burundi, Uganda, Kenya, Tanzania, Somalia, Sudan, Zambia

Asia - ^{WHO} Progs. operative in E. Pak, Nepal and Afghanistan.

Hopefully beginning ^{shortly} in Indonesia + W. Pak.

At present - feel we are on target.

3 ~~key~~ developments / major significance.

1) F.D. vaccine - ^{stability} begun in major way +

^{sup} Production begun a bit over 10 yrs. ago. ^{UNICEF} ~~Active~~ support to labs. + WHO ^{training +} consultation + ~~assist~~
 established vaccine testing service, quantity + qual of vaccine improving markedly
 (Uganda - liquid vaccine - 7 x 10⁶ vac.)

2) Jet guns - U.S. developed. + tested - ^{mechanics; speed; success of tubes} used in Brazil + W. Africa successfully.

Hope to be able to extend them use more widely.

3) Bifurcated needles - U.S. developed - exhibit + discuss.

Most encouraged by ^{1st} 14 mos. but there are problems identifiable.

1) Countries

- a) Congo (K.)
- b) Ethiopia
- c) Indonesia
- d) India

} Costs of program. If take resources already devoted to smallpox control, add some equipment + vaccine - most can do job. Once job is done - a real saving in resources. 5-10% vaccination.

2) Vaccine for jet injection -

sterility, containers - U.S. + Canada.

3) Vaccine generally - Why not purchase

Soviet Union - 125 x 10⁶ doses/yr. bilateral + 25 x 10⁶ multilateral. + a number of other countries (Netherlands, Switzerland, Germany, Hungary, UAR, Algeria, Thailand, Philippines, etc)

1966	1967	1968
3	13	56