



1
00:00:23,080 --> 00:00:09,110
welcome to the skeptic zone the podcast

2
00:00:27,620 --> 00:00:25,730
Richard Saunders here from Sydney

3
00:00:31,580 --> 00:00:27,630
Australia for the skeptic zone podcast

4
00:00:35,450 --> 00:00:31,590
it's episode number 126 was just one

5
00:00:38,270 --> 00:00:35,460
week ago well just over a week ago I was

6
00:00:41,990 --> 00:00:38,280
quite happy with myself I got the

7
00:00:43,810 --> 00:00:42,000
previous skeptic zone out online I was

8
00:00:46,660 --> 00:00:43,820
sitting back and enjoying the afternoon

9
00:00:49,930 --> 00:00:46,670
when I happened to flick on the TV and

10
00:00:53,840 --> 00:00:49,940
there was a report of an earthquake in

11
00:00:58,430 --> 00:00:53,850
Japan and I don't need to tell you the

12
00:01:01,250 --> 00:00:58,440
rest as it happened I was having a chat

13
00:01:05,149 --> 00:01:01,260

to a good friend of mine Kerry I win one

14

00:01:07,640 --> 00:01:05,159

of the skeptics and we watched together

15

00:01:12,109 --> 00:01:07,650

in horror in our respective countries

16

00:01:14,210 --> 00:01:12,119

the unfolding disaster so some of this

17

00:01:17,390 --> 00:01:14,220

week's show will be devoted to topics

18

00:01:20,840 --> 00:01:17,400

relating to disasters i guess the

19

00:01:23,990 --> 00:01:20,850

tsunami and previous tsunamis and also

20

00:01:28,039 --> 00:01:24,000

to the interesting issue of atomic

21

00:01:30,580 --> 00:01:28,049

reactors in fact first up Maynard will

22

00:01:33,350 --> 00:01:30,590

interview professor David Jamison

23

00:01:36,469 --> 00:01:33,360

professor of physics at the University

24

00:01:39,440 --> 00:01:36,479

of Melbourne about his thoughts and

25

00:01:41,300 --> 00:01:39,450

feelings about atomic reactors and his

26
00:01:44,630 --> 00:01:41,310
thoughts about the current situation in

27
00:01:47,389 --> 00:01:44,640
Japan and after that on a similar sort

28
00:01:51,130 --> 00:01:47,399
of topic dr. Richie and dr. Reggie

29
00:01:53,630 --> 00:01:51,140
reports will look at the unbelievable

30
00:01:57,819 --> 00:01:53,640
newsletter that came out from homeopathy

31
00:02:01,130 --> 00:01:57,829
plus here in Australia advocating

32
00:02:04,490 --> 00:02:01,140
homeopathic remedies or radiation

33
00:02:06,080 --> 00:02:04,500
sickness you might have to rewind that

34
00:02:08,869 --> 00:02:06,090
little bit to understand it now I'll

35
00:02:10,850 --> 00:02:08,879
tell you again they are advocating that

36
00:02:13,160 --> 00:02:10,860
you take homeopathy to counter the

37
00:02:15,280 --> 00:02:13,170
effects of radiation sickness

38
00:02:19,400 --> 00:02:15,290

I don't even have to comment about that

39

00:02:22,600 --> 00:02:19,410

following dr. H E is reality bites with

40

00:02:25,670 --> 00:02:22,610

Joanne been home ooh and then we have to

41

00:02:28,220 --> 00:02:25,680

editorials one from the former president

42

00:02:31,250 --> 00:02:28,230

and former CEO of Australian skeptics

43

00:02:35,000 --> 00:02:31,260

and former editor of the magazine the

44

00:02:37,340 --> 00:02:35,010

skeptic magazine Barry Williams with an

45

00:02:42,589 --> 00:02:37,350

editorial he originally wrote to cover

46

00:02:43,790 --> 00:02:42,599

the previous tsunami back in 2004 and to

47

00:02:46,280 --> 00:02:43,800

round off the show we have another

48

00:02:49,370 --> 00:02:46,290

editorial from Peter Babbage otherwise

49

00:02:51,949 --> 00:02:49,380

known as red bag from ratbags calm with

50

00:02:54,949 --> 00:02:51,959

an editorial he wrote along a similar

51
00:02:57,470 --> 00:02:54,959
vein here is the skeptic zone and this

52
00:03:16,080 --> 00:02:57,480
week it is particularly relevant to the

53
00:03:26,650 --> 00:03:21,030
here's my not spooky action at the

54
00:03:31,610 --> 00:03:29,900
good afternoon how hello I'm just fine

55
00:03:33,200 --> 00:03:31,620
look thank you for taking my call you

56
00:03:36,140 --> 00:03:33,210
have very busy would conferences last

57
00:03:38,240 --> 00:03:36,150
time we spoke changed since we last

58
00:03:39,770 --> 00:03:38,250
spoke it certainly has that ladies and

59
00:03:41,480 --> 00:03:39,780
gentlemen a few months ago I was trying

60
00:03:44,720 --> 00:03:41,490
to do a story with this man here dr.

