

Transcript

00:00:06 Speaker 1

If asking your mate down the pub about vaping, here's what they'd probably say.

00:00:13 Speaker 1

No one agrees if it's safer or not, so you might as well smoke anyway.

00:00:20 Speaker 1

Now, what your mate needs is a Cochrane review.

00:00:23 Speaker 1

All the facts have been checked at least twice.

00:00:26 Speaker 1

They find there's a lot that the experts agree on and might give you different advice.

00:00:38 Speaker 2

Hi, my name is Nicola and I'm a researcher based at the University of Oxford in the UK.

00:00:44 Speaker 3

And I'm Jamie and I'm a researcher based at the University of Massachusetts Amherst in the United States.

00:00:49 Speaker 2

We are both members of the Cochrane Tobacco Addiction Group.

00:00:52 Speaker 2

Welcome to this edition of Let's Talk E-Cigarettes.

00:00:56 Speaker 2

This podcast is a companion to a research project being carried out at the University of Oxford, where every month we research the e-cigarette research literature to find new studies.

00:01:06 Speaker 2

We then use these studies to update our Cochrane systematic reviews of e-cigarettes for smoking cessation and interventions for quitting vaping.

00:01:15 Speaker 2

This type of review is called a living systematic review.

00:01:18 Speaker 2

And in each episode, we start by going through the studies we found that month and then go into more detail about a particular study or topic

00:01:26 Speaker 2

related to e-cigarettes.

00:01:28 Speaker 3

So this month, our searches cover the studies we found in December and our January searches.

00:01:35 Speaker 3

So up to the 1st of January of 2026, because we took a break over the winter holidays and hope you did too.

00:01:42 Speaker 3

Over December and January, we found four new ongoing studies and 12 papers linked to studies already included in our review.

00:01:49 Speaker 3

We'll tell you about those four new ongoing studies in a nutshell.

00:01:55 Speaker 3

Of the four new ongoing studies, one studied vaping for smoking cessation.

00:01:59 Speaker 3

The record's up on clinicaltrials.gov, so we don't have a ton of information on it, but it's a really exciting study.

00:02:04 Speaker 3

It's led by Lori Zawartailo at the University of Toronto, and the sponsor is listed as the Center for Addiction and Mental Health.

00:02:11 Speaker 3

This is a really big study.

00:02:13 Speaker 3

They're aiming to recruit 6,000 people who smoke daily and randomize them to either e-cigarettes or cytosine for quitting smoking.

00:02:21 Speaker 3

As a reminder to those listening, cytosine is a nicotine receptor partial agonist.

00:02:25 Speaker 3

It's a really effective drug that you can get on prescription to help you quit smoking.

00:02:29 Speaker 3

And we really have hardly any data right now comparing e-cigarettes directly to cytosine.

00:02:34 Speaker 3

So it's really exciting that such a big trial is coming.

00:02:38 Speaker 3

They haven't started recruitment yet, but they anticipate study completion in 2028, and they'll be collecting data on biomarkers, self-reported smoking behavior, nicotine dependence, and quality of life up to 12 months.

00:02:51 Speaker 3

We also found three new ongoing studies of interventions for vaping cessation.

00:02:56 Speaker 3

The first is testing nicotine and tobacco message framing to change nicotine and tobacco use behavior in diverse groups of young adults who smoke.

00:03:06 Speaker 3

The sponsor is listed as Ohio State University Comprehensive Cancer Center, and Assistant Professor Joanna Patterson is listed as the lead.

00:03:15 Speaker 3

The trial is active right now, and it investigates the effect of message framing on smoking and vaping behaviors among lesbian, gay, bisexual, transgender, and queer young adults who use nicotine or tobacco.

00:03:26 Speaker 3

I'm personally super excited to see a study in this population.

00:03:29 Speaker 3

We know that vaping and smoking rates tend to be higher in this group of young people, and it's great to see a study focused on them.

00:03:38 Speaker 3

This study is estimated to complete in August of this year.

