

1
00:00:06,359 --> 00:00:14,099
welcome to the skeptic zone the podcast

2
00:00:09,519 --> 00:00:14,099
from Australia for science and reason

3
00:00:20,420 --> 00:00:28,009
hello and welcome to the skeptic zone

4
00:00:23,339 --> 00:00:31,800
episode number 82 for the 14th of may

5
00:00:28,009 --> 00:00:35,090
2010 it's Richard Saunders here my

6
00:00:31,800 --> 00:00:38,640
little studio in Sydney Australia an

7
00:00:35,090 --> 00:00:41,309
interesting show this week a grain of

8
00:00:38,640 --> 00:00:45,140
salt with Iran so give and Iran is

9
00:00:41,308 --> 00:00:48,238
talking to John McDonough a firefighter

10
00:00:45,140 --> 00:00:50,628
yes a firefighter skepticism and

11
00:00:48,238 --> 00:00:53,698
firefighting critical thinking and

12
00:00:50,628 --> 00:00:55,500
firefighting here's an interesting take

13
00:00:53,698 --> 00:00:59,128
on critical thinking I think you'll

14
00:00:55,500 --> 00:01:02,789
enjoy it after that we have dr. Rachel

15
00:00:59,128 --> 00:01:06,030
reports with a an update without wacky

16
00:01:02,789 --> 00:01:08,219
and crazy and zany freaked out friends

17
00:01:06,030 --> 00:01:11,040
at the Australian vaccination at work

18
00:01:08,219 --> 00:01:13,618
what what wacky adventure have they been

19
00:01:11,040 --> 00:01:16,950
up to this week we'll find out soon with

20
00:01:13,618 --> 00:01:19,319
dr. Aichi now i'm pleased to say just a

21
00:01:16,950 --> 00:01:21,990
couple of days ago I finally finished

22
00:01:19,319 --> 00:01:25,919
editing filming and editing the first

23
00:01:21,989 --> 00:01:28,979
skeptic zone sort of official video in

24
00:01:25,920 --> 00:01:33,359
the new how it's done series where we

25
00:01:28,980 --> 00:01:34,800
look at applied kinesiology now if you

26
00:01:33,359 --> 00:01:36,540
want to look at that video online and

27
00:01:34,799 --> 00:01:39,060
recommend it to your friends or whatever

28
00:01:36,540 --> 00:01:41,700
the case may be it starts lots of an

29

00:01:39,060 --> 00:01:44,430
interesting skeptics own people check

30
00:01:41,700 --> 00:01:46,650
out the official YouTube channel of the

31
00:01:44,430 --> 00:01:50,190
skeptic zone which is skeptic zone

32
00:01:46,650 --> 00:01:52,440
podcast and it's right there skeptics

33
00:01:50,189 --> 00:01:56,189
own podcast presents how it's done

34
00:01:52,439 --> 00:01:57,599
applied kinesiology and in fact what I'm

35
00:01:56,189 --> 00:02:01,920
going to do is I'm going to put this

36
00:01:57,599 --> 00:02:05,548
video in a day or two into the itunes

37
00:02:01,920 --> 00:02:07,399
feed so we've lucky people with iphones

38
00:02:05,549 --> 00:02:09,780
and ipod touches and things like that

39
00:02:07,399 --> 00:02:13,680
well you can just watch it on your video

40
00:02:09,780 --> 00:02:15,598
will get the video downloaded hey just

41
00:02:13,680 --> 00:02:18,689
the thing to take to the next mind-body

42
00:02:15,598 --> 00:02:22,530
wallet festival and show some people I

43
00:02:18,689 --> 00:02:25,318

hope you enjoy it it was great fun to

44

00:02:22,530 --> 00:02:27,658

make I learn the secrets trick people

45

00:02:25,318 --> 00:02:31,560

it's all there recommend it to your

46

00:02:27,658 --> 00:02:33,699

friends and see how you go oh well I'm

47

00:02:31,560 --> 00:02:36,640

going to go out myself now and grab

48

00:02:33,699 --> 00:02:39,359

dog so well I'm doing that enjoy the

49

00:02:36,639 --> 00:02:39,359

skeptic zone

50

00:02:44,419 --> 00:02:46,479

you

51

00:02:55,209 --> 00:03:06,139

let's all take this with a grain of salt

52

00:02:57,998 --> 00:03:07,968

is Iran tickets on McDonald is a

53

00:03:06,139 --> 00:03:09,889

firefighter you might think that it's

54

00:03:07,968 --> 00:03:12,138

odd to interview a firefighter for a

55

00:03:09,889 --> 00:03:14,810

skeptical podcast but there's a simple

56

00:03:12,139 --> 00:03:16,280

explanation John recently signed up for

57

00:03:14,810 --> 00:03:19,430

the Sydney skeptics meetup group and

58
00:03:16,280 --> 00:03:21,739
wrote the following in his profile I'm a

59
00:03:19,430 --> 00:03:23,870
firefighter whose job is to train others

60
00:03:21,739 --> 00:03:25,669
our problems are based on critical

61
00:03:23,870 --> 00:03:27,560
thinking and doing everything we can to

62
00:03:25,669 --> 00:03:30,109
understand the signs of our occupation

63
00:03:27,560 --> 00:03:32,840
only that keeps us safe in a dangerous

64
00:03:30,109 --> 00:03:34,669
workplace Jon the critical thinking

65
00:03:32,840 --> 00:03:37,188
firefighter welcome to the skeptics on

66
00:03:34,669 --> 00:03:39,530
podcast yeah thank you very much it's

67
00:03:37,188 --> 00:03:41,120
good to be here can you start by telling

68
00:03:39,530 --> 00:03:44,090
us a bit about what it is that you

69
00:03:41,120 --> 00:03:47,449
actually do in your day job I'm actually

70
00:03:44,090 --> 00:03:51,229
a manager of one of our training such

71
00:03:47,449 --> 00:03:54,139
sections we deal with the live-fire

72
00:03:51,229 --> 00:03:57,198
training and teaching other firefighters

73
00:03:54,139 --> 00:03:59,870
be our best help help us to fight fires

74
00:03:57,199 --> 00:04:02,000
in particular structure fires so you

75
00:03:59,870 --> 00:04:03,979
mentioned that you do live fire training

76
00:04:02,000 --> 00:04:06,769
is that as opposed to other types of

77
00:04:03,979 --> 00:04:08,419
training yes well our training so it has

78
00:04:06,769 --> 00:04:11,269
a theory component and then we have a

79
00:04:08,419 --> 00:04:12,939
practical component the practical that

80
00:04:11,269 --> 00:04:14,959
we have is we light fires inside

81
00:04:12,938 --> 00:04:17,238
shipping containers for one of a better

82
00:04:14,959 --> 00:04:18,829
word and under controlled conditions we

83
00:04:17,238 --> 00:04:21,379
try and replicate the conditions that

84
00:04:18,829 --> 00:04:23,658
we'd have in a structure fire I see and

85
00:04:21,379 --> 00:04:25,908
you also train others or did you just

86

00:04:23,658 --> 00:04:29,658
train others or deal also fight fires

87
00:04:25,908 --> 00:04:32,718
yourself well of being in the service

88
00:04:29,658 --> 00:04:35,079
since 1987 so the first I suppose three

89
00:04:32,718 --> 00:04:38,899
quarters of my career was fighting fires

90
00:04:35,079 --> 00:04:40,788
but now that I'm more senior rank I just

91
00:04:38,899 --> 00:04:43,008
trained firefighters and only turn up to

92
00:04:40,788 --> 00:04:45,889
the larger fires on what we call an

93
00:04:43,009 --> 00:04:47,300
instant management team and do you do do

94
00:04:45,889 --> 00:04:48,918
do rescue work as well because I know

95
00:04:47,300 --> 00:04:51,829
firefighters do a rescue work quite a

96
00:04:48,918 --> 00:04:54,198
lot I'll look for sure I mean once again

97
00:04:51,829 --> 00:04:56,629
for all of my operational career I

98
00:04:54,199 --> 00:04:59,810
suppose when I was in a fire station and

99
00:04:56,629 --> 00:05:02,029
actively turning out to instance rescue

100
00:04:59,810 --> 00:05:05,030

with a domestic

101

00:05:02,029 --> 00:05:07,819

rescues I suppose in motor vehicle

102

00:05:05,029 --> 00:05:10,429

accidents and also industrial rescues in

103

00:05:07,819 --> 00:05:12,680

your profile you mentioned the signs of

104

00:05:10,430 --> 00:05:14,480

your occupation can you tell me a little

105

00:05:12,680 --> 00:05:16,400

bit about what it means and if you can

106

00:05:14,480 --> 00:05:18,050

give some examples especially my

107

00:05:16,399 --> 00:05:20,089

submitter I'd be particularly interested

108

00:05:18,050 --> 00:05:22,490

if some of your examples could relate to

109

00:05:20,089 --> 00:05:26,359

the victorian bushfires because we have

110

00:05:22,490 --> 00:05:28,280

had a bit of a chat about that yeah my

111

00:05:26,360 --> 00:05:30,889

more expertise sort of extends to the

112

00:05:28,279 --> 00:05:32,419

structure fire which is a little bit

113

00:05:30,889 --> 00:05:33,500

different to the bush fires but but

114

00:05:32,420 --> 00:05:37,460

basically just to give a bit of

115
00:05:33,500 --> 00:05:39,259
background the fire service is well the

116
00:05:37,459 --> 00:05:43,370
New South Wales Fire Brigade has been

117
00:05:39,259 --> 00:05:46,069
around since 1884 when beef prior that

118
00:05:43,370 --> 00:05:48,170
we had insurance fire brigades so people

119
00:05:46,069 --> 00:05:50,000
would ensure their houses and dumb and

120
00:05:48,170 --> 00:05:52,939
then the insurance brigades would

121
00:05:50,000 --> 00:05:54,949
protect those particular houses and at

122
00:05:52,939 --> 00:05:57,290
the turn of that other century before

123
00:05:54,949 --> 00:05:59,629
last now that he saw the best way was to

124
00:05:57,290 --> 00:06:01,670
join those fire services together and

125
00:05:59,629 --> 00:06:04,069
became the New South Wales Fire Brigades

126
00:06:01,670 --> 00:06:06,259
so we've been fighting fires for well