61
00:03:46,610 --> 00:03:44,730
David Jamison and basically no one was

62
00:03:48,260 --> 00:03:46,620
interested because thorium reactors was

63
00:03:50,510 --> 00:03:48,270

something that only crazy scientist

64

00:03:52,700 --> 00:03:50,520

talks about an experimental way but

65

00:03:54,290 --> 00:03:52,710

suddenly dr. thorium reactors have

66

00:03:57,050 --> 00:03:54,300

become very interesting to a lot of

67

00:04:01,160 --> 00:03:57,060

people haven't they yes I have and

68

00:04:05,150 --> 00:04:01,170

people go thorium what is that well

69

00:04:07,760 --> 00:04:05,160

thorium is a relatively common heavy

70

00:04:10,750 --> 00:04:07,770

elements like uranium but a little bit

71

00:04:13,130 --> 00:04:10,760

lighter either because naturally in the

72

00:04:15,620 --> 00:04:13,140

crust of the earth where it's about as

73

00:04:17,150 --> 00:04:15,630

abundant as lead which I think not

74

00:04:19,940 --> 00:04:17,160

people would be much more familiar with

75

00:04:23,630 --> 00:04:19,950

and where are most of the deposits of

76

00:04:26,300 --> 00:04:23,640

thorium in the world at it seems to be

77

00:04:29,840 --> 00:04:26,310

fairly well distributed around the world

78

00:04:32,360 --> 00:04:29,850

some of the biggest deposits of thorium

79

00:04:34,130 --> 00:04:32,370

minerals are right here in Australia I

80

00:04:36,080 --> 00:04:34,140

think probably where are the number one

81

00:04:39,980 --> 00:04:36,090

or number two in the world for thorium

82

00:04:43,909 --> 00:04:39,990

reserves with the United States and

83

00:04:46,970 --> 00:04:43,919

India also with very big deposits of

84

00:04:49,610 --> 00:04:46,980

thorium it's not a very rare material

85

00:04:52,340 --> 00:04:49,620

now the question that's been asked is if

86

00:04:55,270 --> 00:04:52,350

this is a potential use in a nuclear

87

00:04:57,590 --> 00:04:55,280

reactor why aren't they doing it already

88

00:04:59,930 --> 00:04:57,600

well that's a very good question and

89

00:05:02,600 --> 00:04:59,940

experts in the field who have been asked

90

00:05:05,360 --> 00:05:02,610

that same question have said well it's a

91

00:05:07,370 --> 00:05:05,370

bit like going into a forest and cutting

92

00:05:08,890 --> 00:05:07,380

down a whole lot of green timber and

93

00:05:11,180 --> 00:05:08,900

trying to get a fire going with that

94

00:05:13,730 --> 00:05:11,190

instead of using all the dead wood

95

00:05:16,040 --> 00:05:13,740

flying around on the forest floor which

96

00:05:18,400 --> 00:05:16,050

burns a lot better so thorium is like

97

00:05:20,630 --> 00:05:18,410

the green wood and the dead wood is like

98

00:05:24,320 --> 00:05:20,640

uranium it's much easier to get the

99

00:05:27,050 --> 00:05:24,330

nuclear reaction started in uranium then

100

00:05:30,320 --> 00:05:27,060

the thorium and so that's why you're

101
00:05:32,659 --> 00:05:30,330
onium has had a head start in a nuclear

102
00:05:34,159 --> 00:05:32,669
reactor compared to thorium now the

103
00:05:35,870 --> 00:05:34,169
problem we have with the Japanese

104
00:05:37,080 --> 00:05:35,880
reactors at the moment if they were

105
00:05:38,970 --> 00:05:37,090
thorium

106
00:05:40,320 --> 00:05:38,980
be we be having any problem like this or

107
00:05:44,760 --> 00:05:40,330
is the main problem of the Japanese

108
00:05:46,740 --> 00:05:44,770
reactors their age anyway well there's a

109
00:05:49,230 --> 00:05:46,750
there's a diversity of opinion about

110
00:05:51,150 --> 00:05:49,240
that Maynard but from my point of view

111
00:05:52,950 --> 00:05:51,160
the the problem that the Japanese

112
00:05:57,420 --> 00:05:52,960
reactors have experienced is that

113
00:06:01,230 --> 00:05:57,430

terrible tsunami which has washed

114

00:06:04,110 --> 00:06:01,240

through the the old the old plant which

115

00:06:07,590 --> 00:06:04,120

hadn't behaved very well obviously it's

116

00:06:09,830 --> 00:06:07,600

a terrible tragedy but what seems to

117

00:06:12,900 --> 00:06:09,840

have happened is that the tsunami has

118

00:06:15,600 --> 00:06:12,910

destroyed all the backup power systems

119

00:06:18,690 --> 00:06:15,610

which were needed for the cooling of the

120

00:06:22,890 --> 00:06:18,700

shutdown reactors i'm pretty sure from

121

00:06:24,810 --> 00:06:22,900

the press reports that the reactor all

122

00:06:28,350 --> 00:06:24,820

the reactors on the site there had been

123

00:06:31,920 --> 00:06:28,360

shut down as you'd expect automatically

124

00:06:34,020 --> 00:06:31,930

after the earthquake but unfortunately

125

00:06:35,700 --> 00:06:34,030

the tsunami which arrived as the

126

00:06:38,990 --> 00:06:35,710

reactors were shutting down or had

127

00:06:42,150 --> 00:06:39,000

already shut down destroyed all the

128

00:06:45,600 --> 00:06:42,160

power switch yards and the backup diesel

129

00:06:48,719 --> 00:06:45,610

generators leaving them very vulnerable

130

00:06:52,710 --> 00:06:48,729

now to the to overheating but I

131

00:06:55,260 --> 00:06:52,720

emphasized that although the the six

132

00:06:58,830 --> 00:06:55,270

reactors on the site of the Fukushima

133

00:07:00,870 --> 00:06:58,840

one power station are the ones that are

134

00:07:04,170 --> 00:07:00,880

causing the problem the three of them

135

00:07:05,820 --> 00:07:04,180

were weren't in service at the time of

136

00:07:09,360 --> 00:07:05,830

the earthquake and the other three were

137

00:07:13,170 --> 00:07:09,370

but would have shut down immediately in

138

00:07:14,850 --> 00:07:13,180

response to the earthquake but the after

139

00:07:16,860 --> 00:07:14,860

you shadow reactor down you have to keep

140

00:07:18,360 --> 00:07:16,870

the cooling pumps running to dissipate

141

00:07:21,120 --> 00:07:18,370

the enormous amount of heat in the

142

00:07:24,060 --> 00:07:21,130

reactor core and the tsunami has been

143

00:07:27,210 --> 00:07:24,070

destroyed the it appears has destroyed

144

00:07:29,640 --> 00:07:27,220

the pumps and the water intakes and the

145

00:07:31,830 --> 00:07:29,650

power stations and this has created some

146

00:07:33,900 --> 00:07:31,840

significant difficulties obviously which

147

00:07:35,460 --> 00:07:33,910

we're seeing today well given what has

148

00:07:38,310 --> 00:07:35,470

happened in Japan do you think there

149

00:07:39,810 --> 00:07:38,320

would be any interest worldwide on

150

00:07:42,180 --> 00:07:39,820

particularly in Australia to do any

151

00:07:44,370 --> 00:07:42,190

further thorium research to maybe

152

00:07:46,140 --> 00:07:44,380

perhaps make new nuclear power plants as

153

00:07:48,450 --> 00:07:46,150

this is not going to make the image of

154

00:07:50,430 --> 00:07:48,460

nuclear power generally any healthier I

155

00:07:51,870 --> 00:07:50,440

well yes indeed

156

00:07:54,180 --> 00:07:51,880

in fact I should have answered your

157

00:07:55,530 --> 00:07:54,190

question whether their thorium reactor

158

00:07:58,680 --> 00:07:55,540

would have had the same problems that

159

00:08:02,010 --> 00:07:58,690

probably would have because any any

160

00:08:04,350 --> 00:08:02,020

reactor needs to be cooled for a period

161

00:08:06,060 --> 00:08:04,360

of time after is shut down just to get

162

00:08:08,750 --> 00:08:06,070

the heat out of the core because they're

163

00:08:15,000 --> 00:08:08,760

operating at very high temperatures and

164

00:08:16,800 --> 00:08:15,010

I I think that probably when when Japan

165

00:08:19,980 --> 00:08:16,810

begins to recover from this terrible

166

00:08:23,400 --> 00:08:19,990

terrible disaster pawling loss of life

167

00:08:26,960 --> 00:08:23,410

and livelihood that in the overall

168

00:08:29,130 --> 00:08:26,970

scheme of things although the nuclear

169

00:08:31,050 --> 00:08:29,140

disaster is getting an enormous amount

170

00:08:34,440 --> 00:08:31,060

of press coverage I think the loss of

171

00:08:37,110 --> 00:08:34,450

life and livelihood from just a physical

172

00:08:39,480 --> 00:08:37,120

destruction caused by the tsunami of the

173

00:08:43,170 --> 00:08:39,490

railways and the roads and the houses

174

00:08:46,170 --> 00:08:43,180

and the awful tragedy of people who have

175

00:08:49,380 --> 00:08:46,180

lost their lives will will will be

176

00:08:52,740 --> 00:08:49,390

greatly outweigh the problems caused by

177

00:08:55,980 --> 00:08:52,750

the reactors I mean you've got already

178

00:08:58,890 --> 00:08:55,990

an estimate of 10,000 people killed from

179

00:09:01,230 --> 00:08:58,900

the tsunami which is really appalling we

180

00:09:04,410 --> 00:09:01,240

have to keep in mind those the reactors

181

00:09:07,080 --> 00:09:04,420

in Japan have spent 40 years producing

182

00:09:09,120 --> 00:09:07,090

electricity with very low amounts of

183

00:09:11,970 --> 00:09:09,130