00:03:41 Speaker 3

It aims to recruit 300 participants and follow them up for 12 weeks.

00:03:45 Speaker 3

I'll hand over to Nicola to tell you about the other two studies.

00:03:49 Speaker 2

Thanks, Jamie.

00:03:51 Speaker 2

The second new ongoing study for the interventions for quitting vaping review is a study record for a randomized controlled trial called the Individualized Smoking Cessation Treatment for dual smokers of cigarette and electronic cigarette based on genotyping.

00:04:05 Speaker 2

This study is sponsored by the China Japan Friendship Hospital and aims to recruit 220 adults.

00:04:12 Speaker 2

The intervention will involve calculating medication, providing it based on the results of genetic tests.

00:04:18 Speaker 2

The record doesn't specifically say it will aim to help people quit vaping as well as smoking.

00:04:22 Speaker 2

However, as they are recruiting dual users, this may be the case and we'll keep an eye on this as we get more information to see whether it is actually eligible for the review.

00:04:32 Speaker 2

And the study is funded by National High Level Hospital Clinical Research Funding.

00:04:38 Speaker 2

So the final ongoing study for our vaping cessation review is a trial of a novel on-demand virtual reality intervention in combination with cognitive behavioural therapy for nicotine vaping cessation.

00:04:50 Speaker 2

It's led by Charles River Analytics, a company based in Massachusetts in the US.

00:04:55 Speaker 2

They're aiming to recruit 90 people aged 16 years and over who vape nicotine at least weekly for three months, with trial completion estimated for 2028.

00:05:05 Speaker 2

All participants will receive remote cognitive behavioural therapy for quitting vaping, and one group will be randomised to receive a virtual reality intervention called No Vape.

00:05:15 Speaker 2

The other group will be randomised to a sham virtual reality intervention, and they will be followed up to 12 weeks.

00:05:23 Speaker 3

For this month's deep dive...

00:05:26 Speaker 3

Rather than covering the new studies we found, we wanted to focus on some of the methods and really how we go about doing what we do that forms the backbone of this podcast, which are our Cochrane Living Systematic Reviews, how we do those, and also how you can find information on them.

00:05:44 Speaker 3

We know we have some new listeners and we want to make sure that you all know what we're getting up to each month.

00:05:49 Speaker 3

Do you want to get us started, Nicola?

00:05:51 Speaker 2

Yeah, sure.

00:05:52 Speaker 2

And I suppose it might help to start with what actually

00:05:55 Speaker 2

a living systematic review is.

00:05:58 Speaker 2

So A systematic review to start with is a piece of research where you go out and look at the literature and try and find all the available literature that's out there to answer your specific research question.

00:06:11 Speaker 2

And usually that's done at one particular point in time.

00:06:15 Speaker 2

But with a living systematic review, which is what we're doing here, is we've recognised that these are areas where

00:06:22 Speaker 2

The evidence is moving a lot and so as new things come out, the conclusions we draw might be different.

00:06:29 Speaker 2

We're actually doing that systematic reviewing on a regular basis and as new evidence becomes available we're adding it into our systematic review as we go.

00:06:38 Speaker 2

Now for us that means that we look at the literature every month.

00:06:43 Speaker 2

For other people doing different living reviews, they might do that at different time points.

00:06:48 Speaker 2

But for us, we're going out there and we're looking at the literature monthly.

00:06:52 Speaker 2

So we have all of these processes that we go through every month.

00:06:56 Speaker 2

Obviously, one of them is creating this podcast.

00:06:59 Speaker 2

But I'll just get you started on the kind of first piece of the puzzle, I think.

00:07:04 Speaker 2

and then I can hand over to Jamie to talk you through the next one.

00:07:07 Speaker 2

So the first thing, and with all of this, we'll just be correcting each other as we go along, but the first thing usually is our searches.