127
00:06:04,069 --> 00:06:08,779
well over 100 years but in a lot of ways

128
00:06:06,259 --> 00:06:12,310
the fighting of the fires was was

129
00:06:08,779 --> 00:06:14,449
experiential there was in fact the

130
00:06:12,310 --> 00:06:17,209
cultures and traditions if your likes

131
00:06:14,449 --> 00:06:19,370
that are passed on in what I sort of

132
00:06:17,209 --> 00:06:21,169
described as a tribal method of teaching

133
00:06:19,370 --> 00:06:23,420
and learning where the more experienced

134
00:06:21,170 --> 00:06:26,270
member would pass on their experiences

135
00:06:23,420 --> 00:06:27,890
to the next person and we certainly you

136
00:06:26,269 --> 00:06:30,589
know articulated that in our in our

137
00:06:27,889 --> 00:06:32,389
manuals and so on but it was still the

138
00:06:30,589 --> 00:06:34,279
way with the way we viewed fire in fort

139
00:06:32,389 --> 00:06:36,889
fires hadn't really changed over the

140
00:06:34,279 --> 00:06:39,969
over the last hundred years we were to

141
00:06:36,889 --> 00:06:42,349
port fire science when we were recruited

142
00:06:39,970 --> 00:06:44,120
and certainly knew about what we call

143

00:06:42,350 --> 00:06:45,260
the fire triangle and I suppose I

144
00:06:44,120 --> 00:06:49,430
probably talked about that a bit later

145
00:06:45,259 --> 00:06:53,079
on but in a lot of ways we didn't really

146
00:06:49,430 --> 00:06:55,189
understand that fire environment and

147
00:06:53,079 --> 00:06:57,709
therefore there were many sayings like

148
00:06:55,189 --> 00:07:00,230
fire is unpredictable and I suppose in

149
00:06:57,709 --> 00:07:02,329
some ways you know it wasn't really our

150
00:07:00,230 --> 00:07:03,470
fault if we didn't perform as well as we

151
00:07:02,329 --> 00:07:05,930
would have liked or we got ourselves

152
00:07:03,470 --> 00:07:08,240
into danger because because of that

153
00:07:05,930 --> 00:07:11,150
unpredictability and basically it was

154
00:07:08,240 --> 00:07:13,220
just a bad fire that day so I mean I

155
00:07:11,149 --> 00:07:15,469
supposed to give an example of where

156
00:07:13,220 --> 00:07:17,390
we've come and to lead into

157
00:07:15,470 --> 00:07:20,660

to where my career started going in a

158

00:07:17,389 --> 00:07:23,659

different direction was I joined in 1987

159

00:07:20,660 --> 00:07:25,610

in 1991 I was still wearing the same

160

00:07:23,660 --> 00:07:27,920

uniform that I was that was being worn

161

00:07:25,610 --> 00:07:29,300

in eighteen eighty four the only

162

00:07:27,920 --> 00:07:32,030

difference being we had a plastic helmet

163

00:07:29,300 --> 00:07:34,069

instead of a metal helmet at the time it

164

00:07:32,029 --> 00:07:36,549

didn't seem strange but as I look back

165

00:07:34,069 --> 00:07:38,990

now if you look at the advancements I

166

00:07:36,550 --> 00:07:41,900

suppose human kind of made in that time

167

00:07:38,990 --> 00:07:44,629

to still be wearing and using similar

168

00:07:41,899 --> 00:07:45,919

equipment 100 years later sort of gives

169

00:07:44,629 --> 00:07:48,769

you an indication of where the fire

170

00:07:45,920 --> 00:07:51,020

service was in terms of sort of looking

171

00:07:48,769 --> 00:07:53,509

at fire differently so in the early

172
00:07:51,019 --> 00:07:56,419
2000s I I was a station officer in one

173
00:07:53,509 --> 00:07:59,029
of the the fire stations in Sydney and I

174
00:07:56,420 --> 00:08:00,830
read a book called fog attack by an

175
00:07:59,029 --> 00:08:04,759
English firefighter called Paul Grimwood

176
00:08:00,829 --> 00:08:07,219
and here he had spent time in Sweden and

177
00:08:04,759 --> 00:08:09,740
in Europe where a lot of the fire

178
00:08:07,220 --> 00:08:11,419
service personnel there are also what we

179
00:08:09,740 --> 00:08:12,829
caught fire engineers so they're done

180
00:08:11,418 --> 00:08:15,620
degrees at university in particular

181
00:08:12,829 --> 00:08:17,269
wound University in Sweden and we're

182
00:08:15,620 --> 00:08:20,750
starting to sort of apply the scientific

183
00:08:17,269 --> 00:08:22,789
methods to how they fought fires and

184
00:08:20,750 --> 00:08:24,379
they were combining me I suppose the

185
00:08:22,790 --> 00:08:27,379
science personnel with the operational

186
00:08:24,379 --> 00:08:31,189
personnel and looking at how best to

187
00:08:27,379 --> 00:08:36,139
fight fires so I found myself on a trip

188
00:08:31,189 --> 00:08:38,360
to Sweden in 2002 to look at how they

189
00:08:36,139 --> 00:08:41,049
viewed fire and some of those scientific

190
00:08:38,360 --> 00:08:43,099
methods but not in bushfires

191
00:08:41,049 --> 00:08:45,588
unfortunately there's a whole science on

192
00:08:43,099 --> 00:08:47,480
its own but in terms of how a fire

193
00:08:45,589 --> 00:08:49,070
reacts in what we call a compartment so

194
00:08:47,480 --> 00:08:52,610
every structure fire whether it be a

195
00:08:49,070 --> 00:08:54,670
factory or a smaller residence is still

196
00:08:52,610 --> 00:08:56,839
just a compartment of a certain size and

197
00:08:54,669 --> 00:08:59,419
construction with a certain fuel load

198
00:08:56,839 --> 00:09:01,190
and we now steady study very carefully

199
00:08:59,419 --> 00:09:03,199
how fire operates within those

200

00:09:01,190 --> 00:09:04,720
boundaries yeah you mentioned the fire

201
00:09:03,200 --> 00:09:07,910
triangle do you want to expand on that

202
00:09:04,720 --> 00:09:11,389
yeah every firefighter since the moment

203
00:09:07,909 --> 00:09:13,789
they they join we call it the job since

204
00:09:11,389 --> 00:09:14,990
they join the job has known about the

205
00:09:13,789 --> 00:09:18,620
fire triangle it's actually a bit more

206
00:09:14,990 --> 00:09:20,930
complex than that it's sort of but it's

207
00:09:18,620 --> 00:09:23,810
a combination of heat fuel and oxygen

208
00:09:20,929 --> 00:09:27,919
and without that triangle if you like a

209
00:09:23,809 --> 00:09:29,328
heat fuel and oxygen the fire can exist

210
00:09:27,919 --> 00:09:31,009
so when we look at our extinguishment

211
00:09:29,328 --> 00:09:33,559
methods when we look at our control

212
00:09:31,009 --> 00:09:36,019
mechanisms to keep a fire how we want it

213
00:09:33,559 --> 00:09:38,388
to be we look at controlling one of

214
00:09:36,019 --> 00:09:41,060

those three items obviously when we use

215

00:09:38,389 --> 00:09:44,149

water we try and cool the heat we're

216

00:09:41,059 --> 00:09:46,309

very careful how we allow access to a

217

00:09:44,149 --> 00:09:48,320

fire in terms of oxygen whether that's

218

00:09:46,309 --> 00:09:50,869

breaking a window or opening a door or

219

00:09:48,320 --> 00:09:52,970

what we call ventilation and then we

220

00:09:50,870 --> 00:09:55,278

also try and manage the fuel load so

221

00:09:52,970 --> 00:09:56,959

with that very simple sort of three

222

00:09:55,278 --> 00:09:59,689

sided triangle of heat fuel and oxygen

223

00:09:56,958 --> 00:10:01,458

we try and control the fire you said

224

00:09:59,690 --> 00:10:03,860

that you specialize in structural fire

225

00:10:01,458 --> 00:10:06,289

but is there a similar science to bush

226

00:10:03,860 --> 00:10:08,509

fires as well oh look without a doubt

227

00:10:06,289 --> 00:10:10,159

and and I think we still have the fire

228

00:10:08,509 --> 00:10:13,909

try but we still have heat fuel and

229
00:10:10,159 --> 00:10:15,860
oxygen in a bushfire what we what really

230
00:10:13,909 --> 00:10:18,078
makes a difference I suppose you could

231
00:10:15,860 --> 00:10:20,120
say the fuel is different it's it's

232
00:10:18,078 --> 00:10:22,039
placed in a different manner but the

233
00:10:20,120 --> 00:10:24,589
main difference from where I sit in

234
00:10:22,039 --> 00:10:26,719
terms of a structural firefighter is the

235
00:10:24,589 --> 00:10:29,240
smoke is allowed to escape in a bush

236
00:10:26,720 --> 00:10:31,490
fire or a virus fire in a structure fire

237
00:10:29,240 --> 00:10:33,350
that smoke stays within the structure or

238
00:10:31,490 --> 00:10:36,409
within the compartment and it's that

239
00:10:33,350 --> 00:10:38,209
smoke that is also a form of fuel and

240
00:10:36,409 --> 00:10:39,769
that's sort of the main difference in

241
00:10:38,208 --> 00:10:44,448
where our firefighting is now heading in

242
00:10:39,769 --> 00:10:45,589
the past we didn't view smokers fuel we

243
00:10:44,448 --> 00:10:48,198
just viewed it as something that

244
00:10:45,589 --> 00:10:49,519
inhibited in our visibility we couldn't

245
00:10:48,198 --> 00:10:52,338
breathe in it so we could not write in

246
00:10:49,519 --> 00:10:55,310
it without breathing apparatus but we

247
00:10:52,339 --> 00:11:00,199
never quite made that real link to the

248
00:10:55,309 --> 00:11:01,789
to the smoke being fuel and that's one

249
00:11:00,198 --> 00:11:03,319
of the major things over the last 10

250
00:11:01,789 --> 00:11:05,469