greenhouse gas emissions we must always

184

00:09:14,640 --> 00:09:11,980

keep that in mind when assessing you

185

00:09:18,150 --> 00:09:14,650

know what's happening now that's 40

186

00:09:20,220 --> 00:09:18,160

years of not producing carbon dioxide in

187

00:09:22,830 --> 00:09:20,230

response to producing an enormous amount

188

00:09:26,690 --> 00:09:22,840

of electric power for the for the nation

189

00:09:29,580 --> 00:09:26,700

I think we should we should weigh up the

190

00:09:32,550 --> 00:09:29,590

alternatives to to producing electricity

191

00:09:35,040 --> 00:09:32,560

with low carbon dioxide whether it's geo

192

00:09:38,370 --> 00:09:35,050

sequestration or solar or wind or

193

00:09:40,200 --> 00:09:38,380

geothermal or or the different flavors

194

00:09:43,980 --> 00:09:40,210

of nuclear reactor we should weigh them

195

00:09:46,620 --> 00:09:43,990

all up and do a cost-benefit analysis

196

00:09:49,620 --> 00:09:46,630

and we've find out which one is going to

197

00:09:51,690 --> 00:09:49,630

be the cheapest and most effective for

198

00:09:54,000 --> 00:09:51,700

Australia for Victoria for New South

199

00:09:56,480 --> 00:09:54,010

Wales wherever we choose to look at

200

00:09:59,010 --> 00:09:56,490

alternatives to to what we're doing now

201
00:10:01,440 --> 00:09:59,020
so do you think if there is a future for

202
00:10:04,199 --> 00:10:01,450
thorium in the nuclear industry how many

203
00:10:09,030 --> 00:10:04,209
years would be away if anyone decided

204
00:10:13,340 --> 00:10:09,040
really given solid go to roll it out on

205
00:10:16,410 --> 00:10:13,350
a scale sufficient to to make an impact

206
00:10:18,929 --> 00:10:16,420
so for example in India they they want

207
00:10:22,169 --> 00:10:18,939
to try and get a quarter of their power

208
00:10:25,499 --> 00:10:22,179
needs by the 2050 time scale I mentioned

209
00:10:27,660 --> 00:10:25,509
earlier that's about 270 gigawatts which

210
00:10:31,049 --> 00:10:27,670
is an enormous amount of power India

211
00:10:33,239 --> 00:10:31,059
being a big country after all and they

212
00:10:37,249 --> 00:10:33,249
have a they have a very aggressive

213
00:10:40,679 --> 00:10:37,259

program to achieve that goal so that's

214

00:10:44,639 --> 00:10:40,689

two so that's an example of the sort of

215

00:10:46,679 --> 00:10:44,649

timeframe that people are working to how

216

00:10:49,139 --> 00:10:46,689

do you feel when you see sort of quack

217

00:10:50,910 --> 00:10:49,149

ideas of like zero point energy and you

218

00:10:54,150 --> 00:10:50,920

see guys making experiment on a bench

219

00:10:55,739 --> 00:10:54,160

and I seem to be creating that power out

220

00:10:57,150 --> 00:10:55,749

of nothing how do you as a physicist

221

00:10:58,769 --> 00:10:57,160

take that because it every once in a

222

00:11:01,400 --> 00:10:58,779

while we get someone with a miracle way

223

00:11:05,730 --> 00:11:01,410

to make power that doesn't really add up

224

00:11:08,369 --> 00:11:05,740

well yeah a good question I have a

225

00:11:09,509 --> 00:11:08,379

pretty thick file here in my office and

226

00:11:15,299 --> 00:11:09,519

people who have written to me about

227

00:11:18,749 --> 00:11:15,309

these schemes but it's look you know

228

00:11:20,489 --> 00:11:18,759

it's a bit like imagining someone

229

00:11:22,289 --> 00:11:20,499

proposing to the government they need

230

00:11:25,079 --> 00:11:22,299

some funding to go off and discover a

231

00:11:27,809 --> 00:11:25,089

new continent in the Pacific Ocean that

232

00:11:29,309 --> 00:11:27,819

hasn't been discovered yet you know

233

00:11:31,499 --> 00:11:29,319

you'd be pretty reluctant to put any

234

00:11:33,539 --> 00:11:31,509

money behind financing an expedition

235

00:11:35,309 --> 00:11:33,549

expedition to discover that continent

236

00:11:37,919 --> 00:11:35,319

and you'd really need a pretty

237

00:11:39,780 --> 00:11:37,929

compelling reason why this person

238

00:11:41,220 --> 00:11:39,790

thought there was a new continent out

239

00:11:43,980 --> 00:11:41,230

there in the Pacific that no one had

240

00:11:46,470 --> 00:11:43,990

seen yet and and looking for new sources

241

00:11:48,600 --> 00:11:46,480

of energy is a bit like that i'm pretty

242

00:11:51,539 --> 00:11:48,610

happy to listen to someone with a really

243

00:11:54,239 --> 00:11:51,549

good reason why they think they can roll

244

00:11:55,710 --> 00:11:54,249

out a new form of energy or power

245

00:11:59,189 --> 00:11:55,720

generation that no one's thought of

246

00:12:01,949 --> 00:11:59,199

before but without that very very good

247

00:12:04,590 --> 00:12:01,959

reason our i really would prefer not to

248

00:12:06,210 --> 00:12:04,600

listen and do these are proposals to you

249

00:12:08,730 --> 00:12:06,220

come in the form of a perpetual motion

250

00:12:11,309 --> 00:12:08,740

machine or a completely new way to

251
00:12:13,559 --> 00:12:11,319
generate power well sometimes it's very

252
00:12:15,180 --> 00:12:13,569
difficult to say to tell the truth it's

253
00:12:18,270 --> 00:12:15,190
often difficult to

254
00:12:22,500 --> 00:12:18,280
understand exactly what they're talking

255
00:12:25,290 --> 00:12:22,510
about and you know the diagrams are

256
00:12:27,810 --> 00:12:25,300
complex and sometimes it's often just a

257
00:12:29,730 --> 00:12:27,820
matter that they forget about the second

258
00:12:31,830 --> 00:12:29,740
law of thermodynamics and I don't want

259
00:12:34,980 --> 00:12:31,840
to go into the advanced course on in

260
00:12:37,080 --> 00:12:34,990
this phone call but it's that's it it's

261
00:12:39,090 --> 00:12:37,090
not just sufficient to conserve energy

262
00:12:40,170 --> 00:12:39,100
in your power station you've got to

263
00:12:42,270 --> 00:12:40,180

worry about the second law of

264

00:12:44,400 --> 00:12:42,280

thermodynamics which basically says if

265

00:12:46,020 --> 00:12:44,410

you've got a bathtub full of hot water

266

00:12:48,750 --> 00:12:46,030

you've got an enormous amount of energy

267

00:12:50,130 --> 00:12:48,760

in that hot water but you can't use it

268

00:12:52,890 --> 00:12:50,140

to charge the battery of your mobile

269

00:12:55,470 --> 00:12:52,900

phone I'm afraid or at least you can't

270

00:12:57,390 --> 00:12:55,480

do it very efficiently because of the

271

00:12:59,190 --> 00:12:57,400

second law look look while we're talking

272

00:13:00,900 --> 00:12:59,200

about on the verge of conspiracy

273

00:13:03,110 --> 00:13:00,910

theories I'll just ask you one question

274

00:13:05,460 --> 00:13:03,120

as a physicist there is a conspiracy

275

00:13:07,530 --> 00:13:05,470

theory that the Germans during the

276
00:13:10,710 --> 00:13:07,540
Second World War were actually able to

277
00:13:13,110 --> 00:13:10,720
fire off some some kind of dirty nuclear

278
00:13:14,850 --> 00:13:13,120
weapon somewhere in the in the Gulf of

279
00:13:16,710 --> 00:13:14,860
Finland up that way do you think there's

280
00:13:18,750 --> 00:13:16,720
any possibility that they did that

281
00:13:21,540 --> 00:13:18,760
because although that just pure

282
00:13:24,810 --> 00:13:21,550
speculation actually I've looked into

283
00:13:27,000 --> 00:13:24,820
this and I believe its without merit I

284
00:13:31,050 --> 00:13:27,010
don't think there's even a grain of

285
00:13:33,600 --> 00:13:31,060
truth in SD the thing about nuclear

286
00:13:36,630 --> 00:13:33,610
materials and radioactive materials is

287
00:13:39,990 --> 00:13:36,640
that they produce a very strong signal

288
00:13:43,500 --> 00:13:40,000

just lying around as we all know we've

289

00:13:45,240 --> 00:13:43,510

all seen the terrible scenes of people

290

00:13:47,730 --> 00:13:45,250

in Japan being screened for

291

00:13:51,330 --> 00:13:47,740

contamination with Geiger counters and

292

00:13:54,000 --> 00:13:51,340

in some ways you could regard that as an

293

00:13:56,340 --> 00:13:54,010

advantage any any contamination unlike

294

00:13:58,710 --> 00:13:56,350

chemical contamination which may be very

295

00:14:01,650 --> 00:13:58,720

difficult to detect until it's all over

296

00:14:03,480 --> 00:14:01,660

the the the waste from nuclear reactors

297

00:14:07,260 --> 00:14:03,490

produce strong signals that are easy to

298

00:14:11,700 --> 00:14:07,270

detect and so if if such an experiment

299

00:14:13,380 --> 00:14:11,710

had been had happened you don't need to

300

00:14:15,180 --> 00:14:13,390

be it wouldn't be subtle you could get

301
00:14:16,890 --> 00:14:15,190
your Geiger counter and get out there in

302
00:14:19,620 --> 00:14:16,900
the field and try and measure that the

303
00:14:22,110 --> 00:14:19,630
waste products and it wouldn't be a

304
00:14:23,520 --> 00:14:22,120
subtle signal so on this island they

305
00:14:25,260 --> 00:14:23,530
literally did it it wouldn't be just

