

'Restricted' Police- in -Confidence
WILTSHIRE CONSTABULARY



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Reply Contact Name is: Detective Superintendent LUCKETT

Your Ref:

Date: 220701

Our Ref: CR891/AM/99

Dear Mr Bell,

Re: Porton Down.

I write in confirmation of our recent discussion concerning your case. Firstly I would like to briefly outline the circumstances of your allegations: -

On three occasions, between 1959 and 1961, whilst you were serving as an Airman at RAF Aird Uig, Scotland you attended Porton Down, the Chemical Biological Defence Establishment near Salisbury, Wiltshire. This was in response to a notice, circulated at your base, to the effect that volunteers were sought, at that establishment, to assist with research into the 'common cold'.

It is known that no such research has been carried out at that establishment. You subsequently discovered this and also established that you had in fact been subjected to various chemical agents and one biological substance, that being Pyrexal.



The administration of these substances had taken place without your 'informed consent'- insofar that you believed the substances to be associated with common cold research.

On the face of the allegation you have made, it is apparent that a criminal offence of administering a noxious substance, contrary to section 24 of the Offences Against the Person Act 1861 has been committed.

The second part of your allegation concerned the death of Leading Aircraftsman Ronald MADDISON that occurred at Porton Down in May 1953. Mr MADDISON died during an experiment involving the administration of the nerve agent Sarin (GB).

I will now deal with the enquiries carried out to date in respect of your allegation made to the Police on 4th August 1999:

My officers have managed to trace and interview all of the ex-servicemen who attended Porton Down with you on the occasion of week commencing 8 August 1960. I would like to stress that these individuals are living some considerable distance from each other and have not, apparently, had any contact with each other over the past 40 years.

A number of those interviewed clearly corroborate your recollection of the existence of a 'common cold' notice, being published in military units, requesting volunteers to come forward to take part in tests into finding a cure for the 'common cold'. Some remember reading it on Station Routine Orders and others believe they attended for common cold research but cannot recall the full circumstances of their attendance.

In an effort to establish where the notices originated from my officers have located and interviewed the highest-ranking surviving member of the RAF Aird Uig management team during the 1960's. This individual clearly remembers signing a 'typing skin' used to produce large quantities of Station Routine Orders bearing a request for volunteers to come forward to take part in 'common cold' tests at Porton Down. He has also stated that he did not see the originating documentation for this information to be placed on orders. On the date of his interview

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with the Police, he felt that the servicemen attended Porton Down in the belief that they went to assist with common cold research.

Another surviving retired Royal Air Force officer who served at RAF Aird Uig has been traced. He also has a clear recollection of reading notices to Station Routine Orders with an entry on them requesting that volunteers come forward to take part in tests into the common cold.

Further to the above, an individual has been located, who was serving at RAF Aird Uig who attended for tests two weeks before your recorded visit. He also clearly remembers volunteering for tests into the 'common cold'.

As well as looking at the validity of the surviving records, officers have been looking at the distribution of the 'common cold' notice in an effort to offer similar accounts in the way veterans were led to volunteer. This 'similar fact' evidence has resulted in my officers preparing a sizeable portfolio of individuals who claim either to have been aware of the common cold notice or who have attended Porton Down as a result of seeing the notice. This document, together with other evidence in the possession of the Police corroborates your allegation in respect of the 'common cold'.

In relation to the fact that Porton Down only have one record of your attendance, officers have been examining the accuracy of surviving records. The examination of some of the data held in the records showed clearly that there were many anomalies. There is some evidence that corroborates the fact that you attended on more than one occasion.

I enclose for your information copies of Porton Technical Papers 119 and 119a, both of which provide information in respect of the Service Volunteer Programme, which you may find to be of interest.

I will now deal with the matter, which I know, is of serious concern to you, that being the matter of long term adverse health effects as a result of your participation in experiments:

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Enquiries have been made with the Toxicologist who is currently acting as our expert witness with regard to the toxicity of Pyrexal. He will be making a statement identifying the substance as a noxious substance to facilitate an offence of 'administering a noxious substance'. At this moment in time however we have not found any evidence indicating that this substance can cause any long-term harm. However, we are still carrying out some research in respect of this substance and the possibility that harm has resulted from your exposure to this substance cannot be ruled out. I will let you know the result of that research in due course.

