



Review of the biosecurity risks of prawns imported from all countries for human consumption – draft report webinar

Presentation transcript

24 November 2020

Introduction

This is the transcript of a webinar, presented by the Department of Agriculture, Water and the Environment. There were over 95 participants, including individuals, representatives from state and territory government, domestic industry groups and international trading partners.

Transcript

[Webinar begins]

David Pembroke: Hello, everybody, and on behalf of the Department of Agriculture, Water, and the Environment, could I welcome you to this afternoon's webinar, the purpose of which is to discuss the department's draft report on the review of the biosecurity risks of prawns imported from all countries for human consumption, and the purpose is then to address any questions that you might have as a result of the presentation.

David Pembroke: As you can see, questions can be asked at any time today during the webinar using the Q&A box, which is at the bottom of your screen. If you do have a question, please just pop it in there, and we will come to it throughout today's presentation. The team will do their best to answer those questions today, but if they do get a little bit technical, let us know. Certainly put your questions through, and we will let you know that we will perhaps take that on notice and come back to you at a later time if it requires more detail than can be answered straight away.

David Pembroke: So, to introduce you to the team today. In the team, we have Dr. Beth Cookson, who is the assistant secretary of the Animal Biosecurity Branch. Dr. Cookson, welcome to you. We have Dr. Kally Gross, who is the assistant director of the Crustacean Unit. Dr. Gross, welcome to you.

Dr Kally Gross: Thanks.

David Pembroke: And to help us to answer the questions today, we have Dr. Yvonne Gonzales and Dr. Belinda Morahan, who are also members of the Crustacean Unit. So, to start us off today, Dr. Beth Cookson will give us a brief introduction about the prawn review.

Dr Beth Cookson: Thanks, David, and welcome all. I'd like to start today by acknowledging the traditional custodians of the lands we are meeting on today. Here in Canberra, the Ngunnawal people, and I extend that recognition to the traditional custodians of all other lands that you join us from today across Australia. I acknowledge and respect their continuing culture and connection to land, sea, environment, water, and community, and pay my respects to elders both past and present.

Dr Beth Cookson: On behalf of the department and my colleagues who are with me today, I welcome everyone who is attending, including those who represent our Australian domestic industry groups, private enterprises, our counterparts in the states and territories, and participants from our trading partners. We have quite a good attendance list so far, so we're pleased that there is so much interest and we hope that we can answer your questions today and provide a bit more information about the prawn review.

Dr Beth Cookson: As most of you would be familiar, the review of the biosecurity risk of imported prawns was initiated following an outbreak of white spot disease in south-east Queensland in Australia in 2016. The prawn review assesses known prawn diseases of biosecurity concern that may be associated with imported prawns and provides recommendations about if and how prawns can be imported in a manner that achieves Australia's appropriate level of protection. We are holding this webinar today as an opportunity to break down our approach to conducting the risk analysis and about the recommendations in the draft report, and to provide you all with an opportunity to ask questions about the draft report. As David has mentioned, we will do our best to answer as many of those questions as we can today, and if not, we will be able to provide answers to your questions out of session.

Dr Beth Cookson: I will now hand over to Kally, our prawn review liaison officer, that many of you will be familiar with and know, to provide the presentation. Thanks, Kally.

Dr Kally Gross: Thanks, Beth.

Good afternoon, everyone. First of all, I'll just give you a quick run through of what today's presentation will cover. We'll go through a bit of information and background about the draft report, the methodology used to conduct the risk analysis, the biosecurity measures considered for prawns, and we'll go through a risk assessment example, what our proposed import conditions for prawns are, the next steps in the review process, and of course, then we'll have the question and answer session.

So, the draft report documents our review of the biosecurity risks of imported prawns and provides recommendations about if and how prawns can be imported into Australia. It was released on the 28th of September, and comments can be made until the 15th of January. Your submissions can be made using the Have Your Say platform, but please let us know if you're having any issues providing your submission. We really encourage everyone to make a submission. It doesn't have to be long, but we do want to hear from you, whether you agree or disagree with what is presented in the report. We will consider all submissions when we're preparing the final report. We understand the draft report is long and complex, which is why we've put in place a slightly longer consultation period than usual.

Australia is free from many pests and diseases found around the world. Our animal, plant, and human health rely on stringent controls and measures to manage the risk of these pests and diseases entering and becoming established in Australia. Australia's biosecurity framework is supported by Commonwealth, state and territory legislation, policies, import conditions, and our shared responsibilities. Australia's approach is a multilayered system involving complementary measures applied across the biosecurity continuum. That's offshore, border, and onshore.

The department conducts its animal and animal product risk analyses in accordance with the international biosecurity obligations, including the World Trade Organization's Agreement on the Application of Sanitary and Phytosanitary Measures, the policies and recommendations outlined by the World Organisation for Animal Health, or the OIE, and of course taking into account guidelines from the World Health Organization.

So, the prawn review was conducted using a risk analysis process that is consistent with that described by the OIE's aquatic animal health code.

Before we delve too deeply into the details of our risk assessment process, I just wanted to cover what is risk and what is risk assessment. In simple terms, risk is the chance that something might happen. It is determined by combining the likelihood of the event occurring with the consequences if that event occurred. How do we calculate risk? Through a risk assessment, which is the method we use to combine likelihood and consequence to get a risk level. We do risk assessments all the time in our everyday life, whether we realise it or not, and there is a considerable amount of research on the way people perceive risk, how they manage it, and how they live with it. Things like past events, perceived skill level, personal circumstances, the consequences of an event, and of course the actual event itself can all affect the way we perceive risk and the way we conduct our risk assessments.

Because of these factors, our perceptions of risk do not always correlate with actual probabilities of risk. An example of this is the fear of flying. The evidence tells us that the risk of dying in a plane crash is about one in 11 million. For most of us, we consider this a very small risk, and we're happy to fly. However, for others, the risk is perceived to be far greater, and even though the evidence says it is not, they still have a perceived risk of flying. This is usually down to factors that I've mentioned before. For example, perhaps they've had a traumatic flight in the past. However, for whatever reason, their risk appetite, that is the level of risk they're willing to accept, does not extend to flying.

In trade terms, a risk appetite is almost like our appropriate level of protection, or ALOP. Australia describes its ALOP as providing a high level of protection aimed at reducing risk to a very low level, but not to zero, and it's important to consider this in the context of the risk assessments we undertake. In the department, we use a rigorous science-based process to conduct our risk assessments. Our role is to conduct the risk assessments in an objective and impartial manner, using the available scientific evidence and remove any of the factors that may influence our perceptions of risk. We want our outcomes to achieve Australia's ALOP. That is that they manage risk and are as only as restrictive as the science tells us they need to be to allow safe trade. It's a fine balance.

This figure depicts the risk analysis process and it will be presented on the coming slides. The parts of the process that I'm discussing will be highlighted. The principal aim of import risk

analysis is to provide a science-based, objective, and defensible method of assessing and managing the disease risks associated with importation of a product. As shown with the numbers on this diagram, there are four components to a risk analysis. They are hazard identification, risk assessment, risk management, and risk communication.

So, hazard identification is the first step in the risk analysis process. On your slide, you will see the hazards, which we've retained for risk assessment in the draft report. Noting that there was insufficient information to conduct a risk assessment for yellow head virus genotype eight and also that the assessments for DIV1 and CMNV, that's decapod iridescent virus 1 and covert mortality nodavirus, were conducted based on the available information. We continue to monitor the situation with respect to these three hazards because the data is ever-changing.

To be retained as a hazard, the pathogenic agents must be relevant to prawns, be present in the exporting country, but absent in Australia. However, if they are present in Australia, the disease agent must be listed or subject to a control or eradication program, such as white spot syndrome viruses in Australia, and they must also have the potential to cause adverse consequences.

The second component of risk analysis is risk assessment, which we have discussed as being the way that we combine likelihood and consequence to get a risk outcome. Highlighted in dark orange is the first of the four steps of risk assessment, the entry assessment. The entry assessment describes a pathway for the introduction of the hazard into Australia and estimates the likelihood of that occurring. The scope of the prawn review was a single-entry scenario of the important from all countries of nonviable, farm-sourced, frozen, uncooked whole prawns intended for human consumption. This is also known as an unrestricted risk. A restricted risk is when a biosecurity measure has been applied to the product.

To estimate the likelihood of entry, we considered key factors, such as the biological characteristics of the hazard, which might have included things such as the ability of the hazard to infect specific tissue types in the prawns, which is something called tissue tropism. We also considered the effectiveness of post-harvest inspection and grading in removing infected prawns before export. In general, we considered that this wouldn't be a suitable way to remove prawns because quite often this inspection is only done for food safety purposes, and most of the hazards of concern can still be present in infected prawns, which are showing only minimal clinical science, but they may still be at a high infectious dose.

Finally, we also look at the effect of processing, transport, and storage on the hazard. Will the hazard still be infectious if it's in the prawn at the time it enters Australia? For most hazards we considered, the answer to this is yes. Viruses are hardy. They survive freezing, they're not external pathogens, so washing does not remove them. Of course, freezing can have an effect on non-viral pathogens, such as bacteria.

The exposure assessment is the second step in the risk assessment process. The exposure assessment estimates the likelihood of direct exposure of a susceptible population or exposure group to each hazard via imported prawns. To conduct the exposure assessment, we identified the exposure groups, we identified the exposure pathways, and considered hazard and exposure group-specific information in order to estimate the likelihood of direct exposure of each group. The exposure assessment does not consider exposures such as farmed crustaceans being exposed to infected wild crustaceans. This exposure is considered when determining the likelihood of establishment and spread later in the risk assessment process.