years we've been working very hard on

251
00:11:03,320 --> 00:11:07,579
and one of the major things that I

252
00:11:05,470 --> 00:11:10,129
looked at in Sweden when i first

253
00:11:07,578 --> 00:11:11,958
traveled there the main impetus for a

254
00:11:10,129 --> 00:11:13,759
lot of this sort of study and a change

255
00:11:11,958 --> 00:11:16,458
in the way we fight fires and i'll get

256
00:11:13,759 --> 00:11:18,769
back to i suppose the message up into my

257

00:11:16,458 --> 00:11:22,369
profile was that what we call extreme

258
00:11:18,769 --> 00:11:24,278
fire behavior or rapid fire progress has

259
00:11:22,370 --> 00:11:26,720
killed firefighters around the world and

260
00:11:24,278 --> 00:11:28,698
understanding how the fire reacts and

261
00:11:26,720 --> 00:11:32,209
what we can do about it is all about

262
00:11:28,698 --> 00:11:34,129
keeping firefighters safer and a lot of

263
00:11:32,208 --> 00:11:36,099
the research and Sweden a lot of the new

264
00:11:34,129 --> 00:11:38,958
techniques and tactics they were using

265
00:11:36,100 --> 00:11:41,699
was all based on coming to grips with

266
00:11:38,958 --> 00:11:43,068
with three I suppose extreme fire

267
00:11:41,698 --> 00:11:46,318
phenomenon and they were flashover

268
00:11:43,068 --> 00:11:47,698
backdraft and fire gasps ignitions a lot

269
00:11:46,318 --> 00:11:50,509
of people probably heard about backdraft

270
00:11:47,698 --> 00:11:52,828
from the old fire movie and so on but

271
00:11:50,509 --> 00:11:55,230

certainly flashover and fire gasps

272

00:11:52,828 --> 00:11:57,719

ignitions are ever-present danger for

273

00:11:55,230 --> 00:12:00,329

firefighters and our techniques now deal

274

00:11:57,720 --> 00:12:02,579

with that and a lot of that is based on

275

00:12:00,328 --> 00:12:05,159

a firefighter having the underpinning

276

00:12:02,578 --> 00:12:06,628

knowledge to anticipate that event

277

00:12:05,159 --> 00:12:08,879

occurring and then doing something about

278

00:12:06,629 --> 00:12:10,589

it is critical thinking applied only

279

00:12:08,879 --> 00:12:12,688

during training and need predefined

280

00:12:10,589 --> 00:12:15,139

procedures or firefighters also trained

281

00:12:12,688 --> 00:12:19,168

to think critically on their feet both

282

00:12:15,139 --> 00:12:20,938

its I often say to my to my trainees and

283

00:12:19,168 --> 00:12:23,249

that we do the most difficult job in the

284

00:12:20,938 --> 00:12:25,048

world and I don't think a lot of people

285

00:12:23,249 --> 00:12:27,600

sort of realize that because we work in

286
00:12:25,048 --> 00:12:31,009
an environment which is time critical we

287
00:12:27,600 --> 00:12:33,480
have a rapidly changing hostile

288
00:12:31,009 --> 00:12:35,519
environment a very dynamic environment

289
00:12:33,480 --> 00:12:37,109
so when we first arrived we have certain

290
00:12:35,519 --> 00:12:39,359
things occurring and this gets back to

291
00:12:37,109 --> 00:12:41,160
the the old saying fires unpredictable

292
00:12:39,359 --> 00:12:43,499
but of course it's not unpredictable

293
00:12:41,159 --> 00:12:45,418
it's totally predictable it has to obey

294
00:12:43,499 --> 00:12:47,308
the laws of science what is

295
00:12:45,418 --> 00:12:49,519
unpredictable is when we arrive at an

296
00:12:47,308 --> 00:12:51,868
incident we're only seeing snapshots of

297
00:12:49,519 --> 00:12:53,459
we're seeing a certain amount of the

298
00:12:51,869 --> 00:12:55,259
smoke we're seeing what color it is

299
00:12:53,458 --> 00:12:57,058
we're seeing what velocity it's coming

300
00:12:55,259 --> 00:12:59,668
from the building we're seeing how much

301
00:12:57,058 --> 00:13:02,009
flame we may have we're looking at other

302
00:12:59,668 --> 00:13:03,470
windows black and we're looking at all

303
00:13:02,009 --> 00:13:05,308
these things and what we're trying to do

304
00:13:03,470 --> 00:13:07,019
we're trying to put together how much

305
00:13:05,308 --> 00:13:08,999
fuel might be inside what the

306
00:13:07,019 --> 00:13:11,909
construction is what the building

307
00:13:08,999 --> 00:13:13,589
profile is the building profile it is

308
00:13:11,909 --> 00:13:16,048
how air may move throughout that

309
00:13:13,589 --> 00:13:17,730
structure if I open this building up in

310
00:13:16,048 --> 00:13:20,188
a certain way will that allow the fire

311
00:13:17,730 --> 00:13:22,528
to have more air and so on so we have

312
00:13:20,188 --> 00:13:23,548
but we're anything small snapshots so

313
00:13:22,528 --> 00:13:26,609
we're only seeing a very small

314

00:13:23,548 --> 00:13:28,698
percentage of the actual fire act as

315
00:13:26,609 --> 00:13:31,769
it's showing itself and it's our

316
00:13:28,698 --> 00:13:32,998
inability I suppose to to make sense of

317
00:13:31,769 --> 00:13:35,759
that that makes the fire very

318
00:13:32,999 --> 00:13:38,129
unpredictable so we have certainly in

319
00:13:35,759 --> 00:13:39,778
our procedures we have procedures in an

320
00:13:38,129 --> 00:13:42,058
underpinning knowledge which which has

321
00:13:39,778 --> 00:13:44,639
us to a size up and try to make sense of

322
00:13:42,058 --> 00:13:46,738
what the fire is telling us in a lot of

323
00:13:44,639 --> 00:13:48,239
ways we call that reading the fire we

324
00:13:46,739 --> 00:13:50,850
then have to anticipate where the fires

325
00:13:48,239 --> 00:13:53,209
heading because invariably when we start

326
00:13:50,850 --> 00:13:55,528
to put in place some sort of proactive

327
00:13:53,208 --> 00:13:57,208
firefighters in certain positions or

328
00:13:55,528 --> 00:13:59,370

or we start to sort of fight this fire

329

00:13:57,208 --> 00:14:01,229

it will have moved on from where it was

330

00:13:59,370 --> 00:14:02,818

before and some of the things that we do

331

00:14:01,230 --> 00:14:06,509

may may cause it to move in certain

332

00:14:02,818 --> 00:14:08,068

directions traditionally this sort of

333

00:14:06,509 --> 00:14:11,278

very much standard operational procedure

334

00:14:08,068 --> 00:14:13,948

type of setup as mean that firefighters

335

00:14:11,278 --> 00:14:16,649

have sometimes become I suppose like

336

00:14:13,948 --> 00:14:18,568

robots in that we will check out our

337

00:14:16,649 --> 00:14:20,370

checklist I'll safety checklist and

338

00:14:18,568 --> 00:14:21,838

we'll do what we do in certain

339

00:14:20,370 --> 00:14:24,328

circumstances because that's what we've

340

00:14:21,839 --> 00:14:26,639

done before but one of the key things in

341

00:14:24,328 --> 00:14:28,469

the last ten years is that we are

342

00:14:26,639 --> 00:14:31,019

training firefighters to be more

343
00:14:28,470 --> 00:14:32,790
critical thinkers to be more flexible to

344
00:14:31,019 --> 00:14:35,698
work outside the square our building

345
00:14:32,789 --> 00:14:38,458
construction now our type of fuels the

346
00:14:35,698 --> 00:14:40,469
type of fires we fight now require this

347
00:14:38,458 --> 00:14:43,078
type of thinking it's sort of our

348
00:14:40,470 --> 00:14:45,300
training and element we use it we look

349
00:14:43,078 --> 00:14:46,998
on as toolboxes and it's up to the

350
00:14:45,299 --> 00:14:49,409
firefighter to select the best tool

351
00:14:46,999 --> 00:14:50,850
given his underpinning knowledge or her

352
00:14:49,409 --> 00:14:53,299
underpinning knowledge and apply to the

353
00:14:50,850 --> 00:14:56,308
situation so it's a very dynamic

354
00:14:53,299 --> 00:14:58,258
situation and it's very difficult to to

355
00:14:56,308 --> 00:14:59,730
train someone and that's why we have the

356
00:14:58,259 --> 00:15:01,680
live-fire training we actually light

357
00:14:59,730 --> 00:15:04,019
around fires we put firefighters in

358
00:15:01,679 --> 00:15:07,169
those situations under controlled

359
00:15:04,019 --> 00:15:09,870
conditions and so they can experience

360
00:15:07,169 --> 00:15:12,058
that before they they actually do in a

361
00:15:09,870 --> 00:15:15,089
real sense can you tell us about 3d

362
00:15:12,058 --> 00:15:17,308
firefighting yeah well 3d firefighting

363
00:15:15,089 --> 00:15:19,620
sort of was a term sort of coined by

364
00:15:17,308 --> 00:15:21,389
core Grimwood who was the author that I

365
00:15:19,620 --> 00:15:23,639
first read before I sort of supposed

366
00:15:21,389 --> 00:15:25,740
started my journey into looking at how

367
00:15:23,639 --> 00:15:27,180
to fight fires in a different way and it

368
00:15:25,740 --> 00:15:28,948
involves I think a lot of things would

369
00:15:27,179 --> 00:15:30,750
just talked about it involves a

370
00:15:28,948 --> 00:15:32,818
firefighter looking in a three get you

371

00:15:30,750 --> 00:15:35,159
know more three-dimensional sense in the

372
00:15:32,818 --> 00:15:37,139
past we probably had a very

373
00:15:35,159 --> 00:15:39,629
straightforward mission and that was

374
00:15:37,139 --> 00:15:42,870
