You know, how do we live with them? How? How do we respond when things go wrong? How do we govern and manage various forms of threat to our to ourselves? I'm gonna talk about heat. And at this time of year, we're probably most focused on how we're going to get it, how we're going to keep warm over the winter. How are we going to afford to be able to keep warm, particularly over this winter? And I could have done a bit of a talk about fuel poverty and so on, but I'm not. I'm going to talk about.
A different type of encounter with heat.
And that involves taking us not back very long in time, just to the middle of July, where I'm sure you will remember, we had a very significant heat wave event, not just in this country, but across large swaths of Europe.
So.
I'm going to talk about the sort of the, the, the, what sort of threat he presents to us, who it affects the relationship between heat waves and heat as a risk and ageing, and then talk about a project which I was involved with a few years ago, which looked at how heat waves were being managed in care home environments.
So if we go back to the 18th and 19th of July this year, we had a quite extraordinary experience of a heat wave unlike anything that we've ever experienced before. So these were these really were record temperatures and it was very strongly linked to what we would expect to be happening because of climate change. So heat waves are expected with climate change to become both more intense and more frequently.
Experienced. And if you look at the record, you see clear evidence of this. So this is from the Met Office. It shows the top ten hottest UK days on record and you'll see number one at the top right. There is the 19th of July this year where we got over 40 degrees as a measured temperature in this country for the first time ever. If you look at the sort of range of other ones, you'll see that predominantly in the top 10. They're all within the last 20 or 30 years.
Apart from that, outlier back in 1910.
What was really striking this year was that was the extent to which the temperature record was broken. As it says at the bottom, temperature records tend to get broken by modest amounts and by just a few stations across the country.
This was like incident which broke the national record by a much bigger jump than we've ever seen before, and it was across a large swaths of the country, even up here in Lancaster. So the meteorological station that Hazel rigged at the university runs recorded the highest ever temperature by far at that station. So we encounter temperatures that we'd never expect to have this far north in the UK.
We went for the first time ever into the red zone of the heat wave alerts, so there's a sort of system of levels of alert from sort of zero through to four, and we've never been in a four before. So this was the red. This was the major incident. Emergency response, as it says, UK braces are record temperatures, first ever red heat warning comes into effect. So this was really quite extraordinary.
Even the heating system.
Could be an issue. What? Look at that second one. The heating system was in operation 24/7 in all of our case studies, including during the summer months, the heating was still on in some way during the summer period.
Again, this sort of sense. Well, Kerns have just gotta be hot, you know, I'm sure some of you have been an extraordinarily hot care home environments, and it's just at the sort of culture of it. But

also just nobody was entirely sure necessarily how exactly how the heating system worked or who was responsible for managing temperature levels.
You know, opening the windows rather than doing anything about the heating and no.
A party apart from in some instances, very little investment in things like these sort of blind systems and so on. That would really help better heat management during hot periods.
So those are some of the findings that we that we that we had so and some real sort of problems with the sort of practices and the awareness and the sort of preparedness within care homes.
In a way, I'll I'll most important recommendation was to say, well, we should be setting a really high aim here, but in some ways is actually a very low aim.
The aim of becoming more resilient to overheating and heat wave risks than the care sector should be to ensure that no additional excess mortality or morbidity occurs during future heat waves, so we shouldn't have those instincts at all.
Given that vulnerable residents are within settings that should be providing care.
So they're not socially isolated in principle, when you're in a care home and therefore protection against thermal risks, as they already do against cold weather conditions, when did you last hear of somebody dying in a care home because they were too cold?
Doesn't happen. Not that we're aware, because the care homes are entirely oriented towards that to keep, you know, a great way to deal with fuel policy and being in a cold home in a way, it's to go into a care home because people aren't in fuel poverty when they're in a care home, only when they're in their own home.
I'd like to think I mean this winter, maybe we'll see.
But so it's a reason if we think about it like that, if we flip it towards cold as a risk, we can say well, this is an entirely reasonable aim building design, ongoing management and care practices needs to come much better focused towards just taking these excess deaths away. It's entirely possible to do, I would argue in theory.
Other conclusions, these sorts of things. There's a difference between pleasant summertime sunshine and heat wave periods, and we need to get that into our psyche. That. Yes, summers. Lovely warm sun, nice temperature. Great. But when we go beyond that, things need to change. We need to behave differently. Systems need to function differently.
We need to understand much more about this differential susceptibility to the impacts of heat waves. It should be there in people's care plans that this person during a heat wave is going to be particularly at risk. It's generally not there at all. If it was documented, if it was detailed that around amongst the range of residents in a care home focused particularly on these people because they potentially can be most at risk.
We need to get over this sort of culture, British culture, of seeing the cold as the form of danger. And and recognize that you know this is the world that we're going into is going to start in a way to make some of this more normal.
Which we could say, well, maybe that's a good thing. If these heat waves become more recurrent, then maybe we'll start to think of them more in the way that we should do. But clearly, while we're making that adjustment, there's a lot of threat that could come from future heat waves that it's extreme as the one that we had this year or even more extreme.
We made some specific recommendations that the to do with the heat wave plan and the creation of detailed guidance for care home staff and amazingly, you know, often people say we made always recommendations and then you never hear the rest of the story. We actually got them to do it. We actually got them to produce this document not just because of our research project, but we were part of very much part of putting content into this they produce.

Specific guidance.
On supporting vulnerable people before and during a heat wave for care, home managers and stuff, so it's been regularly updated, which is good to see. But the first iteration of this sort of followed on from our research project.
That is sort of research impact the sort of thing that we'd like to think we can do from our research and very occasionally it does actually happen.
Is this working well?
I'm I haven't sort of done the research since the initial periods were really be able to answer that question, but if we look at statistics, it's not necessarily very hopeful.
This is a bit of a difficult diagram to interpret and I should have put a little sort of simple version of it in a way, but I suppose if you look at the big black.
Symbols for care homes.
So this is showing.
Excess deaths over a number of years and it's showing location of death.
Own Home hospital care home and you'll see that not every time, but in most years, care homes are still the the have the highest number of highest proportion of excess deaths in terms of location compared to own home and hospital. So the phenomena appears to still be there.
So even okay there's guidance, but that doesn't solve all of the problem, does it? Because the care sector has all sorts of other problems, fundamental problems, and justice. This is just layered on top of top of all of those. But that doesn't mean that we should just ignore it. So.
A number of obvious things. Extreme heat is becoming a real threat. It's gonna get worse. Not very happy.
But we can do something about it.
Umm, I think in a way the fact that we were made so clear that this was an extreme heat wave back in July. Maybe we started to respond in a different way to that heat wave, maybe responded better than we had done in the past.
Yeah, we shall see. When we look at those excess death figures when they come out, the Cares Act has a really crucial role to play, but has to be much better enabled to perform this role.
Thank you very much.