The three exposure groups which we identified were farmed crustaceans; hatchery crustaceans, which encompasses broodstock and postlarvae in the hatcheries, as well as crustaceans in research facilities and public aquaria; and also wild crustaceans.

Once exposure groups are identified, the next step is to identify the key distribution pathways and the end uses that may result in an exposure group encountering an imported prawn. This flowchart shows the key distribution pathways in white boxes, the end uses and exposure pathways for imported prawns are in blue and orange boxes, and the three exposure groups in the purple boxes. We identified the use of imported prawns as bait or berley by recreational fishers and the use of imported prawns as feed for crustacean broodstock or crustaceans in research facilities and public aquaria as the major exposure pathways. They're shown in orange.

These are the exposure pathways which pose the greatest risk, as they are direct and have a high probability of completion. These two pathways have black full lines representing which of the exposure groups they would most likely be diverted to. These lines are not weighted, so they do not attribute likelihood or volume of exposure. There are also several minor pathways identified, and they're depicted with the blue and dotted lines. These were not considered further in the risk assessment because they do not substantially contribute to risk. Once we determine the exposure groups and exposure pathways, we estimated the likelihood of imported prawns entering the general environment of each of these exposure groups via those major exposure pathways.

The third step in the risk assessment process is the consequence assessment. The consequence assessment describes the potential consequences of the given exposure and estimates the probability of them occurring. To undertake the consequence assessment, we identified a likely outbreak scenario, estimated the partial likelihood of establishment and spread, determined the overall impact of establishment and spread, and then using those two values, we determined the likely consequences of the outbreak scenario.

When selecting the outbreak scenario, several scenarios were considered across a continuum, ranging from no spread to establishment and spread of the disease to its natural geographic limits. The outbreak scenario selected was that the hazard establishes in the directly exposed population and spreads to wild and farmed populations. It is not eradicated, and becomes endemic in Australia, and eventually spreads to its natural geographic limits. We considered this outbreak scenario was the most appropriate because it had the most potential to occur with the most significant consequences.

The partial likelihood of establishment and spread of the hazard in each exposure group is an estimation of how likely it is that the hazard will establish in that exposure group. When estimating the partial likelihood of establishment of spread, factors specific to the hazard and which consider the dynamics of the exposure group are considered. These include things such as species susceptibility, biosecurity processes in place in the exposure groups to prevent disease incursions and spread, the density of animals in the exposure group, and whether we expect sick animals to be prey for non-susceptible species.

The overall impact of establishment and spread was determined by considering the impacts across seven impact criteria: two direct and five indirect, which covered the biological, economic, and environmental impacts of an outbreak. The direct and indirect impacts were combined to determine the overall impact of establishment and spread. Finally, the overall

impact of establishment and spread was combined with the partial likelihoods of establishment and spread to determine the likely consequences of establishment and spread.

The fourth step in the risk assessment is the risk estimation process. Risk estimation combines the likelihood of entry and exposure with the likely consequences of an outbreak to determine the overall annual risk of the hazard. It is at this point that the overall annual risk of the unrestricted product is compared to Australia's ALOP. If the overall risk is estimated to be greater than very low, then imports are not permitted unless risk management measures can be applied to reduce the risk to at least very low. If the overall annual risk achieves Australia's ALOP, then no risk management is needed.

Risk management is the third component of the risk analysis process. It is the process of identifying, selecting, and implementing measures that can be applied to reduce the level of risk of a hazard, while at the same time ensuring that negative effects on trade are minimised. If, during risk estimation, it was determined that the overall annual risk exceeded Australia's ALOP, then we identify risk management measures and assess whether those measures will reduce risk to an acceptable level. This is now the restricted product or the restricted risk. If, following the application of the biosecurity measures, the risk still exceeds ALOP, then further measures can be applied until ALOP is achieved or it is determined that the product cannot be safely imported.

Risk communication is shown here as the fourth component in the risk analysis process, but in actuality, it's an ongoing process from the beginning to the very end. It includes both informal and formal consultation with stakeholders and peer review is also an essential component of risk communication. Peer review is used to obtain a scientific critique and to ensure that the data, information, methods, and assumptions are the best available. The draft report and the hazard table were both subject to peer review by two independent leading experts in crustacean diseases before they were released.

So, for the following, I'll just run through what biosecurity measures we selected from a range of pre-export and on-arrival measures, which are considered practical, to inform the basis of those recommended to apply to prawns imported for human consumption.

There are two means by which biosecurity measures can reduce the overall risk of a hazard to achieve Australia's ALOP. Firstly, by reducing the likelihood of that hazard entering Australia in imported prawns, and secondly, by reducing the likelihood that the susceptible animals in Australia would be exposed to the hazard in the imported prawns. The extent to which biosecurity measures will reduce the likelihood of entry and/or exposure is dependent on the specific hazard and the exposure groups. For example, if we removed the head and shell from prawns, that might reduce the entry risk for some hazards, but not all because most hazards are present in the body of prawns as well as the head and shell, and removal of the head and shell may reduce the exposure risk in two of our exposure groups, farmed and hatchery, because whole prawns are preferred for their nutritional composition, but it won't necessarily reduce the likelihood of exposure of wild crustaceans because fishers are more interested in the product being uncooked and easily accessible and available.

The table shown here provides an overview about how the biosecurity measures considered for prawns manage risk. The table doesn't represent that these measures specifically achieve ALOP on their own for each of those identified hazards, but their application reduces the likelihood of

entry and/or exposure, and usually in combination with a number of measures ALOP is achieved.

So, in the first column, this contains the biosecurity measure. Column two explains how or if the biosecurity measure reduces the likelihood of entry of the hazard, and column three does the same for exposure. How or if the biosecurity measure reduces the likelihood of exposure for our exposure groups. The use of NA indicates the biosecurity measure has no impact on entry or exposure.

In the first row of biosecurity measures, we have sourcing from free populations. This reduces entry likelihood for all hazards because products would be sourced from countries, zones or compartments which have been assessed by the department to be free of the hazard. It, however, doesn't change the exposure likelihoods because there is nothing obvious about the prawns that would prevent them being used as bait or feed.

The next example is head and shell removal again, which is the third line down. This reduces entry likelihood for those hazards which are present preferentially in the head and shell, such as Laem-Singh virus, and it reduces exposure likelihood only for two of the exposure groups, as I mentioned earlier, farmed and hatchery because whole prawns are the preferred for their nutritional benefits. However, it's assumed that these products will still be used by fishers and bait as their use is driven primarily by convenience and availability, so there's no decrease in the likelihood of exposure of wild crustaceans.

If we move down to the very last row, labelling for human consumption. As you can see, this will have no impact on the entry likelihood because, of course, it doesn't affect the hazard in any way. However, we use this measure to reduce the likelihood that prawns imported for human consumption and subsequently downgraded due to quality issues are not diverted to bait or feed supplies. This is part of our education campaigns. However, it is not something that we can rely on its own to reduce exposure.

I'm just going to run you through one example of the risk assessment, which will be white spot syndrome virus. I have slides for all the other hazards as well, if anyone would like to see them during the question and answer session. So, just a reminder, risk is the combination of likelihood and consequence.

So, just before we go into the example risk assessment of white spot syndrome virus, I just wanted to present a flow chart which outlines how all the components of risk assessment that we've discussed so far fit together and what we do with each of these during the risk assessment process. This slide probably looks a bit daunting, but I'll step you through it and I think by the end it will all come together really well.

So, I think it's easier to demonstrate the process with just one exposure group, so I've used farmed. They're depicted in green, however there's also blue and purple squares, which represent the hatchery and wild exposure groups, and we do the exact same process for wild and hatchery as we do for farmed, but if I were to include all the calculations for all three exposure groups, it would be quite unwieldy.

So, at the top of the pictures, you'll see columns labelled with the risk analysis component and also a number. We're going to start at column one on the left, which is labelled entry assessment.

This is where we estimate the likelihood of entry of the hazard, and we only do this once. There's only one estimate for likelihood of entry, which is shown in the cream box and represented as an LR for short. The reason why we only have one likelihood of entry is because this is not influenced by the exposure group's specific factors, so we only do it once.

We next move onto column two, which is labelled exposure assessment. This is where we estimate the likelihood of exposure for each of our three exposure groups. We do this three times because there are differences in the dynamics and specifics of the exposure group. For this reason, we have what is called a partial likelihood of exposure, and this is depicted in the green box, where it says PLE-Farm. It's called the partial likelihood of exposure because this is the value that we get just for this exposure group, and then we would get one for hatchery and one for wild. In very simple terms, if we added all the partial likelihoods of exposure up, we would get one, and that should encompass essentially our whole likelihood of exposure.

We'll move onto column three, which is the partial annual likelihood of entry and exposure, also called PALEE. As the name suggests, this is the likelihood we get when we combine entry and exposure, and we understand that we need entry and exposure in order to have a risk, so these two likelihoods are combined, and because we have different exposure likelihoods for each exposure group, we will now come away with three separate PALEEs, but let's just leave PALEE where it is at the moment.

We'll move to column four, which is the consequence assessment. For this, we now need to estimate the partial likelihood of establishment and spread, or the PLES, for each of the exposure groups. The PLES is strongly influenced by exposure group specifics, so we do this three times again. You'll see that the PLES for the farm is the green box in column four.

We'll remain in column four, where we now determine the impact if the hazard were to establish and spread. The impact is only estimated once because the impact of the outbreak occurring doesn't change relative to the exposure groups, and it covers all the range of impacts across those groups. Impact is in the cream box.

Once we've obtained our impact rating, we combine that with the partial likelihood of establishment and spread in column four still, and we end up with our likely consequences, which is the green box labelled overall likely consequences farm in column four. There, again, are going to be three likely consequence ratings because, of course, the likelihood of establishment and spread are different for each of the exposure groups.