basically due to to put water on to the

375
00:15:39,629 --> 00:15:44,970
fire and take that heat away and quite

376
00:15:42,870 --> 00:15:47,639
often that that led to sort of a tunnel

377
00:15:44,970 --> 00:15:49,050
like view where firefighters would enter

378
00:15:47,639 --> 00:15:50,490
rapidly they would move quickly through

379
00:15:49,049 --> 00:15:53,549
the structure trying to find the source

380
00:15:50,490 --> 00:15:54,928
of the heat quite often in most fires by

381
00:15:53,549 --> 00:15:56,338
fighters are lucky to be able to see

382
00:15:54,928 --> 00:15:59,278
their hand in front of their face so you

383
00:15:56,339 --> 00:16:02,100
losing a lot of your other senses in a

384
00:15:59,278 --> 00:16:04,289
lot of ways because you're you're trying

385
00:16:02,100 --> 00:16:05,850

to access the place which is hottest to

386

00:16:04,289 --> 00:16:08,099

impact on that in the quickest amount of

387

00:16:05,850 --> 00:16:09,159

time you actually become a bit of a heat

388

00:16:08,100 --> 00:16:11,319

seeker for one a bit

389

00:16:09,159 --> 00:16:12,669

word it was very much two-dimensional it

390

00:16:11,318 --> 00:16:14,828

was very much about just that one

391

00:16:12,669 --> 00:16:17,828

mission to get that hose line in to

392

00:16:14,828 --> 00:16:19,689

attack the fire and quite often we had a

393

00:16:17,828 --> 00:16:20,859

mission running at the same time and

394

00:16:19,690 --> 00:16:23,170

that was to rescue many people that

395

00:16:20,860 --> 00:16:25,060

might be inside and quite often both of

396

00:16:23,169 --> 00:16:27,338

those missions cause the conflict in the

397

00:16:25,059 --> 00:16:30,068

thinking of the firefighter in a 3d

398

00:16:27,339 --> 00:16:32,889

sense we're looking at now at looking at

399

00:16:30,068 --> 00:16:34,809

the the compartment and a three

400
00:16:32,889 --> 00:16:36,789
dimensional sense looking at the fuel

401
00:16:34,809 --> 00:16:38,979
load looking at the surrounding

402
00:16:36,789 --> 00:16:41,828
construction and once again looking at

403
00:16:38,980 --> 00:16:44,709
that smoke and just I can't I suppose

404
00:16:41,828 --> 00:16:47,429
exaggerate more anymore the importance

405
00:16:44,708 --> 00:16:50,198
of how we now view smokin and in the

406
00:16:47,429 --> 00:16:52,778
development of a standard room fire it's

407
00:16:50,198 --> 00:16:55,419
that smoke that causes the most danger

408
00:16:52,778 --> 00:16:57,568
to five phones if we have a small fire

409
00:16:55,419 --> 00:16:59,860
in a room maybe it's damned on a bed

410
00:16:57,568 --> 00:17:03,309
maybe it's in a kitchen maybe it's on

411
00:16:59,860 --> 00:17:05,740
the stove or fire starts more in that

412
00:17:03,309 --> 00:17:08,649
case and what we have then is as that

413
00:17:05,740 --> 00:17:10,088
fire starts to grow it will burn we call

414
00:17:08,650 --> 00:17:12,640
it either burning Lenalee or burning

415
00:17:10,088 --> 00:17:15,038
richly we have a flammability range just

416
00:17:12,640 --> 00:17:16,780
like we do at explosive gases if a fire

417
00:17:15,038 --> 00:17:18,818
has plenty of oxygen there probably

418
00:17:16,779 --> 00:17:21,818
won't be much smoke it'll burn very lean

419
00:17:18,818 --> 00:17:23,470
we'll have them plenty of flame but in a

420
00:17:21,818 --> 00:17:25,449
compartment it each soon starts to run

421
00:17:23,470 --> 00:17:27,519
low on that oxygen the fire is still

422
00:17:25,449 --> 00:17:29,380
burning but the smoke will start to dark

423
00:17:27,519 --> 00:17:31,990
and it will start to be thicker and we

424
00:17:29,380 --> 00:17:34,390
call that that smoke unburned products

425
00:17:31,990 --> 00:17:36,130
of combustion this carbon is sought as

426
00:17:34,390 --> 00:17:37,840
various chemicals and that's that's

427
00:17:36,130 --> 00:17:39,370
visibly what we can see in the smoke but

428

00:17:37,839 --> 00:17:41,769
what happens that smoke is hard it will

429
00:17:39,369 --> 00:17:43,599
rise but it can't go anywhere unlike a

430
00:17:41,769 --> 00:17:45,819
bushfire so we'll start to layer back

431
00:17:43,599 --> 00:17:49,089
down and we call that the neutral plane

432
00:17:45,819 --> 00:17:50,379
and that's the layer of smoke so you

433
00:17:49,089 --> 00:17:52,058
might have heard before whenever people

434
00:17:50,380 --> 00:17:55,210
are trapped in a fire we say to get down

435
00:17:52,058 --> 00:17:56,859
low and go-go-go because down low you

436
00:17:55,210 --> 00:17:58,769
still have less seat and you will still

437
00:17:56,859 --> 00:18:02,168
have air to breathe and good visibility

438
00:17:58,769 --> 00:18:04,269
so in a in a compartment that smoke

439
00:18:02,169 --> 00:18:06,130
starts to come down and we still can

440
00:18:04,269 --> 00:18:07,869
have a relatively small fire but it's

441
00:18:06,130 --> 00:18:11,289
growing and the smoke is getting hotter

442
00:18:07,869 --> 00:18:12,759

now at about 700 800 degrees that smoke

443

00:18:11,288 --> 00:18:16,569

comes into its auto-ignition temperature

444

00:18:12,759 --> 00:18:19,000

and it will reburn so as that room

445

00:18:16,569 --> 00:18:20,558

reaches that temperature the all of the

446

00:18:19,000 --> 00:18:22,359

smoke inside the room which meant now

447

00:18:20,558 --> 00:18:22,960

may only be a couple of feet off the

448

00:18:22,359 --> 00:18:24,939

ground

449

00:18:22,960 --> 00:18:27,159

we'll then burst into flame and that's

450

00:18:24,940 --> 00:18:28,570

what we call flash over and from that

451

00:18:27,159 --> 00:18:29,950

point then the room is then fully

452

00:18:28,569 --> 00:18:31,569

involved and you're talking at

453

00:18:29,950 --> 00:18:34,569

temperatures above a thousand degrees

454

00:18:31,569 --> 00:18:37,210

and that can happen very rapidly in a

455

00:18:34,569 --> 00:18:39,069

matter of seconds so we can have

456

00:18:37,210 --> 00:18:41,169

firefighters entering in structure we

457
00:18:39,069 --> 00:18:43,269
have a fire burning we have hot smoke

458
00:18:41,169 --> 00:18:45,490
filling the room and the heat is

459
00:18:43,269 --> 00:18:47,528
increasing we may also have a fire that

460
00:18:45,490 --> 00:18:49,089
is low on oxygen at this stage here so

461
00:18:47,528 --> 00:18:50,950
the fire is not burning quite as well as

462
00:18:49,089 --> 00:18:52,389
it should the actions of the

463
00:18:50,950 --> 00:18:55,179
firefighters even entering that

464
00:18:52,390 --> 00:18:58,419
structure there now providing a fresh

465
00:18:55,179 --> 00:18:59,950
air way the fire can now intensify it

466
00:18:58,419 --> 00:19:02,049
will get bigger the smoke will get

467
00:18:59,950 --> 00:19:04,960
hotter and once again we can bring on

468
00:19:02,048 --> 00:19:07,089
that flash over so what we do now is we

469
00:19:04,960 --> 00:19:08,890
have firefighters and this is something

470
00:19:07,089 --> 00:19:11,519
we never did in the past we now actively

471
00:19:08,890 --> 00:19:14,230
try and cool that gas layer we use our

472
00:19:11,519 --> 00:19:17,589
specially designed nozzles so put up a

473
00:19:14,230 --> 00:19:19,778
very fine water fog into those hot gases

474
00:19:17,589 --> 00:19:21,819
and if we can keep those hot gases below

475
00:19:19,778 --> 00:19:23,710
the auto-ignition temperature we can

476
00:19:21,819 --> 00:19:26,079
stop the room from flashing over and

477
00:19:23,710 --> 00:19:28,329
stop this rapid fire progress so

478
00:19:26,079 --> 00:19:30,308
firefighters in the past and for most of

479
00:19:28,329 --> 00:19:32,288
my career we would always hold our water

480
00:19:30,308 --> 00:19:34,750
we would never use our water until we

481
00:19:32,288 --> 00:19:37,298
found the actual fire because we used

482
00:19:34,750 --> 00:19:39,819
our water indiscriminately we ran the

483
00:19:37,298 --> 00:19:41,970
risk of steaming yourself or lessening

484
00:19:39,819 --> 00:19:44,048
visibility and making conditions worse

485

00:19:41,970 --> 00:19:45,490
and and this is where the the

486
00:19:44,048 --> 00:19:47,319
fundamental change has been in

487
00:19:45,490 --> 00:19:48,970
firefighting training and this was

488
00:19:47,319 --> 00:19:51,158
started by the Swedes in the early 80s

489
00:19:48,970 --> 00:19:53,980
where they actively use their their

490
00:19:51,159 --> 00:19:56,260
water before they reach the fire to cool

491
00:19:53,980 --> 00:19:58,620
the hot fire gases and stop the

492
00:19:56,259 --> 00:20:01,778
progression of the fire to full

493
00:19:58,619 --> 00:20:05,500
development and install flash over from

494
00:20:01,778 --> 00:20:07,750
occurring so our firefighters now sort

495
00:20:05,500 --> 00:20:10,089
of make that those decisions on the run

496
00:20:07,750 --> 00:20:11,648
they assess they assess a fire they

497
00:20:10,089 --> 00:20:13,658
assess whether it wants more oxygen and

498
00:20:11,648 --> 00:20:15,729
how to deal with that if they suspect