Details of the constituents of the rubber mixes that you were subjected to have been forwarded to the Rubber and Plastic Research Association (RAPRA) in Shrewsbury. They have advised us that the International Contact Dermatitis Group has issued one of the constituents, known as Nonox ZA, (previously manufactured by a chemical company) with a skin sensitisation warning.

I am, of course, unable to state whether this substance has caused your skin complaint. I have, however, directed my officers to make contact with that group, without delay, to establish the nature of hazard this substance presents. We shall also be discussing this matter with your medical consultant.

Research is also being carried out to establish whether a compound used in the CS gas you were subjected to causes any long-term ill effect. The Police will advise you, in due course, of the results of that research.

We have obviously not lost sight of the fact that you state you attended Porton Down on three separate occasions and as such were subjected a number of different agents. Unfortunately, in view of the fact that there is no record at Porton Down of two of those visits, we are unable to examine whether the substances administered during those visits may have caused any adverse long-term health damage. I have already made mention of the matter of the number of times you attended.

Officers have interviewed a former Porton Down employee, under caution. He took part in the Pyrexal experiments, but as an administrator, as opposed to playing any active part. Unfortunately, everyone else named in the technical paper relating to those experiments has since died. This individual has claimed that he was brought into the trial at a late date to carry out post exposure tests. He claims that he neither recruited volunteers nor administered any substances to them.

At this moment in time the inquiry team are attempting to locate surviving individuals from a list of former Porton Down employees to establish whether there are any who took part in any of your recorded tests. The Police can of course only carry out the enquiries, to identify potential offenders, in respect of the recorded tests. It is clearly extremely difficult, if not impossible, to identify individuals where there are no records in existence.

As you can see from the contents of this letter, we have strong corroborative evidence that you attended Porton Down as a result of seeing a 'common cold notice'. There is also evidence to support the fact that you attended on more than one occasion. Unfortunately, if we cannot find any other surviving individuals linked with your case the papers may well have to be forwarded to the Crown Prosecution Service for them to consider the role of the one individual who has been interviewed. I will let you know the position in due course.

In respect of the case of Ronald MADDISON a full Police Inquiry has now been carried out into the circumstances of his death, the subsequent Military Court of Inquiry, and the Coroners' Inquest which was held in 'camera' at the time.

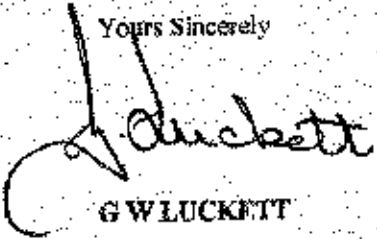
As a result of the findings of the Police Inquiry, a comprehensive report has now been sent to the present H.M. Coroner Mr David MASTERS.

Mr MASTERS has now made application to the Attorney General for permission to refer the case to the High Court with a view to quashing the original verdict of 'misadventure'. Should he be successful in this application, Mr MASTERS will hold a second Inquest.

Finally I am pleased to hear that you have agreed to take part in the Medical Assessment programme and I would be grateful if you could inform me of the result.

If you wish to speak to me about any of the issues raised in this letter please do not hesitate in contacting me.

Yours Sincerely



G W LUCKETT

Detective Superintendent

Mr. Gordon H. BELL

Box 10

Site 23

RR2

Carvel

Alberia.

Canada.

NOTE
THIS ADDRESS HAS SINCE CHANGED
IT IS NOW 40 MOREL DRIVE,
SPACE GROVE
ALBERTA
CANADA

By Hand

THIS BECAME THE MOST OCCUPIED
POLICE INVESTIGATION EVER UNDERTAKEN. !

(6)

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P.T.P. 880

P.T.P. 830

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Copy No. 108

PORTON TECHNICAL PAPER No. 880

40 PAGES

HUMAN EXPOSURE TO VX VAPOUR

THESE NAMES WERE
ERASED,
BUT ARE THOSE
SHOWN

BY

R. J. SHEPHERD - LIVING IN CANADA

R. C. BRAMWELL

W. S. LABELLE

CHEMICAL DEFENCE EXPERIMENTAL ESTABLISHMENT

Porton, Wilts.