We're going to move to column five, which is risk estimation. Here, we calculate the partial annual risk for each exposure group, and this is determined by combining the overall likely consequences in column four with the partial annual likelihood of entry and exposure, or PALEE, in column three. So, as you can see, we're once again combining consequences and likelihood in order to get risk. However, because we've only determined our risk as a partial annual risk, that is we've got an annual risk for each of the exposure groups, we need to sum these three separate risks together in order to obtain an overall annual risk, which is depicted as the rainbow box down the bottom of column five.

In column six, we move onto risk management. Once we've completed the risk assessments for the unrestricted risk, which is our whole imported, uncooked prawns, does it achieve ALOP? Is

the overall risk very low or negligible? If it is, then we don't need to apply any measures to manage that particular risk, and that's shown in green. The bright green square.

If it does not achieve ALOP, which is the red box, we need to consider what biosecurity measures we have available that are practical and the least trade restrictive. Once we've selected them, we apply that measure and go back to the start to recalculate the risk. If you follow the red arrow from column six all the way back to column one, to the entry assessment, we will then reassess the likelihood of entry with that biosecurity measure applied.

If we were to apply head and shell removal, we look at it, and we say, "Does the removal of the head and shell change the likelihood of entry for that hazard?" We then do the same to the partial likelihood of exposure. Does the removal of the head and shell then change our likelihood of exposure? And we move through the calculations as we did before, and we come out with a different overall annual risk. We'll get what's known as our restricted overall annual risk. We don't need to recalculate the partial likelihood of establishment and spread or the impacts because they are considered at the point that a viable infectious virus or hazard has come into contact with the prawns, with our exposure groups, and it's not affected by the biosecurity measures.

Okay, so this is a slide which is a very high-level summary of our risk assessment for white spot syndrome virus. In the first column, we have the key factors that we considered, and obviously this is a very, very select few of the key factors and very high level. The next column are our risk assessment values, and this is a summary of those, and then the last column is our risk management measures, and I'll just quickly run you through this slide, and then, as I mentioned, we have these similar examples for all the hazards.

So, when we did the risk assessment for white spot syndrome virus, some of the key factors we considered were that it's present in the whole body of the prawn, infections can be subclinical, all the evidence suggests that it survives freezing, there is a body of evidence now that shows us that it is impacted by cooking. All decapod crustaceans are susceptible, so it has a very wide host range. We know that prawns are used as bait and berley by fishers, and they can also be used as feed for captive crustaceans. White spot syndrome virus causes high mortality and we know it has a high impact if it becomes established in Australia.

So, when we conducted our entry assessment, we considered the fact that it would be present in the whole body of the prawn, that it would be an infectious dose at that time. Because we did a generic risk assessment, it's assumed that all countries had it at that time, and we thought that infected prawns were unlikely to be removed during processing because the infections can be subclinical and even if the prawn isn't showing signs of disease, it's likely to still have an infectious dose in it that could cause disease in naïve animals. So, the likelihood of entry rating we determined to be high.

We next did the exposure assessment, and we looked at the likelihood exposure across the three exposure groups, so you'll see it says there Low (f). The F, H, and W are representing our three exposure groups: farmed, hatchery, and wild.

So, for our partial likelihood of exposure, we consider things like what are the biosecurity processes in place on farms or in the hatcheries and in the wild, how likely is it that the hazard will be exposed to those groups. In the wild, we know that prawns are used for bait and because

of the very wide host range, any crustacean that would be present in the wild will be exposed to white spot. Obviously, on our farms and in hatcheries, we would expect a high level of biosecurity and less likely for any imported prawns to get in there, noting this is a direct exposure, so the imported prawns would need to go into a farm deliberately or potentially also through inlet canals through fishers. In our hatchery groups, any crustaceans in research or public aquaria are going to be susceptible because it's such a wide host range.

So, the PALEE, which is the partial annual likelihood of entry and exposure is a calculation that determined by combining the entry and exposure, so I won't go through that.

We then looked at the partial likelihood of establishment and spread. Obviously, in a farm, any prawn that we're to get in there, it would be likely consumed by the prawns in the farm, and a very high likelihood of establishment in the spread given high densities. White spot can be transmitted through water or through cannibalism, so we expect that it's highly likely that it could easily establish and spread from a farm, and we're looking at the same possibilities in the hatchery as well, and slightly less likely for the hatchery. In the wild, because it has such a wide host range, it's very likely for it to spread, and also noting that crabs may often carry white spot, but not necessarily be clinically sick, so the likelihood of being prey for non-susceptible animals is much less for white spot-affected animals in the wild compared to some of our other hazards.

We know that the impact is going to be high. We've seen that, and as a result, we end up with high likely consequences, and ultimately, our overall annual unrestricted risk for white spot syndrome virus was extreme. We had that as our overall annual unrestricted risk, and then we moved onto our risk assessment, where we applied the process that I discussed previously to look at head and shell removal. Head and shell removal we didn't consider changes the likelihood of entry for white spot because there's still significant amount of viable infectious hazard left in the meat of prawns. Head and shell removal on its own did not achieve ALOP.

We then applied pre-export testing, which does change the entry likelihood because, of course, if we're testing pre-export, then we should be having less volume of positives, and we then looked at how that affected our overall restricted risk, which was moderate. It wasn't until we applied pre-export testing, on-arrival testing, and head and shell removal do we consider that we met ALOP because we got our restricted risk down to very low.

The application of cooking, there's evidence about the effective temperature, so entry was reduced and, of course, also exposure was reduced across all our exposure groups because cooked prawns are not something that are regularly used for bait. Cooking achieves our overall annual restricted risk at very low.

We then did the same process for our value added products, and likelihood of entry was unchanged because essentially these products are just prawns which have had the head and shell removed, so from a hazard dose perspective, that wasn't reduced. However, it has a significant impact on our exposure for our exposure groups because people are far less likely to use a dumpling for bait purposes. So, value added products, which were the things such as dumpling products or breaded, battered and crumbed also achieved ALOP.

So, the following will just provide a quick summary of our proposed import conditions for prawns and prawn products imported or exported to Australia. The draft report doesn't propose any changes to the way prawns are currently imported, with the exception of whole, uncooked

prawns, which require an assessment by the department to demonstrate freedom from additional hazards than what is currently in place.

So, this table just provides a summary of our proposed import conditions. There are a range of new hazards which countries will need to be able to demonstrate freedom at the country, zone, or compartment level in order to export whole, uncooked prawns. So, those hazards that we need freedom from are DIV1, CMNV, EHP, IMNV, LSNV, TSV, HPND, and of course white spot virus and yellow head virus. If frozen product has been sent, then there's no requirement for freedom from Candidiasis [inaudible 00:39:27].

So, the next steps for the review. We're at the little pebble star above the webinar on the 24th of November. The draft report consultation ends on the 15th of January, and then in the early to mid-part of next year, we'll be considering the comments on the draft report, also the bait and berley data, which we'll be expecting then, and also any new information that might be received during the consultation period. We'll then obviously prepare the final report, and then we're hoping to release mid to late-next year. Then, of course, if we need to implement new import conditions, they'll be put in place, and noting that DIV1 and CMNV are emerging diseases, we continue to monitor the situation with respect to those agents.

So, this is just a list of image sources, and then we'll move onto the question and answer session. Just before we do that, I'll just say please feel free to contact the prawn review liaison officer if you'd like to arrange a follow up discussion or have any questions about the draft report. We are also in the process of preparing fact sheets, which are shortened versions of the risk analysis methodology and also the hazard risk assessments. They'll be available shortly. We'll be very grateful to receive any feedback you may have about the webinar. In the current COVID climate, it's likely we'll be doing quite a few more of these, so we're always happy to hear how you feel it worked or didn't work, and as mentioned, we look forward to receiving your submissions.

Question and answer session

David Pembroke: All right. Dr. Gross, thank you so much for that presentation, comprehensive and certainly plenty in it. Before we go to the question, Dr. Cookson, anything to add there from your point of view? Anything jump out at you through that presentation that the audience may be interested in? And interesting to see that a very good strong audience listening today.

Dr. Beth Cookson: There is a very strong audience listening. I guess the thing that jumped out of me was the comment Dr. Gross made about risk appetite. I have a fear of flying, I'm now informed that my risk appetite may not be appropriate to the situation. But no, thank you, Kally. David, as you said, it was a very comprehensive overview of a very complex and technical report. And so we're hoping that this provides the opportunity just to continue to unpack that a little bit for people, to make it a little bit more accessible, and hopefully a bit more transparent for people who do have questions about the way that we approached it, any of the conclusions that we reached.

Dr. Beth Cookson: And as Kally said, there's more opportunities, there's obviously now, but there will be more opportunities to provide technical submissions through the formal consultation period. And we will be taking into consideration all of those submissions as we finalise the report.

David Pembroke: Okay. Fantastic. All right. We do have some questions and perhaps I might put the first question to you, Dr. Cookson, or actually Dr. Gross, maybe. The question is, is this presentation going to be made available for the audience to be able to download and have a look at?

Dr. Kally Gross: Yes. Yep. The presentation will go up on our Prawn Review website and also along with, there will be a transcript from today, which will be available later on. In a short term, yes it will be.

David Pembroke: Okay. There you go, answering that question. And what I won't do actually is identify people by name as we go through the questions today. We just feel that that's best and appropriate that we don't identify you. But that's good news in that the full presentation and a full transcript will be made available for you to look at the detail of which there is quite a bit of detail to get through as many of you have already identified. That was the first question.

David Pembroke: The second question is, what is the biosecurity requirement to be fulfilled for getting recognition by Australia? That is a question from overseas and it's somebody who is asking, what do they have to do? What's the process that they need to go through to be recognised by Australian authorities? And I'll put that to you, Dr. Gross.