499
00:20:13,659 --> 00:20:17,380

that the fire wanted more air and most

500

00:20:15,730 --> 00:20:19,450

fires we go to do because once again

501

00:20:17,380 --> 00:20:21,730

they're enclosed in the structure they

502

00:20:19,450 --> 00:20:23,649

will actually do what we call anti

503

00:20:21,730 --> 00:20:26,230

ventilation they will close doors behind

504

00:20:23,648 --> 00:20:27,969

them they will keep that fire that part

505

00:20:26,230 --> 00:20:32,019

of the fire triangle the oxygen side of

506

00:20:27,970 --> 00:20:33,610

it suppressed so regardless of how hot

507

00:20:32,019 --> 00:20:36,369

the fire gases are they won't be within

508

00:20:33,609 --> 00:20:37,269

their flammable range so constantly our

509

00:20:36,369 --> 00:20:38,259

firefighters law

510

00:20:37,269 --> 00:20:40,569

are applying their underpinning

511

00:20:38,259 --> 00:20:42,190

knowledge based on science and the

512

00:20:40,569 --> 00:20:45,220

surrounding environment and how can they

513

00:20:42,190 --> 00:20:47,769

can manipulate that to ensure the fire

514
00:20:45,220 --> 00:20:49,450
stays under their control and that's a

515
00:20:47,769 --> 00:20:51,609
very very powerful thing which we never

516
00:20:49,450 --> 00:20:53,650
were able to do in the past without a

517
00:20:51,609 --> 00:20:55,719
complete understanding of how the fire

518
00:20:53,650 --> 00:20:58,030
operates and that's where the the

519
00:20:55,720 --> 00:20:59,980
critical thinking and the fire science

520
00:20:58,029 --> 00:21:01,299
and fire behavior comes in do you find

521
00:20:59,980 --> 00:21:02,860
that there are differences in approach

522
00:21:01,299 --> 00:21:04,990
between firefighters in different

523
00:21:02,859 --> 00:21:07,689
countries I look without a doubt it's

524
00:21:04,990 --> 00:21:09,730
sort of them you know I've trained and

525
00:21:07,690 --> 00:21:13,059
lectured in in Europe Great Britain and

526
00:21:09,730 --> 00:21:15,069
also in the States and in Asia the

527
00:21:13,059 --> 00:21:17,109
American firefighters are probably the

528
00:21:15,069 --> 00:21:19,029
most different it is funny in the fact

529
00:21:17,109 --> 00:21:20,529
that the different we're probably ninety

530
00:21:19,029 --> 00:21:22,420
five percent of like and five percent

531
00:21:20,529 --> 00:21:25,599
different because we do do the same job

532
00:21:22,420 --> 00:21:26,769
our traditions are very similar but we

533
00:21:25,599 --> 00:21:28,119
do have different ways in which we

534
00:21:26,769 --> 00:21:30,129
approach at the the building

535
00:21:28,119 --> 00:21:31,929
construction in the states is different

536
00:21:30,130 --> 00:21:33,400
without getting too technical they have

537
00:21:31,930 --> 00:21:34,810
a lot of tenement buildings they have a

538
00:21:33,400 --> 00:21:37,060
lot of timber buildings which are over a

539
00:21:34,809 --> 00:21:38,950
cup of couple of stories high so they

540
00:21:37,059 --> 00:21:40,690
tend to use different tactics they tend

541
00:21:38,950 --> 00:21:43,539
to be more aggressive in these buildings

542

00:21:40,690 --> 00:21:46,090
they tend to have a larger life risk the

543
00:21:43,539 --> 00:21:48,789
buildings most of our buildings that are

544
00:21:46,089 --> 00:21:50,709
medium rise to high rise of what we call

545
00:21:48,789 --> 00:21:54,159
design to survive the burn out of the

546
00:21:50,710 --> 00:21:56,890
contents so it stays a contents fire and

547
00:21:54,160 --> 00:21:59,380
the structure itself doesn't burn so

548
00:21:56,890 --> 00:22:01,180
they're your glass and steel your double

549
00:21:59,380 --> 00:22:02,710
brick construction in the states where

550
00:22:01,180 --> 00:22:04,210
you have a lot of timber buildings it

551
00:22:02,710 --> 00:22:06,160
becomes a structure fire very quickly

552
00:22:04,210 --> 00:22:08,519
and the life risk is enormous so they've

553
00:22:06,160 --> 00:22:11,410
devised different ways of doing that

554
00:22:08,519 --> 00:22:14,170
America is a very different fire service

555
00:22:11,410 --> 00:22:16,240
model they have over 30,000 separate

556
00:22:14,170 --> 00:22:18,610

five services over there in Australia we

557

00:22:16,240 --> 00:22:20,589

have a level 11 separate spire services

558

00:22:18,609 --> 00:22:22,059

they have a huge volunteer base where

559

00:22:20,589 --> 00:22:24,069

we're training probably isn't as good as

560

00:22:22,059 --> 00:22:26,409

it should be and they also there's this

561

00:22:24,069 --> 00:22:28,569

very gung-ho attitude when I was in the

562

00:22:26,410 --> 00:22:30,640

States last I remember if I if I to

563

00:22:28,569 --> 00:22:32,169

telling me that the the fire service is

564

00:22:30,640 --> 00:22:36,220

a hundred years of tradition unimpeded

565

00:22:32,170 --> 00:22:37,960

by progress so which which is it is very

566

00:22:36,220 --> 00:22:39,370

true and it really was my own

567

00:22:37,960 --> 00:22:41,710

experiences up until a couple of years

568

00:22:39,369 --> 00:22:43,569

ago but that the last 10 to 15 years

569

00:22:41,710 --> 00:22:45,910

certainly in Australia the fire services

570

00:22:43,569 --> 00:22:47,230

have had moved very much towards

571
00:22:45,910 --> 00:22:50,050
critical thinking and a science-based

572
00:22:47,230 --> 00:22:51,240
approach whereas in the States I suppose

573
00:22:50,049 --> 00:22:55,210
it's very traditional

574
00:22:51,240 --> 00:22:58,120
approach that it's okay to be 100 years

575
00:22:55,210 --> 00:22:59,529
of unimpeded by progress and they hold

576
00:22:58,119 --> 00:23:02,709
that very dear to their hearts in some

577
00:22:59,529 --> 00:23:04,329
ways and in some ways the service it's

578
00:23:02,710 --> 00:23:06,430
very easy for that to occur because

579
00:23:04,329 --> 00:23:09,129
there's a lot of ownership I suppose

580
00:23:06,430 --> 00:23:10,120
when people do things hard they they put

581
00:23:09,130 --> 00:23:11,920
their lives at risk in some

582
00:23:10,119 --> 00:23:15,219
circumstances it's very hard to change

583
00:23:11,920 --> 00:23:16,840
if you've been successful and I say that

584
00:23:15,220 --> 00:23:18,880
no builded comments because some of the

585
00:23:16,839 --> 00:23:20,349
problems when the fire service is for

586
00:23:18,880 --> 00:23:22,330
example I've never but every fire I've

587
00:23:20,349 --> 00:23:24,519
been to us out it eventually goes out

588
00:23:22,329 --> 00:23:27,159
sometimes it's very difficult to gauge

589
00:23:24,519 --> 00:23:29,799
how successful you were if the fire goes

590
00:23:27,160 --> 00:23:31,170
out no one's injured so I think in the

591
00:23:29,799 --> 00:23:35,250
past we haven't been as good at

592
00:23:31,170 --> 00:23:37,990
debriefing and validating our own

593
00:23:35,250 --> 00:23:39,910
techniques and experiences because it's

594
00:23:37,990 --> 00:23:42,640
been so easy to blame the fire and say

595
00:23:39,910 --> 00:23:45,190
it was just a bad fire that day so in

596
00:23:42,640 --> 00:23:47,590
the US they tend to be some brigades a

597
00:23:45,190 --> 00:23:49,900
very very proactive and very modern and

598
00:23:47,589 --> 00:23:52,269
cutting-edge and others are very very

599

00:23:49,900 --> 00:23:53,800
traditional in Europe once again

600
00:23:52,269 --> 00:23:56,859
traditions are very important but

601
00:23:53,799 --> 00:23:59,319
overall and probably led by Scandinavia

602
00:23:56,859 --> 00:24:01,959
and the UK very cutting edge in their

603
00:23:59,319 --> 00:24:04,240
technique in their understanding in

604
00:24:01,960 --> 00:24:06,640
their training of fire science and fire

605
00:24:04,240 --> 00:24:09,400
behavior and in Australia we're probably

606
00:24:06,640 --> 00:24:12,580
somewhere in between but we are very

607
00:24:09,400 --> 00:24:14,950
much a British a traditions lie with the

608
00:24:12,579 --> 00:24:16,539
British fire service so we tend to be

609
00:24:14,950 --> 00:24:18,160
very proactive in that area as well

610
00:24:16,539 --> 00:24:20,170
among people who work in dangerous

611
00:24:18,160 --> 00:24:22,210
professions there is often a high level

612
00:24:20,170 --> 00:24:24,279
of superstition do you find that that's

613
00:24:22,210 --> 00:24:26,110

true among your colleagues and do you

614

00:24:24,279 --> 00:24:27,940

have any personal superstitions related

615

00:24:26,109 --> 00:24:30,639

to your profession interesting

616

00:24:27,940 --> 00:24:33,640

interesting question but contended agree

617

00:24:30,640 --> 00:24:34,930

with you on that I suppose there are

618

00:24:33,640 --> 00:24:37,000

some firefighters that that are

619

00:24:34,930 --> 00:24:40,450

superstitious I think a lot of what we

620

00:24:37,000 --> 00:24:41,799

did was as you kept on doing it you'd

621

00:24:40,450 --> 00:24:44,080

build experience as I suppose in some

622

00:24:41,799 --> 00:24:46,089

