

Date	Apr 27 2002
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Title	Smallpox: Triumph and disaster
Event	Dinner address
Event Sponsor	Asso of Amer Physicians
Event location	Chicago IL
Notes	
Publ as	

Appreciate opportunity to be your dinner speaker tonight - esp. honored to have dinner ticket 001

Now identified as epi + public health specialist + mention Dean
I began life intending to be an internist

2 summers with Dr. William M. Cassin. - My metabolism

3 years as med. resident with Dr. James Boardley (Phys. in Chief)

Summer brought Dr. MacLure Harvey

Finally - I wound up as ID specialist on Dr. Don Thomas's

first bone marrow transplants. - since that time, MacLure, Dr.

Hard to imagine better mentors than these, in

Despite all of this I fell by the wayside and never fully grew as an internist.

1980 WHA declaration -

Expected to have discussed smallpox & its diagnosis for last time.

At end of program - I had done little else but smallpox -

winding up as an international expert on disease - 5 remarkable & bills

Over 11 periods, upwards of 120,000 staff - 33 countries

~~worked tirelessly~~ worked tirelessly, some of the most in hospitable places on earth

Finally - Oct 26, 1977 last case -

Disease dates back ~~at least~~ ^{approximately} 3000 years - 4 millennia & disease. 1500 B.C.

It had proved to be, over the centuries, the most durable and most feared of all the protobacterial diseases. That the last case might have occurred -

That ~~vaccination~~ ^{eradication} eradication had really ~~been~~ ^{been} that vaccination

could be stopped was ~~quite~~ initially greeted with ^{utter} disbelief, ~~but~~ finally, as months and years went by & no cases - it came to be regarded as one of the important achievements of the past century.

But a word about smallpox, the disease -

• Virus, clinical, CFR, blindness + scars

• Gods & goddesses

• Jenner 1798 → vaccine around the world → arm to arm

• Problem of producing → calves refrigeration

U.S. became free in the early 1940s - Europe

• 1954 - freeze drying

over in 20th century
Killed 300,000

To put the present
in + informed
smallpox is
necessary to say
something about the past

1966 Proposal U.S. - USSR for global eradication
Operation - ① Can't be done ② Cost.
Debate - 2 votes
DG - U.S. at fault - selection of SA.

1967 - 10-15 $\times 10^6$ cases / 2 $\times 10^6$ deaths
43 countries $\rightarrow$ > 1.5 billion people
 $\$2.4 \times 10^6$ or $\$50,000$ / country

Strategy - ① to vaccinate 80%
② Surveillance + containment.

in 6 years - Americas were free; disease confined to 4 countries in Asia
and 1 in Africa

Asia saga - ~~1970~~

Priority - 2 yrs. surveillance / award.

USSR a major contributor - worked well together throughout Cold War.

only 90s in ~~late~~ ^{early} 1990s

~~1980~~ - learned from Alibek / USSR initiated special program to weaponize smallpox
Sergei Pospelov
Nikolai Zhukov
Kirov.

Use - ICBM -

~~From earlier~~ ^{miss.} - Thatcher - Bush - Gorbachev - Yeltsin - Biol. weapons.

Still a central point of discussion in all meetings.

Kindig's likes $\downarrow$ - stuff in labs = 50%

When gone - U.S. / U.K. / Iraq / N. Korea / Iran most actively researching.

Concern about terrorism $\nearrow$ 95 - from Shimnityo, Iraq, Alibek
At first nuclear + chemical

Then recognized - biological weapons are of greatest concern

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Working group - ~~6~~ ¹⁶ working smallpox #1

Vaccination protection
Potential for spread -

Vaccine production stopped 1980 - no manufacturers.
Total supply U.S. 150 vials

How to spread smallpox — aerosol

Sept. 2000 — Order for 40 million and starting production

Sept 11 —

What next?

~~1500000 vials only~~ ~~no decision~~

October — decision to obtain more vaccine — effectively enough for 280 million people
by Dec. this year.

ON TRACK.

AVANTIS VACCINE

What is Russia up to at this point? Not certain

This week — summary of reports in Russian newspapers.

U.S. — \$1 billion to States for preparation — Jan 10 → Jan 31

• Plan for rapid distribution of vaccine.

•

~~What is the state~~
~~What is the state~~

Under review — what to do in September when ample vaccine is available.

Cross of vaccine. — ? attenuated vaccine ^{3-5 years} — ? antiviral drug.

Will have a great deal more on the coming months — A difficult decision

A regrettable postscript to a remarkable saga. The last chapter has not been written. I wish it had.