Dr. Kally Gross: Sure. I guess it would depend a bit on what sort of product the country would be intending to send. If they were wanting to become recognised, for example, for country freedom, or a zone, or compartment freedom, then that takes quite a bit more work. That's quite a substantial process where we need to meet the OIE requirements. We look at the competent authority, which is the government agency who's managing prawns, and we need to formally recognise that authority as having the capacity for the disease control monitoring and surveillance that we need for the hazards.

David Pembroke: So really the best advice is to go to the domestic agency to try to understand? Is that where they could get the best information as to what they have to do?

Dr. Kally Gross: They should probably have their government talk to us because it is a government to government process and it requires quite an in-depth questionnaire-

David Pembroke: Yeah, sure.

Dr. Kally Gross: ... and those types of things.

David Pembroke: Okay. All right. Very good. Thank you very much for that question this afternoon. And to our next question, does the reduced risk as determined by pre and post border testing apply to testing of 100% of consignments? Or will this revert to a lower proportion of consignments tested?

Dr. Kally Gross: Currently, all 100%-

David Pembroke: 100%.

Dr. Kally Gross: ... uncooked consignments are tested, that's correct.

David Pembroke: And no change, thoughts about that? It looks like at this stage, that will be the future state.

Dr. Beth Cookson: If I might just add a comment to that. At the current point in time and under our general conditions, no, there's no change to that requirement. I just wanted to make it clear that under some circumstances, for example, if we had been requested by an exporting country to do an equivalence type of assessment, for example, to recognise their laboratory system for conducting some of the pre export testing, we are looking at ways in which we would verify that on the importing end in Australia.

And so that may over time be based on more of a compliance-based intervention schedule, but that's not yet in place, we haven't done those assessments yet. But it is certainly something that is flagged in the draft report that those equivalence assessments and requests may be made to the Australian government in the future.

David Pembroke: Okay. Very good. All right. Of the audience, if you'd like to send in the questions, keep the questions coming. We do have plenty of time for your questions this afternoon. So if you would like to send more of your questions through, the team would gratefully accept those and do their best to answer them. To the next question, and I actually did pick this up myself during the presentation around the high risk nature of bait and berley. And the question is, why doesn't Australia manage the risk of prawns being used as bait or berley internally? Dr. Gross.

Dr. Kally Gross: Yes. Yeah, that's a really great question. Control of the use of imported prawns as bait or berley once they've been released from biosecurity control at the border is a matter that's usually... Or is a matter for each state and territory government. However, we are aware that it's just not practical or feasible to police Australia's recreational fishing waters and prevent recreational fishers from using imported prawns as bait or berley. Australia has over a thousand estuaries and over, I don't know, 50,000 kilometres of coastline, so the feasibility and practicality of being able to manage that is really difficult.

Dr. Kally Gross: And there's been lots of surveys looking at recreational fisher behaviour and they tell us that prawns intended for human consumption despite countless education campaigns are used by fishers because essentially it's easy and it's convenient for them to get their prawns when they're at the supermarket, rather than going to a bait shop. And also in general terms, the surveys tell us that fishers consider the quality of bait prawns to be nowhere near as good as human consumption prawns, and they don't get the same positive results from the fish when they go fishing with them. So, yeah, it is a big risk for us.

David Pembroke: All right. Thank you very much. Okay, to our next question. Regarding sampling frequency, does this apply to consignments where the product type is declared and where it may be found in mixed seafood consignments? Just to ask that again, regarding sampling frequency, does this apply to consignments where the product type is declared and where it may be found in mixed seafood consignments?

Dr. Kally Gross: If the product is declared as being whole uncooked prawns, then it will certainly be tested as is appropriate for what the product is. Something like, for example, I know

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uncooked prawns in marinara mix, that they are required to be tested. So I'm not 100% sure about the mixed seafood consignment, if that means... No, I'm not 100% sure about that. But if it's declared as uncooked prawns, then yes, they will be subject to the same testing as all uncooked prawns.

David Pembroke: Okay. If there are any more details or clarification to that question that you'd like to send through, we will endeavour to give you a little bit more detail, should that... Just be a little bit more clearer in the question. Okay. To our next question. Why was all the deveining? I think that's what it says.

Belinda Morahan: Deveining.

David Pembroke: Deveining, sorry, deveining be compulsory been added to biosecurity requirements, including small shrimp wild-caught that does not warrant to do so?

Dr. Kally Gross: Okay. I just

David Pembroke: I might try that again. Why was all deveining compulsory? Why has that been added to biosecurity requirements, including small shrimp wild-caught that does not want to do so?

Dr. Kally Gross: Deveining is compulsory for all uncooked prawns. We do note that wild prawns often have lower prevalence, but at the moment, we don't have different requirements for wild prawns, so everything is imported under the same import condition as an uncooked prawn. But as Beth mentioned, we can always look at equivalence measures if we have a government to government process and we can consider things like wild-caught, and that was identified in the draft report that we could look at wild-caught as having different import conditions, but it requires a case-by-case assessment.

David Pembroke: Okay. Very good. Thank you, Dr. Gross. Another question. With regard to Section 16.2.1 of the draft report, it says, "Proposed biosecurity measures, prawn sourced from a country zone or compartment that is recognised by Australia to be free of pathogenic agents of biosecurity concern." There are two questions. Are there any zones or compartments in any countries that are free from the list of hazards? I'll wait on the second question. So are there any zones or compartments in any countries that are free from the lists of hazards?

Dr. Kally Gross: At the moment Australia has not approved a zone or compartment. These conditions have also obviously only just been released, so we haven't had an opportunity. All our assessments for these types of zones, compartments, the freedom are being put on hold whilst we're doing the review so as not to get too far down a pathway where then the government of the exporting country would need to change what they were doing. So at the moment these are on hold.

David Pembroke: Okay. Second question though, related to the same section. What then is the criteria for declaring a zone or compartment as free from this list of hazards so that whole prawns could be imported?

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Dr. Kally Gross: Determination of hazard freedom needs to be to a standard that's consistent with that recommended by the OIE or an equivalent. And for us to be satisfied that the country compartment or zone is free of a given disease, we need to formally recognise the competent authority of that country and be satisfied that they've got the capacity for the disease control, monitoring and surveillance, which is appropriate for the hazards and they're trying to claim freedom from.

David Pembroke: All right. That is clear. Okay, keep those questions coming. We can see that the audience is still there, so if you have noted a question, please send it through, we would love to take it from you to be able to see if we can give you some more answers. Because the department is very keen to understand it, and is very keen on your views indeed of what has not only been presented this afternoon, but the wider report.

David Pembroke: But to the next question, regarding ALOP, how does Australia deal with an exporting country that is assumed or judged to have a lower level of ALOP than Australia has, but the commodities are important or have a high demand in the Australian market?

Dr. Beth Cookson: I might respond to-

David Pembroke: Sure. Dr. Cookson.

Dr. Beth Cookson: ... that one, David.

David Pembroke: Away you go.

Dr. Beth Cookson: I guess the simple answer is that this is a generic import risk analysis, so in conducting a generic import risk analysis, we assume that the hazards that have been identified are present in all of the trading partners, and as Dr. Gross has mentioned we can then go through a process for equivalence assessments if that's not the case and if there's a government to government process. I guess the other important point to mention is that, in accordance with our World Trade Organisation and SPS agreement obligations, we don't take into account commercial interests when we're determining these risk measures.

And so we base it purely on the biosecurity risk and what is required to achieve a safe trade in the least trade restrictive manner possible.

David Pembroke: Got it. Anything to add there, Dr. Gross?

Dr. Kally Gross: No.

David Pembroke: No? Happy with that? All right. Okay, to the next question and it's a long-ish one, but stick with me as we get through this. The draft report notes that testing may be applied pre border (pre export) or on arrival (at border) and notes that pre export testing in the country of origin is not considered equivalent to an arrival testing in Australia assuming that Australia has not assessed the exporting countries pre export testing systems.

If this is the case, how then can a risk be reduced from high to moderate when pre exports screening is included as a biosecurity measure when Australia has not assessed the exporting

country's pre export testing systems? Okay. A long-ish question, but you look confident. Dr. Gross.

Dr. Kally Gross: Yes. I think the question is referring to when we look at the effect of pre export testing on the overall risk for, white spot and pre export testing does reduce our entry likelihood. And it doesn't reduce it as much as on arrival testing does where we've had all the confidence in what our laboratories within Australia are doing, because we've assessed them, we've approved them, they're part of our system. We know what testing they're using. We have approved countries to export prawns to us, and so we have done sort of a mini look at what their systems are for their pre export testing.

And on that basis, we are confident that we will get a reduction in our entry likelihood, but on its own, that's not enough to achieve ALOP, so we do require that addition in there of our on-arrival testing to ensure that we have a robust process in place, which is managing our entry likelihoods. I think our on-arrival testing is demonstrating that that process is working well because we have very few failures in Australia pre export of prawns when they've been tested here.

David Pembroke: Okay. All right. To our next question. What is the sampling procedure being adopted for import assessment in the case of farmed shrimps? Is it grade-wise or production code-wise? To ask that question again, what is the sampling procedure being adopted for import assessment in the case of farmed shrimps? Is it grade-wise or production code-wise?

Dr. Kally Gross: I think the question's asking how do we determine what our batches are for testing, I think in which case-

David Pembroke: Should we ask for more clarification?

Dr. Kally Gross: Maybe we should probably do it a bit more clarification.

David Pembroke: All right. If the questioner would be able to just give us a little bit more detail on that one, the team are close, I can see the wheels are moving and they're close, but we don't want to give wrong information. So if you could just come back to us with just a little bit more detail as to precisely what it is that you mean in terms of the import assessment in the case of farmed shrimps. Is it grade-wise or production code-wise. If you could just give us a little bit more detail we will do what we can to get you the answer through the webinar.