ways before we really concentrated on

623

00:24:44,079 --> 00:24:48,609

the underpinning science and fire

624

00:24:46,089 --> 00:24:50,980

behavior we tended to look at a fire and

625

00:24:48,609 --> 00:24:53,709

say that doesn't look good or or say

626

00:24:50,980 --> 00:24:55,839

things like I just knew it was it this

627

00:24:53,710 --> 00:24:57,579

wasn't going to turn out well or I

628
00:24:55,839 --> 00:24:59,259
looked at it and just knew it wasn't

629
00:24:57,579 --> 00:25:02,769
right but we had trouble articulating

630
00:24:59,259 --> 00:25:04,849
that just from our experiences we we

631
00:25:02,769 --> 00:25:06,920
would sort of say things like that and

632
00:25:04,849 --> 00:25:09,259
and we would maybe anticipate things

633
00:25:06,920 --> 00:25:11,240
before they happen but still not quite

634
00:25:09,259 --> 00:25:13,400
understand why they happened because of

635
00:25:11,240 --> 00:25:16,069
just just from experience and just from

636
00:25:13,400 --> 00:25:17,690
seeing things occur in the past but in a

637
00:25:16,069 --> 00:25:20,299
lot of ways I think I think firefighters

638
00:25:17,690 --> 00:25:23,330
are probably quite the opposite they can

639
00:25:20,299 --> 00:25:26,899
be very practical people they tend to

640
00:25:23,329 --> 00:25:28,819
trust I suppose trust more their own

641
00:25:26,900 --> 00:25:31,040
abilities rather than leave things to

642
00:25:28,819 --> 00:25:32,659
fate or four in a bit of a word they

643
00:25:31,039 --> 00:25:35,480
tend to trust in their their comrades

644
00:25:32,660 --> 00:25:37,700
and yeah just very practical people so I

645
00:25:35,480 --> 00:25:40,400
suppose that that offsets the the

646
00:25:37,700 --> 00:25:43,160
superstitious angle me in some ways but

647
00:25:40,400 --> 00:25:44,690
interesting question but um I don't

648
00:25:43,160 --> 00:25:46,340
think we were over-represented in the

649
00:25:44,690 --> 00:25:48,620
superstitious side of things and like i

650
00:25:46,339 --> 00:25:51,199
said i think the practical nature of the

651
00:25:48,619 --> 00:25:53,089
job probably overrides them all up in a

652
00:25:51,200 --> 00:25:54,980
lot of cases John McDonald thank you

653
00:25:53,089 --> 00:25:56,689
very much for joining me on the skeptics

654
00:25:54,980 --> 00:26:08,120
on podcast No thank you very much for

655
00:25:56,690 --> 00:26:10,549
having me it was great hi I'm dr. ginger

656

00:26:08,119 --> 00:26:13,369
Campbell I started the brain science

657
00:26:10,549 --> 00:26:16,159
podcast in December 2006 with the

658
00:26:13,369 --> 00:26:18,679
tagline the show for everyone who has a

659
00:26:16,160 --> 00:26:21,800
brain because you don't need a PhD to

660
00:26:18,680 --> 00:26:25,190
enjoy my podcast all you need is

661
00:26:21,799 --> 00:26:28,069
curiosity about how our brains make us

662
00:26:25,190 --> 00:26:31,009
who we are the brain science podcast is

663
00:26:28,069 --> 00:26:33,470
not a self-help show but understanding

664
00:26:31,009 --> 00:26:36,559
how the brain works will give you useful

665
00:26:33,470 --> 00:26:39,500
insights into your own behavior and the

666
00:26:36,559 --> 00:26:41,329
behavior of others on the show I talk

667
00:26:39,500 --> 00:26:44,289
about the latest books about the brain

668
00:26:41,329 --> 00:26:46,730
and I interview leading scientists of

669
00:26:44,289 --> 00:26:49,549
course I would love to be discovered by

670
00:26:46,730 --> 00:26:52,700

NPR but until then you can find the

671

00:26:49,549 --> 00:26:56,950

brain science podcast in iTunes and at

672

00:26:52,700 --> 00:26:56,950

brain science podcast com

673

00:27:04,589 --> 00:27:13,509

now it's time for dr. Rachel reports

674

00:27:07,990 --> 00:27:16,509

with dr. Rachel Dunlop hello listeners

675

00:27:13,509 --> 00:27:18,730

and welcome to dr. Richie reports well

676

00:27:16,509 --> 00:27:21,609

the avian or Australian vaccination

677

00:27:18,730 --> 00:27:23,589

network are not happy it seems another

678

00:27:21,609 --> 00:27:25,990

venue has pulled the plug on them at the

679

00:27:23,589 --> 00:27:29,049

last minute this time the Uniting Church

680

00:27:25,990 --> 00:27:31,720

in the city of Perth withdrew access to

681

00:27:29,049 --> 00:27:33,579

their venue for a scheduled seminar due

682

00:27:31,720 --> 00:27:36,640

to be held in Perth on Friday night

683

00:27:33,579 --> 00:27:38,589

which is tonight according to the church

684

00:27:36,640 --> 00:27:40,450

there were concerns raised by a number

685
00:27:38,589 --> 00:27:42,699
of people including prominent church

686
00:27:40,450 --> 00:27:44,890
members who are experts in the field of

687
00:27:42,700 --> 00:27:47,140
ethics and Public Health that the

688
00:27:44,890 --> 00:27:49,060
message promoted by the avian is not in

689
00:27:47,140 --> 00:27:51,759
line with the ethos and values of the

690
00:27:49,059 --> 00:27:53,710
Uniting Church in Australia Meryl Dory

691
00:27:51,759 --> 00:27:56,170
who is the immediate past president and

692
00:27:53,710 --> 00:27:58,180
now media spokesperson received

693
00:27:56,170 --> 00:28:00,850
notification as she was about to board a

694
00:27:58,180 --> 00:28:05,640
plane to travel from Brisbane to Perth a

695
00:28:00,849 --> 00:28:08,109
five hour and 3600 kilometre journey

696
00:28:05,640 --> 00:28:10,270
according to a newsletter sent after the

697
00:28:08,109 --> 00:28:12,339
event mrs. story was queuing to catch

698
00:28:10,269 --> 00:28:14,619
her flight when the mission development

699
00:28:12,339 --> 00:28:17,289
officer for the Uniting Church called to

700
00:28:14,619 --> 00:28:19,539
break the news with less than 24 hours

701
00:28:17,289 --> 00:28:21,369
to go before the scheduled event and no

702
00:28:19,539 --> 00:28:23,829
venue for the hundred plus people

703
00:28:21,369 --> 00:28:25,989
already booked mrs. storey had no choice

704
00:28:23,829 --> 00:28:27,669
but to forfeit her plane tickets valued

705
00:28:25,990 --> 00:28:31,960
at seven hundred and fifty dollars and

706
00:28:27,670 --> 00:28:34,660
returned home and she is livid now the

707
00:28:31,960 --> 00:28:36,340
avian organised the current seminar to

708
00:28:34,660 --> 00:28:38,590
capitalize on the recent spate of

709
00:28:36,339 --> 00:28:40,539
adverse reactions to the seasonal flu

710
00:28:38,589 --> 00:28:42,849
vaccine in children under five years of

711
00:28:40,539 --> 00:28:45,009
age the vaccination program was

712
00:28:42,849 --> 00:28:48,069
suspended several weeks ago and remain

713

00:28:45,009 --> 00:28:51,519
so following reports of high fevers and

714
00:28:48,069 --> 00:28:53,710
febrile convulsions initial thoughts

715
00:28:51,519 --> 00:28:56,170
that a bad batch was to blame have since

716
00:28:53,710 --> 00:28:58,329
been discounted following testing and

717
00:28:56,170 --> 00:29:02,170
information that more than one batch was

718
00:28:58,329 --> 00:29:04,269
involved the vaccine manufacturers CSL

719
00:29:02,170 --> 00:29:07,930
and independent bodies are continuing to

720
00:29:04,269 --> 00:29:10,359
investigate but to date australia wide

721
00:29:07,930 --> 00:29:11,500
over 400 reactions have been reported in

722
00:29:10,359 --> 00:29:13,719
five states

723
00:29:11,500 --> 00:29:17,170
the majority of which occurred in perth

724
00:29:13,720 --> 00:29:19,509
western australia most children have

725
00:29:17,170 --> 00:29:21,610
recovered but one child in queensland

726
00:29:19,509 --> 00:29:24,609
died 12 hours after receiving the

727
00:29:21,609 --> 00:29:26,709

vaccine the coroner found no evidence to

728

00:29:24,609 --> 00:29:30,309

implicate the vaccine but investigations

729

00:29:26,710 --> 00:29:32,100

are ongoing yet despite this mrs. dory

730

00:29:30,309 --> 00:29:35,470

states in her blurb for the seminar

731

00:29:32,099 --> 00:29:37,359

quote to date more than 300 serious

732

00:29:35,470 --> 00:29:39,100

reactions to the current seasonal flu

733

00:29:37,359 --> 00:29:41,379

shot have been reported in children

734

00:29:39,099 --> 00:29:43,389

under the age of five with one child

735

00:29:41,380 --> 00:29:46,990

known to have died within hours of being

736

00:29:43,390 --> 00:29:50,290

vaccinated there is no mention that the

737

00:29:46,990 --> 00:29:52,120

coroner has found no evidence of this so

738

00:29:50,289 --> 00:29:54,730

the avn seminar which has since been

739

00:29:52,119 --> 00:29:57,729

cancelled was called flu vaccines and

740

00:29:54,730 --> 00:30:00,460

informed choice and was to cover quote

741

00:29:57,730 --> 00:30:02,259

this talk examines the risk of flu to

742
00:30:00,460 --> 00:30:04,240
children the effectiveness of the

743
00:30:02,259 --> 00:30:05,950
vaccine and the additional risks to

744
00:30:04,240 --> 00:30:09,460
children's health of adding another

745
00:30:05,950 --> 00:30:11,319
vaccine to the childhood schedule in her

746