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Porton Technical Paper No. 830

Copy No: 108

Date: January, 1963

HUMAN EXPOSURE TO VX VAPOUR

SUMMARY

1. Fifty four tests have been carried out in which a man has been exposed, head and neck only, to VX vapour. In 19 tests the subjects had no respiratory protection, and in 35 tests the respiratory tract was protected. In all except one test the subject kept his eyes closed.
2. In the unprotected series the Ct's ranged from 0.6 mg.min/m³ to 6.4 mg.min/m³. No marked symptoms occurred during exposure but transient respiratory symptoms developed later; there were no marked systemic effects. Depression of the blood cholinesterase developed rapidly in the first 15 min after exposure, and this proceeded more slowly to approach a maximum in about 4 hr. The greatest depression seen was 70% after exposure to a Ct of 5.5 mg.min/m³. The ChE I 50 was 8 mg.min/m³.
3. In the protected series the Ct's ranged from 0.7 mg.min/m³ to 25.6 mg.min/m³. Some depression of the blood cholinesterase was apparent within an hour of exposure, and it developed slowly but steadily to approach a maximum in about 8 hr. The greatest depression seen was 70% after exposure to a Ct of 25.6 mg.min/m³, and the subject had transient systemic symptoms with some nausea and vomiting, but recovered without treatment in a few hours. The ChE I 50 was 27 mg.min/m³.

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4. Miosis developed after most exposures, even though the eyes were closed. On the assumption that this was due to vapour desorbed from the cheeks it is shown that less than .008 mg/m³ of VX would cause miosis after about 2 hr exposure.

5. The relative importance of the respiratory and percutaneous routes of entry of VX during exposure to vapour is discussed, and it is pointed out that under certain conditions VX vapour could present a considerable hazard despite respiratory protection.

30 PLUS MORE PAGES TO THIS
DOCUMENT

~~SECRET-DESCRIBED~~

MINISTRY OF SUPPLY

DIRECTORATE OF CHEMICAL DEFENCE RESEARCH AND DEVELOPMENT

CHEMICAL DEFENCE EXPERIMENTAL ESTABLISHMENT

20 Pages

THE SINGLE-BREATH
ADMINISTRATION OF SARIN

134

R.S. SHEPHERD

THE NAME OF THE AUTHOR OF THIS PAPER WAS ERASED. HAVE SINCE DISCOVERED HIS NAME AND THAT HE LIVES IN CANADA. (BRACHENDASE, B.)

MNJ/123

Wiltshire Constabulary - Operation Antler

UNCLASS.

D F RUSSELL
SENSITIVITY REVIEW
(D INFO/EXP) RECORDS
14 AUG 2001

THIS NOTE WAS
PLACED OVER ORIGINAL
TO ERASE NAMES OF
LARRY SHEPHERD

~~UNCLASSIFIED~~

PORTON TECHNICAL PAPER NO. 702

COPY NO: 109

DATE: 12th October, 1959.

THE SINGLE-BREATH ADMINISTRATION OF SARIN

SUMMARY

*FALSELY
RECRUITED FOR
"COMMON (G-2) RESEARCH"*

1. Symptoms following exposure of human volunteers to a single breath of GB equivalent to a dose of 15 mg. min/m^3 are slight and transient. The commonest are "tightness in the chest" later moving up to the throat, and a dry cough. The time course of these symptoms is considered, and a physiological explanation offered.
2. Cholinesterase inhibition develops progressively in the first 10 minutes following exposure. At the small doses used, the dose/response relationship does not depart significantly from a linear form.
3. Experiments with radioactive GB show that cholinesterase inhibitor cannot be removed from the lungs at a greater rate by washing with blood than by washing with saline. The slow rate of cholinesterase inhibition is probably due to the relatively small proportion of the total blood volume perfusing the bronchial tree per minute.
4. Appendices describe (i) potential errors of the single-breath technique, and (ii) a formal statistical evaluation of the rate of cholinesterase inhibition.

Head, Physiology Section.

(Sgd).

Supt., Medical Division.

*NOTE
R.S. SHERMAN*
RJS/GC

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P.T.P. 841

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P.T.P. 8

PORTON TECHNICAL PAPER No. 841

A BACTERIAL ENDO-TOXIN
KNOWN AS LIPOPOLYSACCHARIDE (L
// PAGE

EFFECTS OF PYREXAL IN MAN

BY

Surg. Col. W.A. BURNETT, R.N.