And again, great to see that the audience is sticking around. And again, if you do have questions, if you've noted something down, now is the time to get that question out and the team will certainly do what they can to answer that question this afternoon. Okay. To our next question. You indicated the DIV and CMNV are being monitored. How is being monitored going to be incorporated into changes in the assessment after this current process has been completed? Dr. Cookson.

Dr. Beth Cookson: Than you, David. I will start and then I'll ask Dr. Gross if she has anything to add. I guess in general, the role of the animal biosecurity branch is to monitor the changing statuses of a range of pests and diseases internationally that may impact our import conditions. So whilst this is the formal process we go through to establish or review import conditions, it

doesn't limit our ability or our actions available to us if those pests and disease statuses change in the interim period.

Dr. Beth Cookson: So as soon as we're aware that there has been a change in the status or a change in the information about the epidemiology or the way a pest or disease is behaving or moving, then we can take that into account and we can elect to make changes to our import requirements if we assess that it no longer achieves our appropriate level of protection. I guess the short answer is that the monitoring will continue, so regardless of whether we get information that we assess is changing the current recommendations in the current draft report or if that information comes to hand.

If there's changes in the circumstances after the final report is published, then we'll still take actions to manage the biosecurity risk to Australia.

David Pembroke:

Okay. Anything to add to that, Dr. Gross?

Dr. Kally Gross: No, not at all.

David Pembroke: Very good. Okay. All right. The next question is, and it's pretty straightforward. What is the difference between direct exposure and indirect exposure?

Dr. Kally Gross: Direct exposure is what we assess when we look at the exposure assessment, and this is when we look at a native prawn being exposed to an imported prawn. Indirect exposure is what we look at in the consequence assessment when we look at the likelihood of establishment and spread. So this is where for example, say a farmed prawn then comes into contact with a wild-infected prawn, which previously got sick by the imported prawns. So it's part of our establishment and spread, it's not the initial exposure.

David Pembroke: Okay, great. Thank you very much. To the next question, how can someone from overseas arrange a teleconference or a consultation with Australia involving experts and other related stakeholders? How might we be able to make that happen? Dr. Cookson.

Dr. Beth Cookson: Thanks, David. We always welcome the opportunity to be involved in teleconferences on a bilateral basis with trading partners. It often helps both sides to understand the system and for us to provide clear guidance on what's required. The best way of contacting the department is by contacting the Prawn Review Liaison officer. That email address is on your screens now, so it's prawnreview@awe.gov.au, and we can get our Australian agricultural counsellor who is based in country to make contact with the relevant government authority to organise those types of discussions.

David Pembroke: Indeed. There is a network of those counsellors, so if you are overseas, please get in touch. The department is very keen to speak to you as well. Okay. To the next question. Does Australia have a different or the same approach regarding the pre border mitigation measures, i.e. country-based, compartment-based, zone-based for the exporting country in the case of a disease outbreak?

David Pembroke: And a second related question. How has Australia's decision-making carried out to stipulate an exporting country as a country-based or compartment based in recognising the process of their quality and safety assurance systems?

Dr. Beth Cookson: I might kickoff again. I'll do my best. It is quite a long question. I think in regard to the first part of the question where we're being asked if in the circumstance that Australia has assessed and approved a country freedom or a compartment-based or zone-based freedom for the exporting country, then our actions would likely be the same for any of those in the event of a breakdown of disease status. So that would obviously be dependent on the nature of the disease and of the breakdown.

Dr. Beth Cookson: But essentially if you were recognised by the Australian government as free for a certain hazard, and then that freedom was no longer able to be obtained, then it wouldn't matter whether it was country, compartment or zone-based for the purposes of the actions that we might need to consider in order to continue to manage the biosecurity risk, to achieve our appropriate level of protection.

Dr. Beth Cookson: In terms of the second part of the question about the decision-making to provide that approval in the first place, I think we have touched on this previously in some of our responses, but basically it's the government to government process. It does require significant resource commitments from both sides, from both the Australian government and from the exporting country government, as we require a submission of a completed questionnaire, which we then require a team in Australia to be able to assess from a desktop basis.

Dr. Beth Cookson: And we also would require an in-country evaluation to verify that those systems and processes are in place to effectively manage those, our importing country requirements. So it is a substantial cost and a substantial commitment to undertake those processes, but the first step is for a government to government approach to request that assessment takes place.

David Pembroke: All right. Okay. Thank you very much. And to our next question. If as explained in the presentation, product labelling does not work as a risk control measure. Why is raw prawn product labelling still needed as per for human consumption only not to be used as bait or feed for aquatic animals? Dr. Gross.

Dr. Kally Gross: Yes. We still consider this a very important part of our education campaigns, and as I mentioned, it's a big part of it is helping to prevent the downgrading of a bulk lot of product being moved from human consumption food into, for example, manufactured food. So a big part of it is that, but it is a really important part of our education campaign to try to help to get somewhere with this issue. So we do consider it, it's still very important for our risk, even if it is not necessarily I guess, tangible.

David Pembroke: At the moment.

Dr. Kally Gross: At the moment.

David Pembroke: At the moment.

Dr. Kally Gross: Measurable.

David Pembroke: Yeah.

Dr. Kally Gross: Yeah, and measurable.

David Pembroke: And measurable. All right. Okay. Thanks for that. Now, we do have a question from Vietnam and the question is, the Department of Animal Health in Vietnam has worked closely with Viet-Uc Corporation, and excuse me while I just grabbed that back? Thank you very much. I'll start that again. The Department of Animal Health of Vietnam has worked closely with the Viet-Uc Corporation and local authorities since 2015 in order to build up the shrimp diseases-free compartmentalization, disease-free compartmentalization.

We have conducted in-farm surveillance programme as well as farm surrounding buffer zones for years. We hope to get detailed guidance from DAWE for further steps. So this sounds like a process that's underway. What guidance might you be able to give our friends from Vietnam based on the question. It's more a statement than a question really, or what observations might you have as a result of that particular question?

Dr. Beth Cookson: Thanks, David. We are of course aware of the request from Vietnam and of the work that Viet-Uc has been doing in establishing a prawn disease-free compartment programme, so we have stayed in touch regularly as the comment indicates. The reason that the prawn assessments have been put on hold was because we did anticipate through this draft report process that it may be a number of other pathogens that we also require management of.

Dr. Beth Cookson: So the hazards that have been identified and retained for risk management are those hazards that we now will need to assess to make sure that the disease-free compartment can actually achieve the risk mitigation for all of those identified hazards. So I guess that's the first part in terms of the timeframes. The next part of that process is that the department is in the process of establishing compartment assessment guidelines.

Dr. Beth Cookson: Now we have recently actually met with the Vietnamese government and we have committed to providing those when they are ready for publication, which we're anticipating in the first part of 2021.

David Pembroke: Excellent. And very good afternoon to or good day, wherever you might be in the world, listening to this. Thank you very much for your interest in today's webinar from the Department of Agriculture, Water and the Environment here in Australia. Okay, to our next question, how can you prove the nine diseases hazards are not present in Australia? Dr. Gross.

Dr. Kally Gross: Australia has a very long and strong history of passive surveillance, and we have really excellent reporting and systems through our states and territories, and we're very confident that we don't have the hazards in the draft report we've identified.

David Pembroke: Okay.

Dr. Kally Gross: So through our passive surveillance systems, which-

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David Pembroke: Over long periods of time-

Dr. Kally Gross: Very long periods of time, yeah.

David Pembroke: we're confident that that is in place. Okay. Thanks very much. Okay, to the next question. Could an emerging disease be widespread before it's identified and the risks managed? Could things get away from us before we're able to reel it back in?

Dr. Kally Gross: As Beth indicated, we have very strong monitoring and surveillance where we spend a lot of time going through disease reports, literature, monitoring, the OIE websites, also monitoring, more anecdotal websites. We have strong relationships with our counterparts overseas, so we spend a lot of time making sure we're getting all the information. We also ask our stakeholders to provide us any information they have at any time so that we can be sure that we are seeing what's happening around the world.

Of course, there are obligations also for all countries to report if they're having significant events even if it's an emerging disease and not listed by the OIE, so that's also really important for everyone knowing what's happening. So we're confident that we are knowing what's going on as best we can.

David Pembroke: Best as we possibly can, and would be able to respond quickly should something-

Dr. Kally Gross: Yeah absolutely.

David Pembroke: ... go wrong.

Dr. Kally Gross: Yes.

David Pembroke: Okay, to the next question. It's suggested Australia is going to exclude Indonesia from the country distribution of LSNV, or add that, the presence of the disease is suspected, but not yet confirmed. Do you have an answer for that question?

Dr. Kally Gross: Yes. We have looked into this and we can certainly change the presence of LSNV for Indonesia in our hazard table, was based on a report that had them listed, but we have subsequently received additional information, which suggests that it may not be present in Indonesia, so we will-

David Pembroke: So updating that?

Dr. Kally Gross: We will update that, yes.

David Pembroke: Okay. All right. Very good. Thank you very much again, for your interest. And again, we still have plenty of time. And again, I do note that plenty of you are still sticking around, so I'm pleased that it is creating such value for you today. And again, we are very interested in the time that we have left to continue to answer your questions. And once again, on behalf of the department, can I thank you for your interest today.

All right. To the next question. What is the thermal treatment minimum time and temperature... Time and temperature, sorry. What is the thermal treatment, minimum time and temperature, which permit to keep the quality of the product to apply to the consignment to export cooked shrimps from a non-free country. Okay, both nodding your heads, both got an answer? Who would like to take that one?