00:30:09,460 --> 00:30:13,720
talk Meryl Dorie will discuss how

747
00:30:11,319 --> 00:30:16,269
vaccines are intended to work and why it

748
00:30:13,720 --> 00:30:17,799
is that they often don't she will talk

749
00:30:16,269 --> 00:30:20,109
about the known side effects of

750
00:30:17,799 --> 00:30:21,669
childhood and adult shots and reveal

751
00:30:20,109 --> 00:30:23,679
that according to the Australian

752
00:30:21,670 --> 00:30:25,600
Government as few as one percent of

753
00:30:23,680 --> 00:30:27,340
vaccine reactions ever get reported

754
00:30:25,599 --> 00:30:30,669
leading to a belief that they are

755
00:30:27,339 --> 00:30:32,500
perfectly safe unquote but one of the

756
00:30:30,670 --> 00:30:33,910
criticisms that has been leveled at the

757
00:30:32,500 --> 00:30:37,299
government is the question of how

758
00:30:33,910 --> 00:30:40,450
thoroughly the current 2010 seasonal flu

759
00:30:37,299 --> 00:30:42,460
triple antigen has been tested this

760
00:30:40,450 --> 00:30:46,809
year's vaccine contains three viral

761
00:30:42,460 --> 00:30:50,500
components the h1n1 the h3n2 and the be

762
00:30:46,809 --> 00:30:52,000
Brisbane strain Ian bar who is the

763
00:30:50,500 --> 00:30:54,069
deputy director of the World Health

764
00:30:52,000 --> 00:30:56,470
Organization's influenza Center in

765
00:30:54,069 --> 00:30:58,750
Melbourne was interviewed on Monday

766
00:30:56,470 --> 00:31:00,279
April the 26th about the question of

767
00:30:58,750 --> 00:31:02,529
whether the current seasonal flu

768
00:31:00,279 --> 00:31:05,049
combination has been tested in clinical

769
00:31:02,529 --> 00:31:08,440
trials here's an excerpt from that

770

00:31:05,049 --> 00:31:11,169
interview played on ABC radio in

771
00:31:08,440 --> 00:31:12,820
Australia we don't require that the

772
00:31:11,170 --> 00:31:14,240
points of vaccine the seasonal vaccine

773
00:31:12,819 --> 00:31:15,960
is

774
00:31:14,240 --> 00:31:18,808
combinations but they have done that

775
00:31:15,960 --> 00:31:21,028
overseas so they have tested in fact

776
00:31:18,808 --> 00:31:24,990
giving a full seasonal vaccine with the

777
00:31:21,028 --> 00:31:27,179
swine flu so for vaccines at once if you

778
00:31:24,990 --> 00:31:29,669
like and there were no untoward effects

779
00:31:27,179 --> 00:31:31,679
there so I think there's a high

780
00:31:29,669 --> 00:31:34,200
expectation that the combination of

781
00:31:31,679 --> 00:31:35,940
these three viruses will be no different

782
00:31:34,200 --> 00:31:38,370
from any other three viruses which we

783
00:31:35,940 --> 00:31:41,070
include every year without doing for

784
00:31:38,369 --> 00:31:43,408

more safety testing which takes quite a

785

00:31:41,069 --> 00:31:45,058

period of time and is that extremely

786

00:31:43,409 --> 00:31:46,889

expensive and time-consuming so in your

787

00:31:45,058 --> 00:31:49,288

opinion the fact that it is a

788

00:31:46,888 --> 00:31:51,778

combination vaccine would have nothing

789

00:31:49,288 --> 00:31:54,000

to do with this situation that we've got

790

00:31:51,778 --> 00:31:56,929

at the moment as far as you know now I

791

00:31:54,000 --> 00:31:59,278

think that's unlikely to be a factor

792

00:31:56,929 --> 00:32:02,450

certainly all viruses are slightly

793

00:31:59,278 --> 00:32:05,788

different but in terms of how they're

794

00:32:02,450 --> 00:32:07,850

produced in in the laboratory and tested

795

00:32:05,788 --> 00:32:10,169

in laboratory and then made in the

796

00:32:07,849 --> 00:32:13,138

commercial scale vaccine production

797

00:32:10,169 --> 00:32:14,278

areas they're all investigating

798

00:32:13,138 --> 00:32:17,398

individually for any particular

799
00:32:14,278 --> 00:32:19,019
differences in those viruses which might

800
00:32:17,398 --> 00:32:23,129
lead to some of these things that we're

801
00:32:19,019 --> 00:32:25,829
seeing currently such as fever so I

802
00:32:23,130 --> 00:32:27,809
think that it's unlikely but I guess we

803
00:32:25,829 --> 00:32:30,329
have to wait and see on analysis of

804
00:32:27,808 --> 00:32:32,089
these particular batches is it possible

805
00:32:30,329 --> 00:32:34,379
that it might have just been a bad match

806
00:32:32,089 --> 00:32:36,178
well I think there is multiple batches

807
00:32:34,380 --> 00:32:38,220
involved so I think that's unlikely

808
00:32:36,179 --> 00:32:39,778
again if it was a single batch than you

809
00:32:38,220 --> 00:32:41,278
might think that might be the case that

810
00:32:39,778 --> 00:32:43,769
if multiple batches are involved in

811
00:32:41,278 --> 00:32:46,798
that's less likely I think but again we

812
00:32:43,769 --> 00:32:48,720
still need to wait so every year CS

813
00:32:46,798 --> 00:32:50,819
Elle's flu vax vaccine contains

814
00:32:48,720 --> 00:32:53,130
fragments of three different types of

815
00:32:50,819 --> 00:32:55,019
influenza virus as recommended by the

816
00:32:53,130 --> 00:32:56,909
Therapeutic Goods Administration and

817
00:32:55,019 --> 00:32:58,679
this depends on the strains of

818
00:32:56,909 --> 00:33:02,519
infectious flu in the environment at the

819
00:32:58,679 --> 00:33:04,860
time in addition flu viruses mutate from

820
00:33:02,519 --> 00:33:06,538
season to season so vaccines become less

821
00:33:04,859 --> 00:33:09,418
effective and need to be modified to

822
00:33:06,538 --> 00:33:11,638
keep up with the current mutants the flu

823
00:33:09,419 --> 00:33:13,830
vaccine is tried and true technology

824
00:33:11,638 --> 00:33:15,928
only changing for the type of viral

825
00:33:13,829 --> 00:33:18,658
components year to year and there has

826
00:33:15,929 --> 00:33:20,700
not been a problem before but flu

827

00:33:18,659 --> 00:33:23,370
vaccines are tested in Australia in

828
00:33:20,700 --> 00:33:27,690
clinical trials just this combination

829
00:33:23,369 --> 00:33:30,658
has not flu vax jr. was tested in two

830
00:33:27,690 --> 00:33:32,669
five and 2006 and this showed a very

831
00:33:30,659 --> 00:33:36,149
good safety and efficacy profile in

832
00:33:32,669 --> 00:33:38,190
clinical trials in a group of 298

833
00:33:36,148 --> 00:33:40,349
children there were no reports of

834
00:33:38,190 --> 00:33:42,269
serious adverse events during the

835
00:33:40,349 --> 00:33:45,418
vaccination period or seven days

836
00:33:42,269 --> 00:33:48,028
following pan vax jr. which is the

837
00:33:45,419 --> 00:33:51,389
thimerosal free h1n one vaccine for

838
00:33:48,028 --> 00:33:53,819
children was tested in a 2009 trial and

839
00:33:51,388 --> 00:33:55,949
showed approximately thirty percent mild

840
00:33:53,819 --> 00:33:58,349
to moderate adverse events in children

841
00:33:55,950 --> 00:34:01,440

under the age of eight the clinical

842

00:33:58,349 --> 00:34:03,480

trial data was evaluated by the TGA and

843

00:34:01,440 --> 00:34:06,389

reviewed by the expert advisory

844

00:34:03,480 --> 00:34:08,818

committee on prescription medicines pan

845

00:34:06,388 --> 00:34:11,969

box was approved by the TGA on december

846

00:34:08,818 --> 00:34:16,190

three 2009 and the national immunization

847

00:34:11,969 --> 00:34:18,750

program began on September the 30th 2009

848

00:34:16,190 --> 00:34:20,849

since then the TGA has been closely

849

00:34:18,750 --> 00:34:24,148

monitoring any side effects from the use

850

00:34:20,849 --> 00:34:26,669

of the vaccine and to date approximately

851

00:34:24,148 --> 00:34:29,909

six million doses of pan vacs have been

852

00:34:26,668 --> 00:34:31,888

distributed in Australia and a total of

853

00:34:29,909 --> 00:34:35,369

twelve hundred and eighty nine adverse

854

00:34:31,889 --> 00:34:37,409

events have been reported to the TGA but

855

00:34:35,369 --> 00:34:39,358

importantly it has not yet been clearly

856
00:34:37,409 --> 00:34:41,358
established if these adverse events

857
00:34:39,358 --> 00:34:44,068
reported in Perth Western Australia

858
00:34:41,358 --> 00:34:47,039
constitute a true spike in adverse

859
00:34:44,068 --> 00:34:49,500
events the federal government's chief

860
00:34:47,039 --> 00:34:51,989
medical officer professor Jim Bishop

861
00:34:49,500 --> 00:34:53,818
said some three million doses of the

862
00:34:51,989 --> 00:34:56,250
seasonal flu vaccine have gone out this

863
00:34:53,818 --> 00:34:58,710
year with up to two-thirds sent to Perth

864
00:34:56,250 --> 00:35:01,108
Western Australia this could be a

865
00:34:58,710 --> 00:35:03,150
partial explanation as to why the state

866
00:35:01,108 --> 00:35:06,179
has experienced a much higher rate of

867
00:35:03,150 --> 00:35:09,800
complications normally expected in one

868
00:35:06,179 --> 00:35:12,868
out of every 1,000 to 10,000 cases and

869
00:35:09,800 --> 00:35:15,210
also Western Australia now provides the

870
00:35:12,869 --> 00:35:17,400
seasonal flu shot for free to children

871
00:35:15,210 --> 00:35:19,650