SENIOR SCIENTIFIC OFFICER W.S.S. LADEL

(MENTIONED IN
"SPYCATCHER"
PETER WRIGHT
MIS AGENT
THE BOOK T.
MARGARET THA
TRIED TO IS

THE NAMES
SHOWN WERE
ERASED BUT
ARE THOSE SHOWN

K. KEMP. INTERVIEWED BY
WILTSHIRE POLICE

CHEMICAL DEFENCE EXPERIMENTAL ESTABLISHMENT

Porton, Wilts.

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... WAS USED ...

PYREXAL

A GRAM NEGATIVE EDOTOXIN
DERIVED FROM SALMONELLA ABORTU
EL

Biological Properties of Endotoxins

Endotoxins are toxic to most mammals. Even though endotoxins are strong antigens, they seldom elicit immune responses which gives full protection to the animal against secondary challenge with the endotoxin. They cannot be toxoided. Regardless of the bacterial source, all endotoxins produce the same range of biological effects in the animal host.

Most of our knowledge of the biological activities of endotoxins derives not from the study of natural disease but by challenge of experimental animals.

The injection of living or killed Gram-negative cells, or purified LPS, into experimental animals causes a wide spectrum of nonspecific pathophysiological reactions such as:

1. fever
2. changes in white blood cell counts
3. disseminated intravascular coagulation
4. tumor necrosis
5. hypotension
6. shock
7. lethality

Injection of large doses of endotoxin results in death in most mammals. The sequence of events follows a regular pattern: (1) latent period; (2) physiological distress (diarrhea, prostration, shock); (3) death. How soon death occurs varies on the dose of the endotoxin, route of administration, and species of animal. Animals vary in their susceptibility to endotoxin

Since Lipid A is embedded in the outer membrane of bacterial cells, it probably only exerts its toxic effects when released from multiplying cells in a soluble form, or when the bacteria are lysed as a result of autolysis, complement and the membrane attack complex (MAC), ingestion and killing by phagocytes, or killing with certain types of antibiotics. It is thought that LPS released into the bloodstream by lysing Gram-negative bacteria is first bound by certain plasma proteins identified as LPS-binding proteins. The LPS-binding protein complex interacts with CD14 receptors on monocytes and macrophages and other types of receptors on endothelial cells. In monocytes and macrophages three types of events are triggered during their interaction with LPS (See also Handout 11 Figure 5):

1. Production of cytokines, including IL-1, IL-6, IL-8, TNF α and platelet-activating factor. These in turn stimulate production of prostaglandins and leukotrienes. These are powerful mediators of inflammation and septic shock that accompanies endotoxin toxemia.
2. Activation of the complement cascade.
3. Activation of the coagulation cascade.

During infectious disease caused by Gram-negative bacteria, endotoxins released from, or part of, multiplying cells have similar effects on animals and significantly contribute to the symptoms and pathology encountered. The range of inflammatory effects caused by LPS during Gram-negative bacteremia or septicemia are outlined below.

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PORTON TECHNICAL PAPER NO. 8
DATE: February, 1963.

EFFECT OF PYREXAL ON MAN

SUMMARY

1. Pyrexal, a lipopolysaccharide prepared from Salmonella abortus equi was given intravenously at two dose levels (0.3 and 0.5 µg) to volunteer and its effects noted. Simple psychomotor performance tests were administered during the height of the symptoms.
2. Headache was the predominant symptom developing about 1 hr. after injection and lasting 5 hr. There was no difference in the severity of the headache between the two dose levels. Body temperature and puls rate rose slightly, more so after the higher doses. The mean recovery time was 9-10 hr. ^{to 104°}
3. The speed and accuracy of simple psychomotor performance tests carried out at the height of the headache were adversely affected but not marked so. Despite their symptoms the subjects were able to perform intricate but short term tasks.
4. Doses of up to 0.8 µg total were administered intranasally to other volunteers but the men were quite unaffected and no physiological effect were observed.

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WAB/KK/WSSL/PMF.
REFERRED TO IN "SPY CATCHER" M & S.

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