Dr. Kally Gross: I will. We don't have a specific time and temperature treatment. Our requirement for cooking is that the prawn is, all the prawn meat, is fully coagulated so that there is no raw prawn meat present in the prawn, and that is essentially what our cooked requirement is, which I believe we do give an example. I think it's 70 degrees for 11 seconds, which is an example of the time and temperature required to fully coagulate the prawn meat.

David Pembroke: Okay. Very good. Okay. Now to the next question. Can you explain why the biosecurity measures are stricter than those recommended by the OIE for frozen prawns? Dr. Cookson.

Dr. Beth Cookson: Sure, I'll jump into this one just to break it up a little bit for Dr. Gross. I guess the explanation for that is that as a member of the WTO and a signatory to the SPS Agreement that we've spoken about previously, Australia has the right to implement SPS measures to maintain a level of protection considered appropriate for life or health of animal, plants or humans within its borders. And that's called the Appropriate Level Of Protection.

So whilst the OIE provides recommendations in the form of international standards, our process of risk analysis, this process is how we determine what is appropriate for our circumstances, and therefore what the import measures are. Because of our favourable disease-free status in Australia, what we find is that most of the time, the minimum requirements provided in those international standards are not sufficient to achieve our appropriate level of protection, and that's why the import measures that we determine through this process is what we put in place.

David Pembroke: All right. Dr. Gross, anything to add on that one?

Dr. Kally Gross: No.

David Pembroke: No? Good answer? All right. Very good. Comprehensive once again. All right. To our next question. Keeping in view the fact that risk can be reduced but can never be completely eliminated. Therefore, in the case of pre export testing results, are they satisfactory whether 100% on-arrival testing can be avoided in order to reduce costs? Dr. Gross.

Dr. Kally Gross: I think this question is asking about pre export testing programmes, which we've been-

David Pembroke: It does look like it's asking that, yes.

Dr. Kally Gross: So that would be a situation where we would assess an exporting country as to whether or not they're able to satisfactorily provide a pre export testing programme, and then on arrival in Australia, we would potentially reduce our on-arrival testing. So this is different to how we have in place now where we've done not a full assessment of the exporting countries systems. That is an equivalence-based assessment, which is, as Beth's spoken about a few times,

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is something we can do, but it's a case-by-case assessment, so it would be something we would need to do as a government to government process.

David Pembroke: Can testing be expanded to include other hazards?

Dr. Kally Gross: Yes, we could certainly do that if we decided there was a need to and the testing regime would be dependent upon the hazard, and the tests that we had available, and the expected prevalence level, and those types of things, but it could certainly be expanded.

David Pembroke: Okay. All right. Our next question. The draft report has very little detail regarding the exact design of the on-arrival testing procedures. Could you please step us through the testing design and explain the rigour of the testing programme?

Dr. Kally Gross: I think this is talking about what we actually do when the prawns arrive in Australia.

David Pembroke: Sounds true. Yep, on-arrival testing procedures.

Dr. Kally Gross: On-arrival, yeah. The draft report doesn't go into a lot of detail about that, it's true. We have maintained what the current on-arrival testing programme is, and so that's 100% seals intact inspections for 100% of all uncooked prawn consignments coming in. We sample 65 prawns out of those out of each batch randomly, so our biosecurity officers do that. And then they are sent to one of our department-approved laboratories for testing.

Dr. Kally Gross: In the meantime, the prawn consignment's held under biosecurity control so no one's able to enter, or tamper, or have anything to do with those prawns. There's not until the department receives the results from the testing laboratory that the consignment is free of both white spot and yellow head type one virus. We would then release the consignment from biosecurity, and then it would be allowed to move.

David Pembroke: On its way.

Dr. Kally Gross: Move on its way, yeah.

David Pembroke: Okay.

Dr. Kally Gross: I'm not sure if Beth's got anything.

David Pembroke: Nope? All good. Okay. Right. To the next question. Why were measures other than cooking applied to manage risk? Why were measures other than cooking applied to manage risk?

Dr. Kally Gross: As Beth talked about, and also we've talked about, we have obligations to apply the least trade restrictive biosecurity measures that we can apply to achieve Australia's ALOP. We selected quite a few biosecurity measures from a range of different pre-export and on-arrival measures. And whilst cooking certainly does achieve ALOP for all our hazards, so do a combination of other measures and it's appropriate for us to offer all biosecurity measures,

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which can manage risk to a level that achieves Australia's ALOP to be the most trade-restrictive as we can.

David Pembroke: Okay. Excellent. All right. To the next question. Is onsite audit a part of the requirement to declare disease-free? Is onsite audit a part of the requirement to declare disease-free?

Dr. Beth Cookson: I'm happy to jump into this one. In terms of our assessment processes for determining disease-free countries, compartments or zones, our standard assessment process is that there is a desktop part of that assessment, and then an in-country verification aspect of that assessment also. Now, obviously the current COVID-19 travel restrictions have meant that we've had to do some thinking about whether there are other alternatives to how we provide that final level of verification over the assessment for those country freedoms.

Dr. Beth Cookson: And the answer I'm afraid is going to be, it depends, which I know is not a very helpful answer to the person who's asked the question. But we will take into account, a range of factors when looking at whether we could possibly use a different method than an in-country verification to complete that final step in that country freedom assessment. And that would include things like the history of existing trade, the level of risk associated with the commodity.

Dr. Beth Cookson: Prawns is just one commodity where we're asked to do these types of assessments, so there are a range of factors we're currently looking at in terms of how are we going to do that part of the process going forward given that we're likely to be living with the current international travel restrictions for a while yet.

David Pembroke: Okay. And to the next question then. In a case of an outbreak, which occurred in the exporting countries that is allowed to export the prawns to Australia, what measures will Australia take to the consignment that it's already on the way to Australian ports before the outbreak declaration was announced from the consignment origin country? That's a hypothetical, but what would Australia do? Dr. Cookson?

Dr. Beth Cookson: Sure, I'll jump in. And I think, again, it's a little bit circumstance-specific, so it is a very general question. However, our general approach is to look at the date that the outbreak was likely to have commenced and factor in the amount of time that infectious material may have been present in the farm or country and make a decision about the level of risk posed by that specific importation and act accordingly. So some scenarios that might apply would be that we'd potentially require additional treatments or potentially require re-export in the worst case example.

Dr. Beth Cookson: Dr. Gross I'm not sure if you've got anything else to add to that.

Dr. Kally Gross: No, I think that definitely covers everything.

David Pembroke: Okay. All right. And again, thank you very much for your question. And now that we've got another 40 minutes, please, as many questions as you would like to ask, we are here in your service. So please send them through because the team are doing a fabulous job of

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giving you the detail that you need, and certainly the Department of Agriculture, Water and the Environment is very keen to understand your views. So please keep the questions coming and we really appreciate the contribution you are making to this webinar. And thanks once again for sticking around.

David Pembroke: Okay. So the next question is, is there any consideration for allowing the importation of live prawns, which would be used for brood stock. Dr. Gross.

Dr. Kally Gross: I guess the first point for that is that importation of live animals is a two-step process really. The first one is that in live species needs to be included on Australia's live import list. That requires a full environment risk assessment, which similar process to us, but looking at whether or not the species, if it was imported into Australia live and it where to escape, could do any damage to Australia's environment. So the first thing that would need to be done for that would be an assessment of the species for addition to the live import list.

Dr. Kally Gross: And from there, we would then need to do a biosecurity import risk analysis like what we've done here, but it would be for a live animal. So it's something that can be done-

David Pembroke: That sounds government to government again and it doesn't look like it's on the agenda as far as you're concerned.

Dr. Kally Gross: There has been an application to amend the live import lists for prawns.

David Pembroke: For the prawns?

Dr. Kally Gross: Yeah.

David Pembroke: Okay.

Dr. Kally Gross: But I'm not exactly sure what that is up to at the moment. That's managed through the department of environment, which I guess is part of us now. Previously it wasn't, but... So that's the process that sits within a different part of the department.

David Pembroke: Okay. All right. Thanks for that. Okay. To the next question, and the question is, is our current ALOP fit for purpose given the quantities of prawns that will be accepted with a 5% prevalence with 95% confidence? The question is, is our current ALOP fit for purpose given the quantities of prawns that will be accepted with a 5% prevalence with 95% confidence?

Dr. Beth Cookson: I might-

David Pembroke: You're nodding your head, you're nodding your head,

Dr. Beth Cookson: I'll jump in.

David Pembroke: ... so that is heading your way, Dr. Cookson.

Dr. Beth Cookson: I think that there's perhaps two aspects of this question that I might just touch on. The Appropriate Level of Protection as many of our audience would know is legislated under

the Biosecurity Act, and Dr. Gross has already outlined that that's aiming at reducing biosecurity risks to a very low level, but not zero. So I think the point in question here is, is our assessment appropriate that we've actually achieved that very low level, but not zero?

So I'm not 100% sure that is actually a problem... The question is not so much an issue with the definition of the ALOP, but in terms of how we've conducted that evaluation that Dr. Gross has gone through and made an assessment that the existing import measures to achieve that very low, but not zero ALOP. So if I take it from that perspective, then I guess the question around the 5% prevalence with 95% confidence goes back to the entry assessment risk, and the fact that there are a variety of layers of risk management and also the combination of entry and exposure that Dr. Gross has already been through.

That means that from the department's perspective, we believe that that's appropriate and that's what's been laid out in the draft report. However, part of this process is to receive that feedback and the technical submissions about what our stakeholders feel about the appropriateness of the conclusions that we've reached in the report.

David Pembroke: Further to that, just how important is it that the community that's gathered today gives the feedback? How important is that as part of the process to deliver the best possible outcomes?