306
00:14:26,620 --> 00:14:25,270
slightly above background radiation

307
00:14:29,500 --> 00:14:26,630
level it would be a lot

308
00:14:31,660 --> 00:14:29,510
yes and and you could you could actually

309
00:14:33,580 --> 00:14:31,670
measure the act of the signals in a more

310
00:14:34,810 --> 00:14:33,590
sophisticated way than just using a

311
00:14:37,090 --> 00:14:34,820
Geiger counter with some very

312
00:14:40,260 --> 00:14:37,100
straightforward detectors and you'd see

313
00:14:42,310 --> 00:14:40,270

immediately the fingerprint of any such

314

00:14:44,500 --> 00:14:42,320
such experiment that would be

315

00:14:46,360 --> 00:14:44,510
unmistakable and unambiguous it and it

316

00:14:49,690 --> 00:14:46,370
wouldn't be subtle it would be would be

317

00:14:51,040 --> 00:14:49,700
very very clear what had gone on look

318

00:14:52,810 --> 00:14:51,050
them Thank You professor David Jamison

319

00:14:55,150 --> 00:14:52,820
thank you for talking to us today and

320

00:14:57,060 --> 00:14:55,160
talking to us about thorium and putting

321

00:14:59,850 --> 00:14:57,070
a couple of these conspiracies to rest

322

00:15:03,100 --> 00:14:59,860
I've got to think up some new ones now

323

00:15:04,840 --> 00:15:03,110
okay fine yes look at that thank you

324

00:15:13,910 --> 00:15:04,850
very much for your time and I really

325

00:15:19,230 --> 00:15:16,530
now on Belfast FM we turn to the person

326

00:15:21,330 --> 00:15:19,240

lads easygoing and confident skeptic

327

00:15:23,670 --> 00:15:21,340

seeks other critical thinkers for fun

328

00:15:25,770 --> 00:15:23,680

laughter and good times must be willing

329

00:15:27,660 --> 00:15:25,780

to apply logic liberally and a good

330

00:15:29,730 --> 00:15:27,670

listener expect something new and

331

00:15:31,710 --> 00:15:29,740

interesting every month come and meet me

332

00:15:33,600 --> 00:15:31,720

in Belfast in Northern Ireland if this

333

00:15:37,200 --> 00:15:33,610

sounds like you check out my profile on

334

00:15:46,050 --> 00:15:37,210

alpha skeptics calm music by Kevin

335

00:15:51,480 --> 00:15:46,060

MacLeod now it's time for dr. Rachel

336

00:15:53,160 --> 00:15:51,490

reports with dr. Rachel Dunlop hello

337

00:15:56,730 --> 00:15:53,170

listeners and welcome to dr. ecchi

338

00:15:58,290 --> 00:15:56,740

reports well it is said that disasters

339

00:16:00,630 --> 00:15:58,300

bring out the best and the worst in

340

00:16:02,700 --> 00:16:00,640

people and sadly there has been plenty

341

00:16:06,030 --> 00:16:02,710

of opportunity to witness this play out

342

00:16:07,830 --> 00:16:06,040

of late in Australia the East Coast

343

00:16:10,170 --> 00:16:07,840

experienced the worst floods since

344

00:16:12,960 --> 00:16:10,180

nineteen seventy-four quickly followed

345

00:16:15,329 --> 00:16:12,970

by Cyclone Yasi ravaging as far inland

346

00:16:16,470 --> 00:16:15,339

as Mount aiza then there was the

347

00:16:19,500 --> 00:16:16,480

terrible earthquake in christchurch

348

00:16:22,520 --> 00:16:19,510

where many died across the pond and then

349

00:16:25,320 --> 00:16:22,530

on friday a massive 9.0 earthquake

350

00:16:27,210 --> 00:16:25,330

exploded under the pacific ocean sending

351
00:16:30,390 --> 00:16:27,220
a huge tsunami smashing into the

352
00:16:32,579 --> 00:16:30,400
northeast coast of japan the japanese

353
00:16:34,440 --> 00:16:32,589
are suffering terribly and not just

354
00:16:36,780 --> 00:16:34,450
because tens of thousands of missing

355
00:16:38,490 --> 00:16:36,790
feared dead but they also face bitter

356
00:16:41,640 --> 00:16:38,500
cold as snow is dumped on the

357
00:16:43,230 --> 00:16:41,650
devastation and even worse for nuclear

358
00:16:45,060 --> 00:16:43,240
reactors which took the brunt of the

359
00:16:47,730 --> 00:16:45,070
tsunami and earthquake are now at risk

360
00:16:49,950 --> 00:16:47,740
of meltdown although the reactors are

361
00:16:52,620 --> 00:16:49,960
built to withstand earthquakes the

362
00:16:55,290 --> 00:16:52,630
combination of such a huge event coupled

363
00:16:57,570 --> 00:16:55,300

with a massive tsunami wiped out backup

364

00:17:00,720 --> 00:16:57,580

systems required to keep the fuel rods

365

00:17:02,760 --> 00:17:00,730

cool as water levels dropped the rods

366

00:17:05,670 --> 00:17:02,770

heated up some producing enough hydrogen

367

00:17:07,679 --> 00:17:05,680

gas to cause explosions and subsequently

368

00:17:10,980 --> 00:17:07,689

the release of radioactive gas into the

369

00:17:12,840 --> 00:17:10,990

air the manufacturers are madly dumping

370

00:17:15,150 --> 00:17:12,850

seawater from helicopters onto the

371

00:17:17,400 --> 00:17:15,160

rapidly heating fuel rods and as a

372

00:17:19,410 --> 00:17:17,410

precaution have set up an exclusion zone

373

00:17:22,470 --> 00:17:19,420

in a 30-kilometer radius around the

374

00:17:24,390 --> 00:17:22,480

plant however if meltdown cannot be

375

00:17:26,100 --> 00:17:24,400

prevented there is a risk of the

376

00:17:29,010 --> 00:17:26,110

days of radioactive gas clouds which

377

00:17:31,800 --> 00:17:29,020

could drift into populated areas so

378

00:17:33,660 --> 00:17:31,810

enter the vultures several days ago

379

00:17:35,880 --> 00:17:33,670

Australian skeptics Vice President

380

00:17:38,400 --> 00:17:35,890

Richard Saunders circulated an email

381

00:17:40,320 --> 00:17:38,410

from homeopathy plus describing

382

00:17:43,200 --> 00:17:40,330

homeopathic remedies for radiation

383

00:17:45,300 --> 00:17:43,210

sickness and poisoning the email

384

00:17:47,700 --> 00:17:45,310

described how homeopathy offered quote

385

00:17:50,250 --> 00:17:47,710

key remedies that have been used either

386

00:17:53,670 --> 00:17:50,260

in research or historically to prevent

387

00:17:56,400 --> 00:17:53,680

or treat radiation poisoning the email

388

00:17:59,460 --> 00:17:56,410

dated March thirteenth states quote if

389

00:18:01,590 --> 00:17:59,470

at risk of radiation exposure any one of

390

00:18:04,080 --> 00:18:01,600

the above remedies may be taken as an

391

00:18:07,980 --> 00:18:04,090

emergency response three times a day in

392

00:18:11,570 --> 00:18:07,990

a 30 C potency the remedies referred to

393

00:18:15,240 --> 00:18:11,580

a cadmium iodide cadmium sulfurous

394

00:18:17,940 --> 00:18:15,250

strontium carbonic command x-rays that's

395

00:18:21,390 --> 00:18:17,950

right listeners homeopathic preparations

396

00:18:23,430 --> 00:18:21,400

of x-rays but before you get worried

397

00:18:25,170 --> 00:18:23,440

that more x-rays might not be the best

398

00:18:27,510 --> 00:18:25,180

thing to treat radiation burns or

399

00:18:30,690 --> 00:18:27,520

sickness let's take a look at precisely

400

00:18:33,060 --> 00:18:30,700

what 30 C means this is a common

401
00:18:34,920 --> 00:18:33,070
homeopathic dilution in fact one you

402
00:18:37,320 --> 00:18:34,930
might find on your local pharmacy shelf

403
00:18:40,200 --> 00:18:37,330
and means the original substance has

404
00:18:43,860 --> 00:18:40,210
been diluted 10 to the power of 60 times

405
00:18:48,000 --> 00:18:43,870
so in simple terms that means 10 with 60

406
00:18:49,620 --> 00:18:48,010
zeros at a dilution this great in order

407
00:18:52,710 --> 00:18:49,630
for you to come into contact with even

408
00:18:55,250 --> 00:18:52,720
one molecule of the original x-rays you

409
00:18:58,980 --> 00:18:55,260
would have to give two billion doses per

410
00:19:03,030 --> 00:18:58,990
second to six billion people for four

411
00:19:05,670 --> 00:19:03,040
billion years or to put it another way a

412
00:19:08,520 --> 00:19:05,680
30-seat dilution is the equivalent of

413
00:19:11,220 --> 00:19:08,530

placing one mil of liquid into a cube of

414

00:19:14,400 --> 00:19:11,230

water measuring a million million

415

00:19:17,250 --> 00:19:14,410

million meters per side clearly

416

00:19:20,250 --> 00:19:17,260

impossible and preposterous but there's

417

00:19:22,500 --> 00:19:20,260

more quote if radiation sickness has

418

00:19:24,630 --> 00:19:22,510

developed your homeopath is the best

419

00:19:27,090 --> 00:19:24,640

person to advise on treatment dosages

420

00:19:28,980 --> 00:19:27,100

and potencies as these will depend on

421

00:19:32,520 --> 00:19:28,990

the symptoms you are experiencing and

422

00:19:34,680 --> 00:19:32,530

their severity but not just any

423

00:19:36,810 --> 00:19:34,690

homeopath apparently some people are

424

00:19:38,660 --> 00:19:36,820

confused by the number of remedies being

425

00:19:41,010 --> 00:19:38,670

offered by different homie

426
00:19:43,650 --> 00:19:41,020
apparently they can't even agree amongst

427
00:19:46,400 --> 00:19:43,660
themselves but never fear homeopathy

428
00:19:48,600 --> 00:19:46,410
plus will only recommend you quote

429
00:19:51,450 --> 00:19:48,610