00:07:16 Speaker 2

So on the very first of the month, our colleague John, John Livingston Banks, who is our search specialist, goes out and looks at

00:07:25 Speaker 2

all the databases that are relevant, we think, to our review and looks at if there are any new studies that we can find in there.

00:07:35 Speaker 2

So it's basically a kind of bibliographic search.

00:07:38 Speaker 2

And we have these search terms, which are all detailed in our review, which you can find online, which we use to try and search for the relevant literature.

00:07:47 Speaker 2

So on the 1st of the month, as long as it's not a weekend or a holiday, we'll get an e-mail from John saying, OK, I've run the

00:07:55 Speaker 2

searches.

00:07:56 Speaker 2

Here they are.

00:07:57 Speaker 2

We get a link to some software where we can find all those searches.

00:08:00 Speaker 2

And then the next step is for us to do screening.

00:08:04 Speaker 2

And I'll hand over to Jamie to tell you a bit more about the screening process.

00:08:08 Speaker 3

Thanks, Nicola.

00:08:08 Speaker 3

So for screening, this is something that we do independently and in duplicate.

00:08:13 Speaker 3

What that means is there's a team of us.

00:08:15 Speaker 3

And for every single paper that John's searches return, at least two of us look at it independently without consulting one another and decide whether or not it's eligible for inclusion.

00:08:25 Speaker 3

in our review.

00:08:27 Speaker 3

Often there are gray areas here, so if one person says yes and the other person says no, that's something we will discuss as a team.

00:08:35 Speaker 3

We always aim to get that screening done by the middle of the month.

00:08:38 Speaker 3

That's for a couple reasons.

00:08:40 Speaker 3

One is so that we can update

00:08:43 Speaker 3

our briefing documents with information on the new studies we found.

00:08:47 Speaker 3

We can also discuss as a team whether or not we think the new studies we found are likely to change the conclusions of the review.

00:08:54 Speaker 3

If we think they are, then in our language that triggers an update.

00:08:57 Speaker 3

That makes us say, okay, it's time to really think about integrating this new data in there because this new data could change the decisions that someone might make on the back of the review.

00:09:08 Speaker 3

And also one of the fun things we do every month is think about who would be good to have on

00:09:12 Speaker 3

as a podcast guest.

00:09:14 Speaker 3

We try and showcase different voices.

00:09:18 Speaker 3

We try and make sure we're covering both vaping cessation and smoking cessation research.

00:09:24 Speaker 3

And we always make sure we're trying to interview people who are not funded by or affiliated with tobacco or vaping industries.

00:09:32 Speaker 2

And you'll notice that sometimes we might not interview someone directly about the studies we've found.

00:09:38 Speaker 2

Sometimes that's because we might not actually find a lot of new literature that month.

00:09:43 Speaker 2

Sometimes it's because we kind of have some kind of burning topic that we'd really like to hear from somebody about.

00:09:49 Speaker 2

And it might be somebody that's in a role, for example, policymaker who might not usually bring out papers, but they've still got a really important take on the topic.

00:09:59 Speaker 2

So it's not always that we interview somebody where

00:10:03 Speaker 2

We found one of their studies that month, but that's more often than not the approach we take to finding someone for the podcast.

00:10:10 Speaker 2

Obviously, that's not what we're doing this month.

00:10:11 Speaker 2

So we do like to mix it up a bit and open to some suggestions as well of what we might do in the future.

00:10:19 Speaker 2

But to then take it from where Jamie got to in terms of the screening.

00:10:23 Speaker 2

So obviously we have our two reviews, as Jamie mentioned, our one that's looking for studies on

00:10:29 Speaker 2

using e-cigarettes for smoking cessation and our other review that's looking at interventions for quitting vaping.

00:10:36 Speaker 2

So part of the process when we're screening our searches is separating those

00:10:40 Speaker 2

the studies out, which studies go into which review.

00:10:44 Speaker 2

And when that's all decided, and usually we do that, the core team kind of looks at those, make sure we agree on that.