Dr. Beth Cookson: For me, I really see this as the check and balance point. We have engaged an incredible amount of technical expertise, both within the department and also with external peer reviewers in getting the draft report to a point where the department believes that the recommendations are appropriate to manage the risks. However, there is a range of other expertise outside of the group that's been engaged so far and people who do have valuable contributions.

Dr. Beth Cookson: We do encourage the submissions to be technical in nature because that's really the scientific basis of this risk assessment. It does mean that those submissions really should draw on technical literature where it exists and where the view is that we may not have incorporated some of the findings from that that body of evidence as well as we may have. It is a very important part of the process and we will endeavour, as I mentioned earlier, to address; that we will review and address all of the submissions that we receive.

David Pembroke: And from your point of view, Dr. Gross? Obviously, a critically important input that the community that's gathered today really does give their views.

Dr. Kally Gross: Yep, definitely. It's one of the key parts of the process release is the stakeholder engagement and consultation, and we want to hear everyone's views, because otherwise we really can't take them into consideration.

David Pembroke: As you say, you can be comprehensive, but people can find things along the way, so consider yourself encouraged community to really think through and to give you feedback, technical in nature. Look at that technical literature and see the contribution that you might be able to make to these important review process.

David Pembroke: Next question. Why are marinated and BBC prawns not considered as dumpling and dim sum type products? Dr. Gross.

Dr. Kally Gross: Under the previous conditions that were in place, these products, when we had them in place without... They didn't have as much rigour around the product type and they were being more a pathway for avoiding testing requirements that we applied to uncooked prawns. And we received many reports that these products were being washed post border and then sold as a raw prawn product.

And our border staff also reported that under the conditions that were previously in place, they had difficulty verifying whether the products were actually a marinated prawn or a proper breaded and battered and crumbed prawn. Within the draft report, we don't really consider these to be equivalent to a dumpling product, which is very clearly just a dumpling.

Whereas, marinated prawns and breaded and battered crumb prawns can be quite easily returned to the just a plain raw prawn form. As we've discussed, fishermen like raw prawns, so that's why we don't consider them the same type of product as that, and they have marinated prawns have to adjust imported as an uncooked prawn, so they're subject to the same testing.

And breaded and battered crumbed prawns have their own set of requirements, which require a par cooking step, which solidifies the coating and means they can't be washed off and the prawn can't be returned to its original status.

David Pembroke: All right. Okay. Thank you very much. And once again, thank you for these questions, they are comprehensive and quite detailed, so here we go with another set of questions. Why are we only testing for WSSV and YHV-1? As in the report you say, "These are the only testing methods available." This is not true and there are techniques for testing all known viruses simultaneously.

Dr. Kally Gross: Yes, I agree, that is not true. The reason why we only have recommended testing for WSSV and YHV is because based on our risk assessment, they were the only two that required testing as a way to manage risk. But I certainly agree that there are tests available for-

David Pembroke: Other tests available.

Dr. Kally Gross: Other tests available, and if other hazards required... we determined that they required testing in order to meet ALOP, then we would put those measures in place.

David Pembroke: Okay. Second question. Clearly labelling, "For human consumption," does not work, which has been previously discussed. Read the arrival of WSSV in Australia, probably through the use of infected bait and is unenforceable, so why do you rely on it?

Dr. Kally Gross: That's a good question, but we don't actually rely on labelling, and so I guess that was one of the points that was also made earlier by another attendee, is that you're saying that you, if it's not doing anything, why do we have it? We have it on there because it's a little bit of extra education, but we certainly don't rely on it. We rely on a raft of other measures and it's just one tiny little portion of an education campaign.

David Pembroke: Of an overarching campaign.

Dr. Kally Gross: Exactly.

David Pembroke: Okay. Another question. Why do you still say, "If WSSV becomes established in Australia."? The question makes the statement that he or she believes it's clearly established here already. Is there any plans to change the status?

Dr. Kally Gross: When we do this risk assessment, it's just the way that things are discussed. Certainly, we understand the white spot syndrome virus is present in south-east Queensland within a movement restricted area, and we are aware of that, and we do acknowledge that in the report. However, it's not considered to be established in the whole of Australia, it's within a small zone. And we know that it's not within the rest of Australia, so we want to protect the rest of Australia as well.

David Pembroke: Okay. Fair enough. What exactly has changed in this new ALOP based on the report? The question, it goes on to say, "Clearly the previous one did not work, WSSV entered. So biosecurity system's failed." It might be a bit harsh, but. "So what has changed exactly? The only thing I see is that the whole uncooked prawns must be checked to demonstrate freedom from hazards. Which hazards do you mean? Only WSSV and YHV-1. Why not EMS, and EHP, and others given that there are tests available for all?"

Dr. Kally Gross: I guess the current import conditions are substantially different to what the old ones were, as far as uncooked prawns go. We now do testing pre export and also on arrival. We've put in place a much more rigorous approved arrangement system for holding our consignments as well as what our actual testing laboratory system is. So I would say that there has been quite a big change for the way we manage our uncooked prawns as far as the whole uncooked prawns go.

Dr. Kally Gross: So these uncooked prawns that are tested are ones that have had the head and shell removed. Whole uncooked prawns have to have a country compartment or zone freedom, and they now need to be... we need to confirm that they're free from all of those diseases. We wouldn't actually consider that testing of a whole prawn on its own would provide us a level of assurance that we get from having a compartment freedom, because just based on the volume of hazard that would be in a whole prawn.

So we actually, that's not something that we would rely on any way. The only way people can export a whole uncooked product is through doing a full compartment country or zone assessment. And yes, I agree there definitely are tests available for the other hazards, but as I mentioned, a couple of questions ago, when we did the risk assessment, it wasn't necessary to apply testing for those hazards because head and shell removal managed it.

And because we require head and shell removal for some hazards, applying testing to those products when the head and shell removal would already manage the risk would be overly trade restrictive and wouldn't be a necessary measure.

David Pembroke: All right. Comprehensive answer. Thank you very much for that question. To the next question. Is there scientific evidence that cooking to coagulation is sufficient to

deactivate viruses? Or is cooking considered to reduce risk as they won't be used in the pathways that will potentially allow released into the transmission pathways?

Dr. Kally Gross: The answer to that is yes to both of them. For us cooking for a range of the hazards, cooking manages risk by entry, so there is scientific evidence for some of the hazards that the temperatures that would be used in commercial cooking would have an impact on the infectiveness of viruses. So these are things like white spot virus and IMNV, and also vibrio parahaemolyticus. We consider that the cooking there would reduce the amount of viable infectious hazard in them. And also that is then works in combination with the reduction in exposure.

And for some of the hazards, we didn't have evidence about temperature effects on them, so we assumed that cooking did not even activate them, so we took a more conservative approach for that pathway. So it does both.

David Pembroke: Okay. Excellent. All right. The next question, and again, ladies and gentlemen, more than 20 minutes to go, so you've got plenty of time. You've written those questions down, please type them into the Q&A box. As I said, the Department of Agriculture, Water, and Environment very keen to answer your questions and consult with you in order to develop the most robust approach.

David Pembroke: The next question is, given the known risk of constant new and emerging diseases, is there a mitigation measure that can be put in place while a disease is emerging and research is still being undertaken? It seems that by the time we understand the risk, it's often too late to put measures in place. Given the known risk of constant new and emerging diseases, is there a mitigation measure that can be put in place while a disease is emerging and research is undertaken into that emerging disease? It seems that by the time we understand the risk, it's often too late to put measures in place.

Dr. Kally Gross: I guess if something was shown or being seen to be a really significant risk and we became aware of it, then there's certainly emergency measures and things that we can put in place at any time, if we think that that there is a risk that we need to do that. One of the other things is that because at the moment, our uncooked prawns are headed and de-shelled, most pathogens of prawns do accumulate in their heads, so we are removing a portion of infectious dose, but we certainly have mechanisms in place to put in place emergency measures if we need to. I don't know if Beth has anything else.

Dr. Beth Cookson: No. No, I think that was a pretty good response. The SPS Agreement does provide for emergency measures in the absence of available sufficient scientific evidence in the case that we deemed that the consequences or the nature of the hazard has as Dr. Gross has described, significantly exceeds our appropriate level of protection. So there's a specific process to go through to do that.

Dr. Beth Cookson: But at the current point in time, the pathogens that we've identified or the hazards that we've identified through the draft report we believe as per the recommendations that are being managed by the current import measures.

David Pembroke: Probably maybe just at a more macro level, that point about emerging diseases and numbers of them, would you offer an observation as to how complex and challenging the environment is? Is it becoming more difficult to manage diseases, to identify and to mitigate some of the risks?

Dr. Beth Cookson: I think as a general observation and probably across both aquatic and terrestrial animal and plant diseases, the nature of emergence of pathogens and the rate at which they emerge is certainly a challenge that the department's very conscious of. And as we've described previously, we do spend a lot of our effort in trying to identify early what those changes are, which sort of commodity pathways they may impact, and whether our existing import control would sufficiently manage the biosecurity risk or whether we need to do more.

Dr. Beth Cookson: But it's absolutely David an increasingly complex world out there and one that we need to stay on the front foot on with biosecurity.

David Pembroke: And certainly need the contribution of the community, don't you?

Dr. Beth Cookson: The intelligence that's out there is really, really important to how we can actually respond to and manage these risks.

David Pembroke: So these opening up forums such as today, very important, so there is this exchange of views. So when there are these new and emerging threats, people can let the government know. Okay. Interesting. Okay. Combined control measures imposed are clearly not the equivalent of cooking. How in good faith can we put Australia's aquaculture industry in such dire risk given recent precedents of WSD in 2016 and not imposing that more fully the SPS Agreements? What is to stop a subsequent WSD incursion?