remedies whose effects are also

430
00:19:54,360 --> 00:19:51,460
supported by research and/or confirmed

431
00:19:56,220 --> 00:19:54,370
with clinical successes as reported by

432
00:19:58,470 --> 00:19:56,230
doctors and physicians dealing with

433
00:20:02,970 --> 00:19:58,480
radiation exposure during the great

434
00:20:04,470 --> 00:20:02,980
world wars thank goodness for that but

435
00:20:06,360 --> 00:20:04,480
what if you can't get your hands on a

436
00:20:09,690 --> 00:20:06,370
super dilute one to the bajillion

437
00:20:11,550 --> 00:20:09,700
dilution of x-rays well no problem you

438
00:20:13,890 --> 00:20:11,560

can take a more concentrated dose of

439

00:20:17,340 --> 00:20:13,900

x-rays but you just need to take it more

440

00:20:20,190 --> 00:20:17,350

frequently yes you heard me correctly if

441

00:20:22,010 --> 00:20:20,200

the preparation is more concentrated you

442

00:20:24,390 --> 00:20:22,020

just need to take it more often

443

00:20:27,330 --> 00:20:24,400

according to the helpful homeopathy plus

444

00:20:29,490 --> 00:20:27,340

newsletter this means quote taking a

445

00:20:32,280 --> 00:20:29,500

more frequent dose for lower potencies

446

00:20:34,320 --> 00:20:32,290

of four to six times a day and a less

447

00:20:37,890 --> 00:20:34,330

frequent dose one to two times a day for

448

00:20:39,600 --> 00:20:37,900

higher potencies now this might seem a

449

00:20:41,670 --> 00:20:39,610

bit confusing but this is because

450

00:20:44,820 --> 00:20:41,680

homeopaths believe that the more dilute

451
00:20:46,500 --> 00:20:44,830
the preparation the stronger it is no

452
00:20:48,690 --> 00:20:46,510
folks you couldn't make this stuff up

453
00:20:51,030 --> 00:20:48,700
well actually you could but no one would

454
00:20:53,160 --> 00:20:51,040
believe you so as you might expect

455
00:20:55,260 --> 00:20:53,170
homeopathy plus have copped a little bit

456
00:20:57,930 --> 00:20:55,270
of flack for this irresponsible nonsense

457
00:21:01,080 --> 00:20:57,940
the story was reported in the Australian

458
00:21:03,660 --> 00:21:01,090
newspaper on the punch website by Phil

459
00:21:05,850 --> 00:21:03,670
Plait in his bad astronomy blog by Brian

460
00:21:08,340 --> 00:21:05,860
Dunning on skeptic blog and by Ben

461
00:21:10,980 --> 00:21:08,350
Radford Adam creswell from the

462
00:21:12,810 --> 00:21:10,990
Australian newspaper asked some experts

463
00:21:15,060 --> 00:21:12,820

about the claims that homeopathy can

464

00:21:18,690 --> 00:21:15,070

treat radiation burns and got a

465

00:21:21,060 --> 00:21:18,700

predictable response Victorian GP Bill

466

00:21:24,090 --> 00:21:21,070

Williams who is also a nuclear safety

467

00:21:26,370 --> 00:21:24,100

experts said there was quote absolutely

468

00:21:29,070 --> 00:21:26,380

no evidence for any of the remedies

469

00:21:33,150 --> 00:21:29,080

being promoted by homeopathy plus being

470

00:21:35,670 --> 00:21:33,160

useful in treating radiation sickness he

471

00:21:37,560 --> 00:21:35,680

continued it's not really very helpful

472

00:21:39,990 --> 00:21:37,570

for people to be promoting treatments in

473

00:21:42,480 --> 00:21:40,000

a dire situation like this which could

474

00:21:45,420 --> 00:21:42,490

give people false comfort dr. Williams

475

00:21:47,460 --> 00:21:45,430

said nuclear radiologist Peter Karim

476
00:21:51,390 --> 00:21:47,470
askis said the claims that were made by

477
00:21:52,440 --> 00:21:51,400
homeopathy plus were quote rubbish such

478
00:21:54,180 --> 00:21:52,450
claims are dangerous

479
00:21:57,840 --> 00:21:54,190
in that it might compromise proper

480
00:21:59,190 --> 00:21:57,850
treatment and give false security but

481
00:22:01,620 --> 00:21:59,200
sadly this is not the first time

482
00:22:04,230 --> 00:22:01,630
homeopathy plus have spouted rubbish on

483
00:22:06,480 --> 00:22:04,240
the unsuspecting public the homeopathy

484
00:22:09,540 --> 00:22:06,490
plus newsletter and clinic are both run

485
00:22:11,370 --> 00:22:09,550
by homeopath Fran Sheffield who as an

486
00:22:13,980 --> 00:22:11,380
aside is also good mates with the

487
00:22:16,560 --> 00:22:13,990
Australian anti-vaccination Network well

488
00:22:18,540 --> 00:22:16,570

birds of a feather and all that in 2010

489

00:22:21,480 --> 00:22:18,550

the Therapeutic Goods Administration the

490

00:22:23,790 --> 00:22:21,490

TGA instructed miss Sheffield to remove

491

00:22:25,770 --> 00:22:23,800

claims that homeopathy was an effective

492

00:22:28,760 --> 00:22:25,780

substitute for vaccinations from her

493

00:22:31,350 --> 00:22:28,770

website and also publish a retraction

494

00:22:33,500 --> 00:22:31,360

she refused to do so on the grounds that

495

00:22:36,420 --> 00:22:33,510

she didn't agree with the decision and

496

00:22:38,400 --> 00:22:36,430

as with approximately thirty percent of

497

00:22:41,010 --> 00:22:38,410

those served with a tsg a retraction

498

00:22:45,840 --> 00:22:41,020

order nothing was done to enforce the

499

00:22:48,420 --> 00:22:45,850

finding in fact the TGA told ABC's late

500

00:22:50,640 --> 00:22:48,430

line program that no legal action has

501
00:22:53,220 --> 00:22:50,650
ever been taken over non-compliance

502
00:22:56,040 --> 00:22:53,230
which makes the complaint system look

503
00:22:58,020 --> 00:22:56,050
like a complete farce and indeed

504
00:23:00,210 --> 00:22:58,030
following the Lateline report Fran

505
00:23:02,100 --> 00:23:00,220
Sheffield jumped a flotilla of sharks

506
00:23:05,700 --> 00:23:02,110
and published a piece on her website

507
00:23:07,980 --> 00:23:05,710
called quite late line can homeopathy

508
00:23:10,950 --> 00:23:07,990
safely protect against epidemic and

509
00:23:13,940 --> 00:23:10,960
infectious diseases can homeopathy treat

510
00:23:16,590 --> 00:23:13,950
serious diseases such as aids and cancer

511
00:23:18,300 --> 00:23:16,600
it was a veritable gish gallop of

512
00:23:20,850 --> 00:23:18,310
references purporting to show that

513
00:23:23,550 --> 00:23:20,860

indeed homeopathy can treat aids and

514

00:23:25,110 --> 00:23:23,560

cancers so not only did miss Sheffield

515

00:23:27,390 --> 00:23:25,120

refused to remove false and misleading

516

00:23:30,150 --> 00:23:27,400

information about vaccinations from her

517

00:23:33,780 --> 00:23:30,160

website when challenged she simply added

518

00:23:36,510 --> 00:23:33,790

more a few months prior she also sent

519

00:23:38,250 --> 00:23:36,520

out an email alert entitled homeopathy

520

00:23:41,700 --> 00:23:38,260

as good as chemotherapy for breast

521

00:23:43,380 --> 00:23:41,710

cancer and non-toxic which was based on

522

00:23:46,260 --> 00:23:43,390

a paper published in the international

523

00:23:49,080 --> 00:23:46,270

journal of oncology firstly the paper

524

00:23:51,750 --> 00:23:49,090

had not made such a claim it was only a

525

00:23:53,940 --> 00:23:51,760

study in cells and secondly it was a

526
00:23:57,600 --> 00:23:53,950
terrible piece of bad science chock-full

527
00:23:59,610 --> 00:23:57,610
of dodgy data so much so that one of the

528
00:24:01,670 --> 00:23:59,620
author's left a comment on my blog where

529
00:24:03,870 --> 00:24:01,680
I had taken the paper to pieces

530
00:24:06,280 --> 00:24:03,880
dissociating herself from the work and

531
00:24:08,470 --> 00:24:06,290
saying quote I asked

532
00:24:11,800 --> 00:24:08,480
be included because I did not think it

533
00:24:13,990 --> 00:24:11,810
was a sound study still French Sheffield

534
00:24:16,600 --> 00:24:14,000
continues to claim that magic vibrating

535
00:24:18,790 --> 00:24:16,610
water can cure everything in a flyer

536
00:24:21,730 --> 00:24:18,800
sent out for a workshop last year she

537
00:24:24,640 --> 00:24:21,740
stated quote homeopathy works for autism

538
00:24:27,550 --> 00:24:24,650

infections anxiety allergies insomnia

539

00:24:30,610 --> 00:24:27,560

coughs and colds depression irritable

540

00:24:32,290 --> 00:24:30,620

bowel syndrome and much much more sorry

541

00:24:34,600 --> 00:24:32,300

Fran but there is no evidence that

542

00:24:37,180 --> 00:24:34,610

homeopathy works for anything except

543

00:24:38,860 --> 00:24:37,190

maybe for hangovers I love a nice cold

544

00:24:40,870 --> 00:24:38,870

drink of water when I'm hungover and

545

00:24:42,790 --> 00:24:40,880

certainly the claim that homeopathy

546

00:24:45,940 --> 00:24:42,800

works for radiation poisoning or

547

00:24:47,740 --> 00:24:45,950

illnesses is complete rubbish you can

548

00:24:49,420 --> 00:24:47,750

find the accompanying blog of this

549

00:24:51,490 --> 00:24:49,430

week's dr. Richie reports on the

550

00:24:55,270 --> 00:24:51,500

official blog of this skeptic zone at

551
00:25:01,060 --> 00:24:55,280
skeptics book calm and until next time

552
00:25:02,890 --> 00:25:01,070
this has been dr. Richie reports dr.