00:10:51 Speaker 2

Those studies are uploaded to a spreadsheet that we have online and we can put the link to that in the description of today's podcast.

00:10:58 Speaker 2

You may have already seen it, but if you haven't, it's worth just

00:11:02 Speaker 2

having a look because obviously we cover as much as we can in this podcast and you'll have just heard Jamie talking about the ongoing study that we found this month.

00:11:11 Speaker 2

But we also find lots of papers, again, as Jamie mentioned, that are linked to studies that are already in the review.

00:11:17 Speaker 2

We don't usually go into a lot of detail about them because often we've already talked about the core study before.

00:11:24 Speaker 2

But sometimes, you know, that throws up interesting new data that might go in the review or just out of general interest purposes.

00:11:32 Speaker 2

It's really

00:11:32 Speaker 2

exciting to see some of the other things that come out of these studies, even if they're not, core outcomes in our particular reviews.

00:11:39 Speaker 2

So if you're at all interested in that, there is a complete log of every paper that we find that is relevant for the review online in an Excel spreadsheet.

00:11:50 Speaker 2

And the other thing that we've integrated into that spreadsheet is we've just done some graphing that shows how many studies we found each month, how many are ongoing, how many are new included studies and how many are linked studies.

00:12:03 Speaker 2

We partly did this because when we're thinking about, whether we carry on this review in the future and whether to apply for funding, it gives us a useful way of seeing, well, are the studies starting to slow down in this area?

00:12:17 Speaker 2

are less studies coming out?

00:12:19 Speaker 2

Do we actually still need this kind of living process for the review?

00:12:23 Speaker 2

And what we can say at the minute is we're confident that we do.

00:12:25 Speaker 2

We're still seeing this kind of steady, very slight rise in like month on month the studies that we're finding, but it's certainly not going

00:12:32 Speaker 2

going down.

00:12:33 Speaker 2

And that's what, if it was really going down and we were seeing less and less studies coming out, that might be a sign that people aren't doing much research in this area anymore.

00:12:41 Speaker 2

Maybe we don't need to focus on here.

00:12:43 Speaker 2

But obviously, the fact that we're doing a monthly podcast about this still shows that is not the case.

00:12:49 Speaker 2

And now I'll hand back to Jamie to talk to you a bit about the next step, which is data extraction.

00:12:55 Speaker 3

Thanks, Nicola.

00:12:56 Speaker 3

So data extraction is my personal least favorite part of the systematic review process.

00:13:01 Speaker 3

I think most people who've done the systematic review will tell you it is painfully boring at times.

00:13:05 Speaker 2

Definitely.

00:13:06 Speaker 3

But what we do there is go through and for the studies that we've identified as eligible, we pull out all the relevant data for our review.

00:13:13 Speaker 3

And we usually do that using some sort of online spreadsheet.

00:13:17 Speaker 3

Again, all of that is done independently and in duplicate by at least two reviewers to make sure there aren't any manual errors creeping in.

00:13:25 Speaker 3

We sometimes get asked, can you use AI for these processes?

00:13:29 Speaker 3

And the answer is yes, but it's not super reliable just yet.

00:13:35 Speaker 3

So there's a lot of work, as you can imagine, being done trying to optimize use of AI for screening and for data extraction for systematic reviews.

00:13:45 Speaker 3

Cochrane does a lot of testing of the different tools available.

00:13:49 Speaker 3

At the moment, the most reliable is still good old-fashioned humans looking at it who know what they are looking at.

00:13:57 Speaker 3

You'd be surprised to hear that AI sometimes has issues with like identifying different cells and tables and therefore can sometimes extract numbers wrong, which can be a really big deal if you're trying to look at the effectiveness or safety of an intervention.

00:14:10 Speaker 3

So I think things are getting better there.

00:14:12 Speaker 3

And as soon as they're kind of more or as reliable as humans, it's certainly something we'll explore.

00:14:17 Speaker 3

But for our purposes,

00:14:19 Speaker 3

not quite there yet.