under five whereas the rest of the

872
00:35:17,400 --> 00:35:21,480
country doesn't the initiative to

873
00:35:19,650 --> 00:35:24,780
distribute free vaccinations for

874
00:35:21,480 --> 00:35:26,880
children was started after a 2007 flu

875
00:35:24,780 --> 00:35:29,160
season where eight children across

876
00:35:26,880 --> 00:35:31,920
Australia under the age of five died

877
00:35:29,159 --> 00:35:33,809
within 24 hours of developing mild and

878
00:35:31,920 --> 00:35:37,980
nonspecific symptoms of respiratory

879
00:35:33,809 --> 00:35:41,170
infection as part of the trial in 2008

880
00:35:37,980 --> 00:35:43,358
almost 65 thousand children aged 5

881
00:35:41,170 --> 00:35:46,619
younger in Western Australia received

882
00:35:43,358 --> 00:35:48,429
free flu vaccinations and this reduced

883
00:35:46,619 --> 00:35:51,010
hospitalizations by eighty-eight percent

884

00:35:48,429 --> 00:35:53,858
the state's health department has said

885
00:35:51,010 --> 00:35:56,410
but then scientific facts and evidence

886
00:35:53,858 --> 00:35:58,630
are not something that the avn seems to

887
00:35:56,409 --> 00:36:01,358
care too much about but perhaps the

888
00:35:58,630 --> 00:36:03,338
Uniting Church does this is not the

889
00:36:01,358 --> 00:36:05,980
first time the avian has been refused

890
00:36:03,338 --> 00:36:10,058
access to a venue after having organized

891
00:36:05,980 --> 00:36:11,980
books and advertised a seminar in 2009

892
00:36:10,059 --> 00:36:14,589
they were forced to find another venue

893
00:36:11,980 --> 00:36:16,809
at short notice after a school in South

894
00:36:14,588 --> 00:36:19,029
Australia declined their appearance

895
00:36:16,809 --> 00:36:22,269
following notification of the nature of

896
00:36:19,030 --> 00:36:24,430
their material someone pondered on

897
00:36:22,269 --> 00:36:26,440
facebook today that the avian would save

898
00:36:24,429 --> 00:36:28,629

themselves a lot of time hassle and

899

00:36:26,440 --> 00:36:31,809

money if they weren't so liberal with

900

00:36:28,630 --> 00:36:34,480

the truth whilst publicly claiming to be

901

00:36:31,809 --> 00:36:37,119

pro-choice the avian preachers a clear

902

00:36:34,480 --> 00:36:39,219

anti-vaccination message designed to

903

00:36:37,119 --> 00:36:41,980

scare parents into shunning vaccinations

904

00:36:39,219 --> 00:36:44,108

for their children here's an excerpt

905

00:36:41,980 --> 00:36:47,440

from Australia's nightly news show the

906

00:36:44,108 --> 00:36:50,078

7pm project Australia's immunization

907

00:36:47,440 --> 00:36:51,309

rate is now at a seven-year low with

908

00:36:50,079 --> 00:36:53,410

only eighty-three percent of

909

00:36:51,309 --> 00:36:56,079

four-year-olds covered the issue has

910

00:36:53,409 --> 00:36:58,358

divided parents none more so than Sonia

911

00:36:56,079 --> 00:37:00,789

and Martyn Williams the vaccine debate

912

00:36:58,358 --> 00:37:02,558

almost ended their marriage I like to

913
00:37:00,789 --> 00:37:05,139
see myself as an open person that just

914
00:37:02,559 --> 00:37:06,369
looking at all evidence happen if you

915
00:37:05,139 --> 00:37:12,210
had a choice you wouldn't you were no

916
00:37:06,369 --> 00:37:14,350
vaccinated he had a choice I pretend

917
00:37:12,210 --> 00:37:16,750
basically it comes down to a stalemate

918
00:37:14,349 --> 00:37:18,460
and I literally had to put the marriage

919
00:37:16,750 --> 00:37:21,309
on the line it was either the kids get

920
00:37:18,460 --> 00:37:22,869
vaccinated or Martin leap so I was sort

921
00:37:21,309 --> 00:37:25,779
of end up being an obvious choice after

922
00:37:22,869 --> 00:37:28,630
that didn't man at this stage the kids

923
00:37:25,780 --> 00:37:30,519
it healthy you know Ethan has a slight

924
00:37:28,630 --> 00:37:34,059
learning difficulty and so forth connect

925
00:37:30,519 --> 00:37:35,590
the computer to the vaccination the

926
00:37:34,059 --> 00:37:37,719
speech pediment is not due to the

927
00:37:35,590 --> 00:37:40,300
vaccinations oh my god it is not today

928
00:37:37,719 --> 00:37:43,179
you know as you can create a spell rages

929
00:37:40,300 --> 00:37:44,650
on suffice it to say the avian has

930
00:37:43,179 --> 00:37:46,779
flooded the church with letters of

931
00:37:44,650 --> 00:37:48,700
complaint claiming a right to free

932
00:37:46,780 --> 00:37:50,320
speech likening the church's

933
00:37:48,699 --> 00:37:52,509
cancellation of the seminar to the

934
00:37:50,320 --> 00:37:55,480
persecution of Jesus amongst other

935
00:37:52,510 --> 00:37:59,080
things here's what Meryl Dory had to say

936
00:37:55,480 --> 00:38:01,780
quote I'm certainly not saying that what

937
00:37:59,079 --> 00:38:03,549
we're doing is godlike in any way but I

938
00:38:01,780 --> 00:38:05,710
mean that the sort of things that Jesus

939
00:38:03,550 --> 00:38:07,570
put up with in his lifetime is the sort

940
00:38:05,710 --> 00:38:09,610
of things that are happening with anyone

941

00:38:07,570 --> 00:38:13,030
who questions the status quo on

942
00:38:09,610 --> 00:38:14,980
vaccinations the church has also issued

943
00:38:13,030 --> 00:38:17,680
a statement which says amongst other

944
00:38:14,980 --> 00:38:19,510
things one of the church's concerns is

945
00:38:17,679 --> 00:38:22,449
that there may be a public perception

946
00:38:19,510 --> 00:38:24,940
that the UCI see does not support

947
00:38:22,449 --> 00:38:27,129
childhood vaccinations due to the avn

948
00:38:24,940 --> 00:38:29,470
seminar being held in our rooms in

949
00:38:27,130 --> 00:38:31,750
addition the level of public response

950
00:38:29,469 --> 00:38:34,149
has raised security concerns for other

951
00:38:31,750 --> 00:38:37,420
users of our buildings this is something

952
00:38:34,150 --> 00:38:38,980
we wish to avoid if you'd like to

953
00:38:37,420 --> 00:38:44,139
contact the church with your thoughts

954
00:38:38,980 --> 00:38:47,380
please go to dub dub dub dot W a dot you

955
00:38:44,139 --> 00:38:50,500

see a dot org dot a you and follow the

956

00:38:47,380 --> 00:38:54,690

links to contact us and until next time

957

00:38:50,500 --> 00:38:54,690

this has been dr. Reggie reports

958

00:38:58,530 --> 00:39:04,690

this is brian dunning from sceptile calm

959

00:39:01,929 --> 00:39:06,519

skep tide is a short weekly podcast

960

00:39:04,690 --> 00:39:08,889

taking a critical look at the

961

00:39:06,519 --> 00:39:11,259

pseudo-sciences that infect popular

962

00:39:08,889 --> 00:39:13,989

culture whenever I'm not locked in the

963

00:39:11,260 --> 00:39:16,830

recording studio I'm listening to the

964

00:39:13,989 --> 00:39:16,829

skeptic zone

965

00:39:25,079 --> 00:39:31,269

thank you for listening to the skeptic

966

00:39:27,969 --> 00:39:32,858

zone now my good friend Travis Roy sent

967

00:39:31,268 --> 00:39:35,708

me a message so I'm going to pass it

968

00:39:32,858 --> 00:39:38,858

along to you Granite State skeptics will

969

00:39:35,708 --> 00:39:41,818

be having a skeptics panel at Granite

970
00:39:38,858 --> 00:39:45,038
con in Manchester New Hampshire on the

971
00:39:41,818 --> 00:39:47,108
twenty-third of May lots of interesting

972
00:39:45,039 --> 00:39:50,950
people coming along skeptical people to

973
00:39:47,108 --> 00:39:54,900
take part of the granite con please have

974
00:39:50,949 --> 00:39:58,568
a look for more information at Granite

975
00:39:54,900 --> 00:40:01,920
con-com or of course at Granite State

976
00:39:58,568 --> 00:40:03,880
skeptics dot-com anybody in the area

977
00:40:01,920 --> 00:40:05,108
this is going to be really worth

978
00:40:03,880 --> 00:40:06,818
checking out they've got some people

979
00:40:05,108 --> 00:40:09,278
coming from the James Randi Educational

980
00:40:06,818 --> 00:40:12,699
Foundation what are my good friends

981
00:40:09,278 --> 00:40:14,679
kitty is going along Jeff wag lots of

982
00:40:12,699 --> 00:40:17,889
other people certainly worth checking

983
00:40:14,679 --> 00:40:19,298
out but in the meantime thank you for

984
00:40:17,889 --> 00:40:21,159
listening with the skeptic zone and

985
00:40:19,298 --> 00:40:23,018
thank you for those people writing in

986
00:40:21,159 --> 00:40:25,118
telling me that they yes last week I

987
00:40:23,018 --> 00:40:27,848
help them go to sleep as soon as they

988
00:40:25,119 --> 00:40:29,769
hear my voice off they go so until next

989
00:40:27,849 --> 00:40:35,619
week this is Richard Saunders signing

990
00:40:29,768 --> 00:40:37,929
off from Sydney Australia you've been

991
00:40:35,619 --> 00:40:42,999
listening to the skeptic zone visit our

992
00:40:37,929 --> 00:40:47,409
website at WWF tag zoomtv the comments

993
00:40:42,998 --> 00:40:50,889
contacts and extra video reports

994
00:40:47,409 --> 00:40:50,889
this kids

995
00:40:52,280 --> 00:40:54,310
Oh

996
00:40:58,789 --> 00:41:00,819
Oh

997
00:41:01,469 --> 00:41:04,009
6