553
00:25:05,650 --> 00:25:02,900
Rachel Dunlop is one of Australia's

554
00:25:07,080 --> 00:25:05,660
foremost media commentators in matters

555
00:25:09,610 --> 00:25:07,090
concerning so-called alternative

556
00:25:13,330 --> 00:25:09,620
medicine she has appeared on national

557
00:25:15,730 --> 00:25:13,340
radio and national television dr. 'he is

558
00:25:19,660 --> 00:25:15,740
available for interviews and you can

559
00:25:26,370 --> 00:25:19,670
contact her at rachel at skeptic zone

560
00:25:30,640 --> 00:25:28,750
yeah aight guys i was talking to Richard

561
00:25:32,740 --> 00:25:30,650
Saunders isn't it alright he said if we

562
00:25:35,140 --> 00:25:32,750
record a trailer for our podcast

563
00:25:36,940 --> 00:25:35,150

skeptics with a que he declared on the

564

00:25:38,230 --> 00:25:36,950

initial last nice of him that's very

565

00:25:39,670 --> 00:25:38,240

generous it's pretty good i'm not sure

566

00:25:41,200 --> 00:25:39,680

what we could do though I mean well

567

00:25:43,990 --> 00:25:41,210

suppose you tell people the shows about

568

00:25:45,970 --> 00:25:44,000

but it's basically this yeah like yeah

569

00:25:47,650 --> 00:25:45,980

but you know we talk about science and

570

00:25:49,000 --> 00:25:47,660

skepticism and things that's that's true

571

00:25:50,770 --> 00:25:49,010

as fuzzy you mentioned the website

572

00:25:52,690 --> 00:25:50,780

address not merseyside skeptics talk

573

00:25:54,340 --> 00:25:52,700

don't you k yeah yeah just like searches

574

00:25:56,770 --> 00:25:54,350

nineteen's oh and then we could end with

575

00:26:08,160 --> 00:25:56,780

like a big song like the skeptics with

576
00:26:23,650 --> 00:26:13,650
is food for thought it's reality bites

577
00:26:25,720 --> 00:26:23,660
with Java and Ben amoud statutory

578
00:26:28,000 --> 00:26:25,730
authority Food Standards Australia New

579
00:26:30,010 --> 00:26:28,010
Zealand issued an urgent recall this

580
00:26:32,320 --> 00:26:30,020
week a popular slimming product the

581
00:26:33,940 --> 00:26:32,330
Latin seed this followed urgent advice

582
00:26:36,580 --> 00:26:33,950
from the New South Wales Food Authority

583
00:26:39,130 --> 00:26:36,590
the state government agency charged with

584
00:26:41,820 --> 00:26:39,140
ensuring food safety and quality on this

585
00:26:43,960 --> 00:26:41,830
and another similar product slim seed

586
00:26:46,030 --> 00:26:43,970
testing has shown that the products

587
00:26:48,880 --> 00:26:46,040
labeled as earlier I smell you Cana

588
00:26:51,130 --> 00:26:48,890

commonly known as candlelight actually

589

00:26:54,070 --> 00:26:51,140

contain highly toxic the veterinary

590

00:26:56,560 --> 00:26:54,080

foliar ortho vet here peruviana also

591

00:26:58,690 --> 00:26:56,570

known as yellow oleander this highly

592

00:27:00,850 --> 00:26:58,700

toxic species contains cardiac

593

00:27:02,920 --> 00:27:00,860

glycosides and is listed in the Food

594

00:27:05,830 --> 00:27:02,930

Standards code under prohibited and

595

00:27:07,540 --> 00:27:05,840

restricted plants and fungi listeners

596

00:27:10,180 --> 00:27:07,550

may be familiar with another of the

597

00:27:13,030 --> 00:27:10,190

glycosides digitalis also known as

598

00:27:16,270 --> 00:27:13,040

foxglove symptoms of poisoning include

599

00:27:18,630 --> 00:27:16,280

nausea vomiting diarrhea coma

600

00:27:21,070 --> 00:27:18,640

convulsions and cardiac arrhythmias

601
00:27:23,410 --> 00:27:21,080
interestingly a side effect of these

602
00:27:25,450 --> 00:27:23,420
substances is decreased appetite and

603
00:27:28,360 --> 00:27:25,460
people have been known to use them to

604
00:27:30,190 --> 00:27:28,370
aid weight loss the Food Authority has

605
00:27:32,400 --> 00:27:30,200
requested that sale of the products be

606
00:27:36,100 --> 00:27:32,410
discontinued and the products withdrawn

607
00:27:37,810 --> 00:27:36,110
fines of 1760 dollars

608
00:27:39,850 --> 00:27:37,820
have been issued to balanced opinions

609
00:27:42,130 --> 00:27:39,860
proprietary limited and slim seed

610
00:27:43,930 --> 00:27:42,140
Australia proprietary limited and both

611
00:27:46,630 --> 00:27:43,940
have been listed on the authorities name

612
00:27:48,340 --> 00:27:46,640
and shame register both were found to

613
00:27:49,870 --> 00:27:48,350

have breached the Food Standards code in

614

00:27:52,720 --> 00:27:49,880

a relation to health and weight loss

615

00:27:54,490 --> 00:27:52,730

claims made about the products these are

616

00:27:56,470 --> 00:27:54,500

the latest in a long line of companies

617

00:27:59,799 --> 00:27:56,480

to be investigated by the authority for

618

00:28:01,960 --> 00:27:59,809

similar breaches in March last year pure

619

00:28:03,880 --> 00:28:01,970

natural health proprietary limited the

620

00:28:06,100 --> 00:28:03,890

company behind the popular lemon detox

621

00:28:08,890 --> 00:28:06,110

diet was fined by the authority for

622

00:28:11,200 --> 00:28:08,900

similar breaches at the time of

623

00:28:13,210 --> 00:28:11,210

recording the website of Latin seed is

624

00:28:15,700 --> 00:28:13,220

directing to a recall notice from the

625

00:28:17,590 --> 00:28:15,710

company no mention is made on the site

626
00:28:20,320 --> 00:28:17,600
of the potential dangers of the product

627
00:28:23,049 --> 00:28:20,330
however an earlier version of the site

628
00:28:25,150 --> 00:28:23,059
states one hundred percent natural no

629
00:28:27,820 --> 00:28:25,160
harmful chemicals artificial colors or

630
00:28:30,100 --> 00:28:27,830
preservatives added the Latin seed is a

631
00:28:32,409 --> 00:28:30,110
product of thorough quality control and

632
00:28:34,330 --> 00:28:32,419
is harvested classified and carefully

633
00:28:37,060 --> 00:28:34,340
selected to guarantee the integrity and

634
00:28:39,970 --> 00:28:37,070
effectiveness following up on a previous

635
00:28:41,350 --> 00:28:39,980
story the West Australian newspaper this

636
00:28:43,450 --> 00:28:41,360
week reported on the Australian

637
00:28:46,090 --> 00:28:43,460
competition and consumer Commission's

638
00:28:47,740 --> 00:28:46,100

case against green gram of the spiritual

639

00:28:50,680 --> 00:28:47,750

healing association of western australia

640

00:28:53,289 --> 00:28:50,690

the case has been dealt a blow up to

641

00:28:55,030 --> 00:28:53,299

federal judge antony see AAPIs refused

642

00:28:57,340 --> 00:28:55,040

to grant injunctions until further

643

00:28:59,320 --> 00:28:57,350

evidence is presented justice siapa

644

00:29:01,750 --> 00:28:59,330

supreet it concerns about the

645

00:29:03,130 --> 00:29:01,760

vulnerability of people with cancer but

646

00:29:04,690 --> 00:29:03,140

commented that the case had the

647

00:29:07,270 --> 00:29:04,700

potential to blur the lines between

648

00:29:09,310 --> 00:29:07,280

issues of trade practice and spiritual

649

00:29:11,200 --> 00:29:09,320

belief treatments offered by the group

650

00:29:13,810 --> 00:29:11,210

include walking into the water and

651
00:29:15,940 --> 00:29:13,820
emerging like Jesus with claims of

652
00:29:17,799 --> 00:29:15,950
hundred percent effectiveness in curing

653
00:29:19,960 --> 00:29:17,809
cancer the judge made comparisons

654
00:29:22,330 --> 00:29:19,970
between Catholic belief in our lady of

655
00:29:25,510 --> 00:29:22,340
lourdes and similar faith-based beliefs

656
00:29:27,340 --> 00:29:25,520
about miracle cures stating can you ever

657
00:29:29,860 --> 00:29:27,350
find that the conduct is misleading if

658
00:29:32,560 --> 00:29:29,870
it's founded on a representation that I

659
00:29:34,750 --> 00:29:32,570
can if you believe the case has been

660
00:29:47,250 --> 00:29:34,760
adjourned until the first of April this

661
00:29:50,919 --> 00:29:49,900
hi this is michael cruz from the

662
00:29:52,870 --> 00:29:50,929
committee for the advancement of

663
00:29:55,270 --> 00:29:52,880

scientific skepticism at the center for

664

00:29:56,740 --> 00:29:55,280

inquiry canada Cass is committed to

665

00:29:58,660 --> 00:29:56,750

critically examining scientific

666

00:30:01,120 --> 00:29:58,670

technological and medical claims in the

667

00:30:03,490 --> 00:30:01,130

public forum across Canada working with

668

00:30:05,289 --> 00:30:03,500

our expert advisors local cfi branches

669

00:30:06,820 --> 00:30:05,299

and other skeptical groups Cass

670

00:30:09,419 --> 00:30:06,830

confronts the peddlers as pseudoscience

671

00:30:11,680 --> 00:30:09,429

with evidence-based scientific inquiry

672

00:30:13,990 --> 00:30:11,690

2010 has been a watershed year for the

673

00:30:15,880 --> 00:30:14,000

sceptical movement in Canada and in 2011

674

00:30:18,220 --> 00:30:15,890

cast will continue fighting bad science

675

00:30:19,480 --> 00:30:18,230

in the media and the government if you

676

00:30:20,799 --> 00:30:19,490

would like to become involved in the

677

00:30:22,330 --> 00:30:20,809

fight to promote critical thinking in

678

00:30:23,860 --> 00:30:22,340

Canada or if you have a concern about

679

00:30:26,049 --> 00:30:23,870

the spread of pseudoscience in the

680

00:30:28,960 --> 00:30:26,059

Canadian media please contact us at

681

00:30:31,690 --> 00:30:28,970

casts at cfi canada CA you can also

682

00:30:33,730 --> 00:30:31,700

follow us on twitter at cfi casts and on

683

00:30:36,610 --> 00:30:33,740

facebook at cass at center for inquiry

684

00:30:49,720 --> 00:30:36,620

canada casts fighting pseudoscience

685

00:30:54,919 --> 00:30:52,850

well the recent tragic events in in

686

00:30:56,480 --> 00:30:54,929

Japan and the last few days cause me to

687

00:30:59,090 --> 00:30:56,490

think about an editorial are right for

688

00:31:01,730 --> 00:30:59,100

the skeptic after similarly tragic

689

00:31:03,200 --> 00:31:01,740

events back in 2004 this is what I said

690

00:31:05,539 --> 00:31:03,210

then and I don't think there's any

691

00:31:07,460 --> 00:31:05,549

difference has happened in the way we

692

00:31:11,480 --> 00:31:07,470

think about things in the intervening

693

00:31:13,250 --> 00:31:11,490

few years who to blame few people could

694

00:31:15,260 --> 00:31:13,260

have remained unaffected by the tragic

695

00:31:17,149 --> 00:31:15,270

events that began in the Indian Ocean of

696

00:31:20,840 --> 00:31:17,159

Sumatra on the morning of December the

697

00:31:22,850 --> 00:31:20,850

26th last year the tsunami profit while

698

00:31:24,860 --> 00:31:22,860

the shifting of tectonic plates under

699

00:31:27,230 --> 00:31:24,870

the sea cut short a quarter of a million

700

00:31:29,899 --> 00:31:27,240

lives ranking it as one of the most

701
00:31:32,060 --> 00:31:29,909
lethal and natural disasters in the

702
00:31:33,830 --> 00:31:32,070
entire history of our planet that this

703
00:31:35,120 --> 00:31:33,840
tragedy touched the hearts of many in

704
00:31:37,100 --> 00:31:35,130
Australia is attested by the

705
00:31:39,230 --> 00:31:37,110
unprecedented generosity of individuals

706
00:31:41,600 --> 00:31:39,240