00:14:20 Speaker 3

So this is still a tedious and manual process, but a very important one.

00:14:25 Speaker 3

We'll also get together and meet and go through that new information

00:14:29 Speaker 3

And once we've extracted that information, then we're at the point, which is my personal favorite part, where we get to incorporate it into the review.

00:14:36 Speaker 3

So we get to put those new studies in, put that new data in, and see what it does to our findings, see how it changes our results.

00:14:44 Speaker 3

Sometimes our existing results don't change, but we have new data on a comparison we didn't have before.

00:14:50 Speaker 3

That's also particularly exciting.

00:14:52 Speaker 3

And once we've done that, we will write up the results.

00:14:55 Speaker 3

All of our team will look at it and make really useful edits and comments.

00:14:59 Speaker 3

It goes through all of us every time.

00:15:01 Speaker 3

And then we will start the process of sending it to Cochrane where it goes through peer review, it goes through editorial review, and eventually makes it out into the world.

00:15:12 Speaker 3

Did I miss anything critical, Nicola?

00:15:14 Speaker 2

I don't think so.

00:15:15 Speaker 2

I suppose the main thing to highlight is how complicated a system

00:15:20 Speaker 2

this can be when you're particularly looking at a living review.

00:15:23 Speaker 2

I think me and Jamie had both become very used to kind of carrying out kind of standard systematic reviews.

00:15:30 Speaker 2

You have this screening, searching, screening, data extraction sections.

00:15:35 Speaker 2

When you've got your data, you're putting it into analysis, you write it up.

00:15:40 Speaker 2

You know, if you've not done a systematic review before, that probably sounds complicated enough.

00:15:44 Speaker 2

The thing with a living review is that because we're doing this kind of

00:15:48 Speaker 2

process every month.

00:15:50 Speaker 2

And we could, for example, have decided, okay, we need to trigger a full update of the review, we need to get the data in there, we need to do a full write-up.

00:16:00 Speaker 2

There's also the possibility that you could already be writing the review and then you get a search that triggers another update.

00:16:07 Speaker 2

And that's when it gets really, really confusing because you're writing one version of the review.

00:16:13 Speaker 2

We've decided these are the months, these are the studies that are going into this review.

00:16:18 Speaker 2

We're updating the previous version, we're writing it up, and then we do some searches and we go, uh-oh, okay, here's another new study that would change our results.

00:16:28 Speaker 2

Now, by this time, we're probably too far down the track to just say, well, let's just **** it in there and the version we're writing now.

00:16:37 Speaker 2

So we've got to kind of keep that in mind.

00:16:40 Speaker 2

Okay, we're now triggered a new update.

00:16:41 Speaker 2

We've got to get out the existing update that we're working on and then be ready to immediately step

00:16:48 Speaker 2

back into doing a whole new update again as soon as that goes out.

00:16:52 Speaker 2

So that's for me, I don't know about you, Jamie, but that's one of the real complexities of this project.

00:16:58 Speaker 2

It's what makes it obviously really dynamic and means that we can be on top of the literature.

00:17:04 Speaker 2

And one of the main reasons we do this is, for example, if someone from the press or a policymaker or anyone asks us about the evidence around e-cigarettes, we know we're really on top of it.

00:17:15 Speaker 2

We know what's come out right to the first

00:17:17 Speaker 2

of the month that we're in.

00:17:19 Speaker 2

But it also means it can become very complex and you really just, we have to keep detailed notes on everything.

00:17:27 Speaker 2

just has to be documented really clearly.

00:17:29 Speaker 2

Ilsa, who is the kind of lead on this project, who produces this podcast, she's kind of always writing copious amounts of notes every meeting that we have.

00:17:39 Speaker 2

We have these weekly meetings, every one of them she's writing copious notes because it's so

00:17:46 Speaker 2

easy to kind of lose track of things, I would say.

00:17:50 Speaker 3

Yeah, absolutely.