governments and organizations were all

707
00:31:43,730 --> 00:31:41,610
sorts in donating to relief efforts and

708
00:31:45,680 --> 00:31:43,740
by the dedication of those who went the

709
00:31:47,529 --> 00:31:45,690
item distressed victims this generosity

710
00:31:50,149 --> 00:31:47,539
shows the better part of human nature

711
00:31:53,020 --> 00:31:50,159
our certain religious issues have

712
00:31:54,980 --> 00:31:53,030
emerged of a not so benign evidence from

713
00:31:57,440 --> 00:31:54,990

neurophysiological research indicates

714

00:32:00,169 --> 00:31:57,450

that our genetic makeup makes Homo

715

00:32:03,320 --> 00:32:00,179

sapiens receptive to abstract beliefs

716

00:32:05,450 --> 00:32:03,330

that have no rational foundation this

717

00:32:07,720 --> 00:32:05,460

faith usually manifests itself as

718

00:32:09,770 --> 00:32:07,730

religion but includes various

719

00:32:11,919 --> 00:32:09,780

totalitarian political philosophies that

720

00:32:14,210 --> 00:32:11,929

emerged during the 20th century which

721

00:32:17,270 --> 00:32:14,220

while they ostensibly eschewed

722

00:32:19,190 --> 00:32:17,280

supernatural causes never lest embraced

723

00:32:22,299 --> 00:32:19,200

many of the trappings and certainly the

724

00:32:24,409 --> 00:32:22,309

dogmatism of religion in the replication

725

00:32:27,049 --> 00:32:24,419

observation tends to support this

726

00:32:28,730 --> 00:32:27,059

conclusion throughout history religions

727

00:32:30,799 --> 00:32:28,740

have emerged from all cultures in all

728

00:32:32,570 --> 00:32:30,809

times and most of them have died out or

729

00:32:36,049 --> 00:32:32,580

evolved with the passing of the cultures

730

00:32:37,850 --> 00:32:36,059

or of the time simple logic dictates

731

00:32:40,760 --> 00:32:37,860

that the beliefs of all religions cannot

732

00:32:42,919 --> 00:32:40,770

possibly be right on the other hand it

733

00:32:45,680 --> 00:32:42,929

is an impeccably rational proposition

734

00:32:48,770 --> 00:32:45,690

that all of them could be wrong there is

735

00:32:51,289 --> 00:32:48,780

no evidence to suggest that faith plan X

736

00:32:53,720 --> 00:32:51,299

has a better explanation of the

737

00:32:55,909 --> 00:32:53,730

inexplicable when this faith brand why

738

00:32:58,610 --> 00:32:55,919

there is far more persuasive evidence

739

00:33:02,600 --> 00:32:58,620

that all religions as constructively

740

00:33:04,760 --> 00:33:02,610

human mind a primer fell ability this

741

00:33:06,980 --> 00:33:04,770

proposed human predisposition to believe

742

00:33:09,530 --> 00:33:06,990

and to invent things in which to believe

743

00:33:11,630 --> 00:33:09,540

has like most human institutions

744

00:33:14,030 --> 00:33:11,640

resulted in both sublime benefits and

745

00:33:16,010 --> 00:33:14,040

grave thoughts they can be little doubt

746

00:33:18,710 --> 00:33:16,020

religious devotion has inspired

747

00:33:20,810 --> 00:33:18,720

wonderful art music architecture and

748

00:33:24,200 --> 00:33:20,820

literature without which the world would

749

00:33:26,030 --> 00:33:24,210

be a decidedly poor a place North can

750

00:33:28,400 --> 00:33:26,040

there be much doubt that religions can

751

00:33:30,380 --> 00:33:28,410

provide comfort to their adherence or

752

00:33:32,900 --> 00:33:30,390

inspire great acts of kindness and

753

00:33:34,940 --> 00:33:32,910

sacrifice but religion and similar

754

00:33:38,030 --> 00:33:34,950

dogmatic beliefs also has a dark side

755

00:33:40,159 --> 00:33:38,040

with sectarian inspired conflict war and

756

00:33:42,200 --> 00:33:40,169

genocide romania's constant throughout

757

00:33:44,060 --> 00:33:42,210

human history thus we have seen

758

00:33:46,850 --> 00:33:44,070

statements from clerics for various

759

00:33:49,490 --> 00:33:46,860

faiths seeking to justify how such

760

00:33:51,320 --> 00:33:49,500

violent natural axles at tsunami fitted

761

00:33:53,750 --> 00:33:51,330

with their concept of their particular

762

00:33:56,600 --> 00:33:53,760

deity the tsunami was immaculately

763

00:33:58,669 --> 00:33:56,610

ecumenical in its effects killing tens

764

00:34:02,150 --> 00:33:58,679

of thousands of Muslims Buddhists Hindus

765

00:34:05,390 --> 00:34:02,160

Christians Jews seeks adherents of many

766

00:34:07,789 --> 00:34:05,400

other faiths sex you Age spirituality as

767

00:34:10,669 --> 00:34:07,799

well as no doubt many skeptics atheists

768

00:34:12,710 --> 00:34:10,679

agnostics illness and rationals who are

769

00:34:14,270 --> 00:34:12,720

lucky enough to be in its path it did

770

00:34:16,639 --> 00:34:14,280

this without regard to their religious

771

00:34:18,619 --> 00:34:16,649

political or other affiliations age sex

772

00:34:20,810 --> 00:34:18,629

state of health or well they were good

773

00:34:23,090 --> 00:34:20,820

or bad people that this caused great

774

00:34:25,190 --> 00:34:23,100

intellectual discomfort the cleric was

775

00:34:28,369 --> 00:34:25,200

evident in a tortured logic they sought

776

00:34:30,830 --> 00:34:28,379

to use in their rationalizations to the

777

00:34:33,260 --> 00:34:30,840

obvious skeptic in question how could

778

00:34:36,320 --> 00:34:33,270

any hypothetical omniscient omnipresent

779

00:34:39,080 --> 00:34:36,330

and benevolent deity allow such

780

00:34:41,960 --> 00:34:39,090

indiscriminate killing the answers range

781

00:34:44,510 --> 00:34:41,970

from punishment was trained from the

782

00:34:47,480 --> 00:34:44,520

true car including newborn babies

783

00:34:49,310 --> 00:34:47,490

presumably to the grace of God is shown

784

00:34:52,010 --> 00:34:49,320

in the generosity of the response from

785

00:34:53,990 --> 00:34:52,020

people surely any deity worth his salt

786

00:34:56,510 --> 00:34:54,000

could have found all this tragic method

787

00:34:58,840 --> 00:34:56,520

of demonstrating it but by far the most

788

00:35:01,760 --> 00:34:58,850

common response was couched in terms of

789

00:35:04,700 --> 00:35:01,770

God's ways are not our ways and we

790

00:35:06,440 --> 00:35:04,710

cannot know the mind of God which might

791

00:35:08,000 --> 00:35:06,450

have sounded more sincere had it not

792

00:35:10,340 --> 00:35:08,010

issued from the mouths of those his

793

00:35:12,080 --> 00:35:10,350

lives and livelihoods were precisely

794

00:35:13,740 --> 00:35:12,090

dedicated to promulgating and

795

00:35:17,310 --> 00:35:13,750

interpreting the action

796

00:35:20,160 --> 00:35:17,320

words of God in passing several of them

797

00:35:22,980 --> 00:35:20,170

more vital clerics chose to try those of

798

00:35:24,810 --> 00:35:22,990

a skeptics atheist NL who do not

799

00:35:26,940 --> 00:35:24,820

subscribe to their nations of Daddy's

800

00:35:29,220 --> 00:35:26,950

implying that we could find no comfort

801

00:35:32,040 --> 00:35:29,230

in our scientific view the world in the

802

00:35:33,990 --> 00:35:32,050

face of catastrophe it might surprise

803

00:35:35,790 --> 00:35:34,000

them to learn that what rational people

804

00:35:38,340 --> 00:35:35,800

the Royal I from science is not comfort

805

00:35:39,720 --> 00:35:38,350

but understanding part of that

806

00:35:41,850 --> 00:35:39,730

understanding is that we live on a

807

00:35:44,910 --> 00:35:41,860

dynamic planet where natural forces

808

00:35:47,100 --> 00:35:44,920

reign supreme that these insensate

809

00:35:49,830 --> 00:35:47,110

forces are neither than I normal I'm I

810

00:35:53,610 --> 00:35:49,840

just are a natural disaster is just that

811

00:35:56,190 --> 00:35:53,620

natural sometimes no one is to blame not

812

00:35:58,470 --> 00:35:56,200

even God it is not the rationalist who

813

00:36:01,260 --> 00:35:58,480

is discomforted by such an occurrence it

814

00:36:03,420 --> 00:36:01,270

is those who strive painfully to justify

815

00:36:07,200 --> 00:36:03,430

the incompatibility of a benevolent body

816

00:36:09,480 --> 00:36:07,210

with the horrific events on a personal

817

00:36:11,670 --> 00:36:09,490

level if not comfort I did derive some

818

00:36:13,440 --> 00:36:11,680

satisfaction when the service in which I

819

00:36:15,750 --> 00:36:13,450

spent 15 of my younger years the

820

00:36:18,360 --> 00:36:15,760

Honorable AF was first on the ground

821

00:36:20,550 --> 00:36:18,370

carrying a dose imatra in 48 hours of

822

00:36:23,790 --> 00:36:20,560

the disaster where it continued to

823

00:36:25,260 --> 00:36:23,800

provide assistance today if any comfort

824

00:36:27,990 --> 00:36:25,270

comes and comes from seeing people

825

00:36:31,050 --> 00:36:28,000

selflessly doing good when other people

826

00:36:33,030 --> 00:36:31,060

are in need in this case such people are

827

00:36:42,880 --> 00:36:33,040

many and they come from right across the

828

00:36:47,329 --> 00:36:45,169

watching the scenes from Japan over the

829

00:36:48,949 --> 00:36:47,339

last few days listen to religious

830

00:36:51,229 --> 00:36:48,959

nutcases blame the earthquake and

831

00:36:53,229 --> 00:36:51,239

tsunami on the wrath of God reminded me

832

00:36:55,099 --> 00:36:53,239

of something I wrote in early 2005

833

00:36:56,779 --> 00:36:55,109

following the earthquake to the west of

834

00:36:58,249 --> 00:36:56,789

Indonesia and the subsequent tsunami

835

00:37:00,679 --> 00:36:58,259

that affected countries around the

836

00:37:02,749 --> 00:37:00,689

Indian Ocean is just as topic on the

837

00:37:05,569 --> 00:37:02,759

hours at most five years ago on November

838

00:37:06,949 --> 00:37:05,579

the first 1755 an earthquake occurred on

839

00:37:09,739 --> 00:37:06,959

the floor of the Atlantic Ocean off the

840

00:37:11,689 --> 00:37:09,749

coast of Portugal an estimated twenty

841

00:37:13,939 --> 00:37:11,699

thousand people died within minutes as

842

00:37:15,829 --> 00:37:13,949

buildings collapsed in Lisbon and about

843

00:37:17,689 --> 00:37:15,839

forty thousand more died is result of

844

00:37:19,579 --> 00:37:17,699

the tsunami wave which struck the city

845

00:37:22,249 --> 00:37:19,589

half an hour later and serves beyond

846

00:37:23,390 --> 00:37:22,259

ruins burn up the Tagus River the vast

847

00:37:24,529 --> 00:37:23,400

majority the dead would have been

848

00:37:27,859 --> 00:37:24,539

Christians they believed in the

849

00:37:30,529 --> 00:37:27,869

benevolent omnipotent God I December 26

850

00:37:32,179 --> 00:37:30,539

2004 North quake off the western tip of

851
00:37:33,769 --> 00:37:32,189
Indonesia sent a tsunami across the

852
00:37:35,390 --> 00:37:33,779
Indian Ocean which killed at least a

853
00:37:37,640 --> 00:37:35,400
hundred and twenty-five thousand people

854
00:37:39,349 --> 00:37:37,650
immediately and count was more later of

855
00:37:41,870 --> 00:37:39,359
disease and starvation race ahead of the

856
00:37:44,269 --> 00:37:41,880
relief effort this wave was not selected

857
00:37:46,309 --> 00:37:44,279
for religion and Hindus Muslims Sikhs

858
00:37:47,989 --> 00:37:46,319
Buddhists Christians and Jews who

859
00:37:50,179 --> 00:37:47,999
eluding observant painful and blameless

860
00:37:52,279 --> 00:37:50,189
lives who swept away with the Atheist

861
00:37:53,870 --> 00:37:52,289
app estates and sinners following both

862
00:37:55,819 --> 00:37:53,880
of these events the question arose of

863
00:37:57,620 --> 00:37:55,829

how a benevolent non-dividend God could

864

00:37:59,149 --> 00:37:57,630

allow such things to happen one of the

865

00:38:00,799 --> 00:37:59,159

philosophical arguments against the

866

00:38:02,899 --> 00:38:00,809

existence of God it's always been based

867

00:38:04,189 --> 00:38:02,909

on the existence of evil this is easily

868

00:38:06,409 --> 00:38:04,199

countered nor most any religious

869

00:38:07,969 --> 00:38:06,419

tradition our ships and the attack on

870

00:38:10,249 --> 00:38:07,979

the world trade center will react to men

871

00:38:11,449 --> 00:38:10,259

who had fully chosen to commit evil the

872

00:38:13,759 --> 00:38:11,459

concept of sin has to allow the

873

00:38:15,890 --> 00:38:13,769

existence of sinners as of the concept

874

00:38:17,929 --> 00:38:15,900

of redemption if Simmons cannot choose

875

00:38:20,509 --> 00:38:17,939

to sin they also cannot choose to ask

876

00:38:22,309 --> 00:38:20,519

forgiveness for those sins the

877

00:38:25,069 --> 00:38:22,319

earthquake cannot however be explained

878

00:38:26,779 --> 00:38:25,079

away so easily a natural disaster which

879

00:38:28,159 --> 00:38:26,789

causes this much suffering can only

880

00:38:30,349 --> 00:38:28,169

happen because God wanted to do it

881

00:38:31,849 --> 00:38:30,359

because God could not stop it must be of

882

00:38:34,699 --> 00:38:31,859

course God didn't care if it happened or

883

00:38:36,169 --> 00:38:34,709

not if God wanted to do it there appears

884

00:38:38,120 --> 00:38:36,179

to be no rational reason to punish good

885

00:38:40,189 --> 00:38:38,130

people with sinners in God can hardly

886

00:38:41,919 --> 00:38:40,199

describe is benevolent and a god he will

887

00:38:44,089 --> 00:38:41,929

explain Evelyn slacks a possible virtue

888

00:38:46,419 --> 00:38:44,099

and something more perfect and this God

889

00:38:48,499 --> 00:38:46,429

can be imagined this God is not God

890

00:38:49,880 --> 00:38:48,509

similarly if God could not stop the

891

00:38:51,890 --> 00:38:49,890

earthquake then God is not omnipotent

892

00:38:54,289 --> 00:38:51,900

and again like to virtually which an

893

00:38:55,640 --> 00:38:54,299

existing God must have if God doesn't

894

00:38:56,300 --> 00:38:55,650

care about us then why should we care

895

00:38:59,090 --> 00:38:56,310

about him

896

00:39:01,640 --> 00:38:59,100

why does he need to exist in the first

897

00:39:03,440 --> 00:39:01,650

place over the days following the 2004

898

00:39:04,670 --> 00:39:03,450

earthquake I saw several religious

899

00:39:06,110 --> 00:39:04,680

figures trying to reconcile the

900

00:39:08,300 --> 00:39:06,120

thousands of deaths with their concept

901
00:39:09,830 --> 00:39:08,310
of God those who could be taken

902
00:39:11,600 --> 00:39:09,840
seriously seem to be desperately

903
00:39:14,330 --> 00:39:11,610
preaching a synthesis / three options

904
00:39:15,890 --> 00:39:14,340
outlined above God had done this is a

905
00:39:17,480 --> 00:39:15,900
way of punishing sinners and warning

906
00:39:19,430 --> 00:39:17,490
potential sinners it was unfortunate

907
00:39:21,590 --> 00:39:19,440
that the innocent had to suffer this was

908
00:39:22,730 --> 00:39:21,600
a burden expected of believers and God

909
00:39:25,460 --> 00:39:22,740
was sorry but things have to keep

910
00:39:27,080 --> 00:39:25,470
following some eternal plan it was this

911
00:39:29,240 --> 00:39:27,090
very form of sophistry which made me an

912
00:39:30,350 --> 00:39:29,250
atheist being asked to believe in

913
00:39:31,910 --> 00:39:30,360

creationism it pushed me out of

914

00:39:33,590 --> 00:39:31,920

organized religion long before that I

915

00:39:35,060 --> 00:39:33,600

can remember the precise moment when I

916

00:39:37,220 --> 00:39:35,070

came to the realization that I did not

917

00:39:39,110 --> 00:39:37,230

need a personal God we set my

918

00:39:40,940 --> 00:39:39,120

grandmother's funeral and the police was

919

00:39:43,040 --> 00:39:40,950

desperately trying to explain how when I

920

00:39:44,600 --> 00:39:43,050

just world a person would lead an

921

00:39:45,680 --> 00:39:44,610

unblemished and charitable life she had

922

00:39:47,180 --> 00:39:45,690

been stricken with the disease which

923

00:39:49,700 --> 00:39:47,190

caused her to spend the last year's our

924

00:39:51,110 --> 00:39:49,710

life in increasing pain he finally

925

00:39:52,370 --> 00:39:51,120

decided that she had taken the burden

926
00:39:54,020 --> 00:39:52,380
which rightly belong to sinners the

927
00:39:56,570 --> 00:39:54,030
Saints is supposed to do and his Jesus

928
00:39:57,860 --> 00:39:56,580
did a partially blasphemy of the idea

929
00:39:59,930 --> 00:39:57,870
that my grandmother was taking up their

930
00:40:01,820 --> 00:39:59,940
jerseys it swept off attack was that she

931
00:40:04,550 --> 00:40:01,830
had not chosen to be crippled God had

932
00:40:06,020 --> 00:40:04,560
done to all without asking I realized

933
00:40:07,430 --> 00:40:06,030
that a God who could do that is not the

934
00:40:09,620 --> 00:40:07,440
sort of God I needed to believe him I

935
00:40:10,610 --> 00:40:09,630
should have a point out but no problem

936
00:40:12,500 --> 00:40:10,620
with other people they want to believe

937
00:40:14,150 --> 00:40:12,510
in a personal God unless that belief

938
00:40:16,160 --> 00:40:14,160

leads to harm to others one of the

939

00:40:20,750 --> 00:40:16,170

differences between seven and 55 and

940

00:40:21,890 --> 00:40:20,760

2005 and even 2011 is that in 1755 there

941

00:40:24,080 --> 00:40:21,900

was an Enlightenment going on across

942

00:40:26,360 --> 00:40:24,090

Europe if it will felt free to ask hard

943

00:40:27,890 --> 00:40:26,370

questions about God in his works even a

944

00:40:30,170 --> 00:40:27,900

fruity criticized religion the religious

945

00:40:32,360 --> 00:40:30,180

bodies two and a half centuries later

946

00:40:34,100 --> 00:40:32,370

and since we're in the middle of an in

947

00:40:35,690 --> 00:40:34,110

darkened money where politeness

948

00:40:37,340 --> 00:40:35,700

political correctness and cultural

949

00:40:40,280 --> 00:40:37,350

relativity restrict free criticism of

950

00:40:41,570 --> 00:40:40,290

religion during the 2004 election

951
00:40:43,670 --> 00:40:41,580
campaigns in the United States and

952
00:40:45,440 --> 00:40:43,680
Australia both countries with explicit

953
00:40:47,810 --> 00:40:45,450
constitutional separation of church and

954
00:40:49,610 --> 00:40:47,820
state incumbent president and prime

955
00:40:50,900 --> 00:40:49,620
minister respectively actively courted

956
00:40:52,490 --> 00:40:50,910
the lunatic fringe of Christian

957
00:40:54,180 --> 00:40:52,500
fundamentalism and Oliver recruits their

958
00:40:55,950 --> 00:40:54,190
chances of re-election

959
00:40:57,810 --> 00:40:55,960
anyone who dare to suggest that

960
00:40:59,490 --> 00:40:57,820
fundamentalist Islam poses a threat and

961
00:41:01,320 --> 00:40:59,500
civilized societies as a cue to

962
00:41:03,120 --> 00:41:01,330
religious bigotry and racism as if

963
00:41:04,200 --> 00:41:03,130

religion which is a option mental

964

00:41:07,740 --> 00:41:04,210

condition has anything to do with

965

00:41:09,090 --> 00:41:07,750

genetics when the tsunami exposed

966

00:41:11,340 --> 00:41:09,100

landmines buried in the fields of

967

00:41:12,810 --> 00:41:11,350

northern Sri Lanka no commentator made

968

00:41:14,610 --> 00:41:12,820

the point that those mines been placed

969

00:41:15,870 --> 00:41:14,620

there by people of one religion to kill

970

00:41:17,850 --> 00:41:15,880

among people with a different set of

971

00:41:19,290 --> 00:41:17,860

beliefs I was criticized for pointing

972

00:41:22,500 --> 00:41:19,300

out for the mood Utley up to Christmas

973

00:41:24,300 --> 00:41:22,510

2003 30,000 people were killed in an

974

00:41:28,140 --> 00:41:24,310

earthquake which hit banned in Iran and

975

00:41:30,390 --> 00:41:28,150

immediately after Christmas 2004 125,000

976
00:41:32,220 --> 00:41:30,400
people were killed by a tsunami then I

977
00:41:33,600 --> 00:41:32,230
asked the question why does God choose

978
00:41:36,300 --> 00:41:33,610
this method of celebrating his son's

979
00:41:38,010 --> 00:41:36,310
birth date what surprised me was that a

980
00:41:40,770 --> 00:41:38,020
lot of the criticism came from atheists

981
00:41:42,570 --> 00:41:40,780
and other skeptics who obviously were

982
00:41:44,910 --> 00:41:42,580
suffering from political correctness I

983
00:41:47,190 --> 00:41:44,920
wonder what the world would be like 250

984
00:41:48,540 --> 00:41:47,200
years from now well people that time

985
00:41:51,150 --> 00:41:48,550
have recovered what has been lost over

986
00:41:52,380 --> 00:41:51,160
the last 250 years and going to prepare

987
00:41:54,600 --> 00:41:52,390
to accept the idea that they can live

988
00:41:55,860 --> 00:41:54,610

without the need for superstition but

989

00:41:57,870 --> 00:41:55,870

will the world's regressed even more

990

00:41:59,730 --> 00:41:57,880

look like it lost 500 years ago and

991

00:42:02,340 --> 00:41:59,740

supposedly civilized cities read that

992

00:42:03,780 --> 00:42:02,350

the smell of burning witches think about

993

00:42:06,570 --> 00:42:03,790

the good things that God is supposed to

994

00:42:08,760 --> 00:42:06,580

be then think about 125,000 people

995

00:42:11,340 --> 00:42:08,770

killed in a single day of what insurance

996

00:42:12,390 --> 00:42:11,350

companies like to call an act of God ask

997

00:42:15,090 --> 00:42:12,400

yourself what's missing in this picture

998

00:42:17,160 --> 00:42:15,100

of a deity remove the last line involved

999

00:42:18,990 --> 00:42:17,170

his poem about the 1755 lisbon

1000

00:42:40,710 --> 00:42:19,000

earthquake he might have added one thing

1001
00:42:45,730 --> 00:42:43,030
thank you for listening to the skeptic

1002
00:42:48,100 --> 00:42:45,740
zone this week now because of the recent

1003
00:42:50,590 --> 00:42:48,110
situation in Japan I've put back the

1004
00:42:53,920 --> 00:42:50,600
interview Maynard conducted with the

1005
00:42:57,370 --> 00:42:53,930
heart transplant recipient so that

1006
00:43:00,060 --> 00:42:57,380
should be coming up next week but I

1007
00:43:03,310 --> 00:43:00,070
think that's all I have to say this week

1008
00:43:11,590 --> 00:43:03,320
so until then this is Richard Saunders

1009
00:43:14,980 --> 00:43:11,600
signing off from Sydney Australia you've

1010
00:43:19,570 --> 00:43:14,990
been listening to the skeptic zone visit

1011
00:43:22,060 --> 00:43:19,580
our website at www.skeptics.org on TV for