00:17:52 Speaker 3

And the one other thing I was going to say is that obviously the main thing that makes us trigger an update is when a new study has come out and we think its findings might change what someone might do on the back of the review.

00:18:02 Speaker 3

But another benefit of the living systematic review process, particularly for us, because we want this review to be as useful as possible to as many people as possible, is that we have the opportunity to incorporate feedback and new outcomes a lot

00:18:15 Speaker 3

more quickly than we would do if it was a kind of one-off or we published it every few years type of systematic review.

00:18:21 Speaker 3

So actually, at the moment, we've triggered an update to our review of e-cigarettes for smoking cessation.

00:18:27 Speaker 3

We have new data from a trial looking at cytosine compared to e-cigarettes, so that's what triggered that update.

00:18:33 Speaker 3

But we're also, in response to feedback from the NIH in the U.S., going to include data on new outcomes, looking at subgroups of participants at the end of the study, depending on their vaping status and

00:18:46 Speaker 3

smoking status.

00:18:47 Speaker 3

So we can really drill down more, okay, how many people at the end of these studies are still, for example, using nicotine?

00:18:52 Speaker 3

How many people are now totally nicotine free?

00:18:54 Speaker 3

How does that compare by group?

00:18:55 Speaker 3

So that's a really nice part of this dynamic process as well.

00:19:00 Speaker 3

For anyone who's listening, who's like, oh, I really wish those Cochrane people would cover this outcome.

00:19:05 Speaker 3

e-mail us.

00:19:06 Speaker 3

If we can make it work, we'd love to.

00:19:07 Speaker 3

We want to be useful.

00:19:09 Speaker 2

Yeah, so I think the whole thing about this project is that we can be very reactive to things like that.

00:19:16 Speaker 2

And obviously, as Jamie mentioned before, we have things like our briefing documents.

00:19:21 Speaker 2

So it's all about us incorporating things that are useful to people and then communicating it.

00:19:26 Speaker 2

And we have our website that has the briefing documents on so

00:19:30 Speaker 2

They give the overall results of the currently published version of the review, but they also say what we found that particular month.

00:19:38 Speaker 2

So that's another thing that Elsa is always on top of.

00:19:40 Speaker 2

She's updating those, getting those out there.

00:19:43 Speaker 2

And obviously this podcast is also a big part

00:19:47 Speaker 2

of that.

00:19:48 Speaker 2

And we're always trying to think of ways that we can get the message out to all of the different groups that might be interested in our results.

00:19:55 Speaker 2

So again, any suggestions on ways we can do that we may be missing, then please let us know.

00:20:01 Speaker 3

Okay, well, that's it from us this month.

00:20:04 Speaker 3

Thank you all so much for listening.

00:20:06 Speaker 3

And we'll be back next month with another episode of Let's Talk E-Cigarettes.

00:20:11 Speaker 3

Please subscribe on iTunes or Spotify and stay tuned for our next episode.

00:20:17 Speaker 3

Thank you to Jonathan Livingston-Banks for running searches, to Ailsa Butler for producing this podcast, and of course to all of you for tuning in.

00:20:23 Speaker 3

The music is written by Jonny Berliner and I and performed by Jonny.

00:20:26 Speaker 3

Our living systematic reviews are supported by funding from Cancer Research UK.

00:20:30 Speaker 3

The views expressed in this podcast are those of Nicola and I and do not represent those of the funders.

00:20:35 Speaker 1

Switching to vaping is safer than smoking May help you quit it, yeah But remember

00:20:43 Speaker 1

to mention the findings we have can't tell us what'll happen long term.

00:20:49 Speaker 1

Even though we know vaping is safer than smoking, we may still find cause for concern.

00:20:55 Speaker 1

If you're thinking of switching to vaping, do it! That's what the experts agree.

00:21:02 Speaker 1

Smoking's so bad for you, they all concur that vaping beats burning, but there's much to learn of a bad long term yet to be seen.