Dr. Beth Cookson: That's a good question. I'm not sure that I entirely agree with it in entirety, because I think what we're saying is not that the other combined control measures are necessarily the equivalence of cooking, but the combined control measures in our draft report and the recommendations we've made achieve that very low risk rating, which achieves our ALOP in many of those cases. Probably cooking in terms of our assessment would exceed what we need in terms of managing the pathogen and therefore becomes more trade restrictive, then providing the other options.

So I think that's probably the answer I would give at this stage. And the other part of that really is that we did learn, unfortunately through the white spot disease incursion in 2016, we did learn a lot about human behaviours. And I guess subsequent to that, there have been the new import measures put in place for prawns since the suspension ended in mid-2017, and there has been no change from those in this draft report. And also that the department is very much actively pursuing a verification processes around the assumptions we make around how effective those import controls are going to be.

So we have changed a few things substantially since that time and we do need to take a layered approach to biosecurity, so we look at what we can do pre export, we look at what we can do at the border. And then we also look at what we can do post arrival to make sure that the system is functioning as we think it is.

David Pembroke: Okay. Very good. All right. To the next question. Has anyone considered given the WSSV is a virus of the cuticular epithelium that removing the head and shell might actually increase risk given the potential attractiveness for bait?

Dr. Kally Gross: Yes, I guess the risk assessment did actually take that into account because we didn't actually consider that head and shell removal did reduce our entry likelihood, so we considered that body of the prawn has just as much ability, to cause diseases as what a whole prawn did for as far as white spot went. And that was why we needed to apply also pre export and on-arrival testing to that in order to manage that risk. So, we certainly agree that the meat is just as risky for white spot as the whole prawn. We took that into account.

David Pembroke: It's quite a simple question, why does all this need to be so complex? Why not just rely on tried and true control measure, that is cooking?

Dr. Kally Gross: Yes, cooking does manage risk, we totally agree. The thing here is that we have done the risk assessment and in what is presented in the draft report, it's our view that other measures also do manage risk. As part of our international obligations where it is safe to allow trade, we need to do so. And that means giving the option for different product types. Certainly, it is complex, there's no doubt about it, but if there's a way for us to manage risk and allow that different types of products other than cooked, then that's what our international obligations are.

David Pembroke: All right. Okay. Another question. You said 65 individually prawns are sampled randomly. What exactly does that mean? Previously, these were not taken randomly, but from the nearest box on the back of the truck, sometimes from a box provided by the exporter for this purpose. What does random sampling mean exactly? What is the process? That's a process question.

Dr. Kally Gross: It is a process question, and yes, I agree, there were some issues found with the previous random sampling process, but it is truly random now. The inspectors, I think they have a sheet with the box numbers and they randomly select the box numbers, and then they require the importers to get those boxes out. So there's no-

David Pembroke: Back of the truck.

Dr. Kally Gross: There's no back of the truck, there's no importers deciding which boxes are going to be sampled. It is genuine random sampling.

David Pembroke: Random sampling. Dr. Cookson.

Dr. Beth Cookson: I will just add one more point too, is that it's also seals intact.

Dr. Kally Gross: Yes.

Dr. Beth Cookson: That means that the container has to arrive with the seals intact from the point of export, and it's not opened until there's a biosecurity officer there to open it and conduct that random sampling. So there's a double layer of controls over that process.

David Pembroke: Okay. This is a good question, it's a simple question. Why did the department do a generic review and not country-specific reviews? You both can answer this question.

Dr. Kally Gross: Yeah, we both can. I guess it comes down to available resources is one of the points. Doing a generic risk assessment allows us to consider everything at once. If we were to do a country risk assessment would take much longer because we would have to do a risk assessment for every single country, which wish to export prawns to Australia. And we also take into account things like how widespread the disease agents are and those types of things. When it comes to prawns, a lot of the agents are spread across a lot of the prawn-producing countries, and it makes more sense to do it in one go and get it done with.

And then if countries wish to have themselves recognised as free from specific diseases, we can then go through that process separately.

David Pembroke: Okay. Have new hazards been identified?

Dr. Kally Gross: In 2018, we released the hazard table for our stakeholders to look at in advance, and since time we have actually added quite a few hazards or potential hazards to it. There hasn't been anything significant that we've included in this risk assessment, but there have been a few novel viruses and a few other new viruses which have popped up. And because they're new, these are ones that we've talked about, we keep a lookout for new and emerging diseases.

So this isn't set and forget, we don't just do it and then put it in the back of the cupboard and leave it, we're constantly monitoring and considering if the information we've got is the best, and the most current, and the most applicable.

David Pembroke: Next question. On the one hand, you say that frozen prawns must now be de-headed, de-shelled and deveined. If so then, why allow any whole frozen prawns in at all? And if you will allow, what conditions must be met to allow whole frozen prawns to be imported? Okay, both nodding heads.

Dr. Kally Gross: Do you want me? Okay.

David Pembroke: Yep.

Dr. Kally Gross: Yes, uncooked prawns do need to be de-headed, de-shelled, deveined and then pre exporting and on arrival tested for white spot virus and yellowhead. We have the option for whole uncooked frozen prawns, however, in order to do that, that's where we go into the country freedom, compartment freedom, zone freedom. So it's a very complex process, and there's a lot of checks and balances that need to be done in order to ensure that we would consider those products to be free. So those two products aren't really, I guess, equivalent in the way that risk is being managed.

It's a very significant process to have freedom from everything, and we would also require freedom from that whole list of hazards, not just for the real conditions that we're doing, where we have something specific like the testing for white spot and yellowhead. So they have to be free from everything. Free from EHP, free from DIV1, free from all of them in order to allow whole uncooked prawns.

David Pembroke: Okay. Dr. Cookson, anything to add there? No? All good? Okay. Another question. Recent studies have shown that farmed prawns in Thailand, and Vietnam, and China have shown that almost or more than 90% are testing positive for EHP. Statement. This is a very serious exotic, and has such, should be tested in all imported raw prawns. The question just disappeared. Why is it not being? Testing protocols exist. Again, couple of statements, but a question in there around that. Dr. Gross.

Dr. Kally Gross: For EHP, when... This is actually something we put in interim measures in place I think earlier this year, because whilst we were doing the risk assessment, we identified that we didn't believe that head and shell removal on its own would manage risk. That was why we then added in the deveining. Because based on the information, there's very little EHP just present in the muscle. So if we removed the head and we removed the gut, then there's basically very little EHP present, and we consider that that manages-

David Pembroke: The risk.

Dr. Kally Gross: ... the risk for EHP.

David Pembroke: Got it. All right. Okay. Coming to a close, so if you do have any last minute questions, please we are just a little over five minutes to go today. But again, as I say, if you do have a question, please send it through. If we don't get to it today, we will certainly get to do it... get to it, I should say, in the days and weeks ahead, but to the question.

The vast majority of viral deactivation studies involving heat cooking use several minutes for deactivation rather than seconds. What process has occurred to ensure the recommendation of coagulation is effective to deactivate viruses if they are present? Couldn't this short heated period be used to avoid testing protocols when the short heated period may not actually be effective in the deactivation of the virus? Dr. Gross.

Dr. Kally Gross: I guess there's two parts to that, so the recommendation for fully coagulating the prawns turns the prawn into a cooked product. That really significantly changes what our exposure likelihoods are because cooked prawns based on the survey and evidence we have not used by, for bait by fishermen, and there would be very little interest in using them for feeding broodstock for nutritional and maturation purposes. When we did our risk assessments, we considered the fact that a lot of the... for those reports, that sometimes the length and time of cooking was greater than what our recommendation is to fully coagulate.

But in that we didn't take it to suggest that it was complete in activation, just some inactivation. So some reduction in entry and a very significant reduction in exposure, and together those to manage the risks. So it's not 100% inactivation, we acknowledge that, but it is a small amount of inactivation that somewhat reduces entry, and we have a big reduction in exposure because they are a product. And if the prawn meat's fully coagulated, then it's looks like a cooked product, it is a product.

Dr. Kally Gross: We have done, our compliance and investigations there, we've looked at prawns, we've inspected them, and cooked prawns are cooked.

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David Pembroke: We do have time for one final question, and it is, I think that the biosecurity risk can be sufficiently reduced by using a lab test before export and a lab test after arrival, risk cannot reduce to zero. What is your opinion about that? A lab test before it leaves, a lab test when it arrives, good to go.

Dr. Kally Gross: That's what we've got in place for our pre export and on-arrival testing. Certainly, we consider that does reduce our risk for white spot and yellowhead. We haven't recommended it for other hazards at this point because our risk assessment hasn't suggested it's needed, and applying those measures would be onerous and over the top at this point based on the risk assessment that we've done.

David Pembroke: That is-

Dr. Kally Gross: Yeah.

David Pembroke: Contained in the report, and again the full presentation today will be made available as well the report for people to make comments. But before we do wrap it up, ladies and gentlemen, I'll just toss across to Dr. Beth Cookson, any final comments that you'd like to send to the community? And just once again, on behalf of the department, can I thank you all for attending the webinar today, but also for sticking around and for asking such great questions. It really, as I say, it helps.

It helps for you to show an interest, and certainly the department is looking for your technical feedback on the information provided. But perhaps as a final comment to the community out there, Dr. Cookson,

Dr. Beth Cookson: Thanks, David. I can only really reiterate what you have just said. I have been very impressed with the number of participants that have stayed with us for the full time. I think it does demonstrate how much interest there is in this review. It's been a while coming, there's been people who have been quite anxious to see the release of this draft report. And we will continue to work as quickly as we can after the consultation period closes to take into consideration all of the technical submissions that are provided and to publish the final report.

There are other opportunities for engagement with us, as I mentioned at the very beginning, for anybody who does want to make some time to discuss with us outside of this webinar, then we're very happy for you to reach out through the Prawn Review email address and we can make some time to discuss with individuals, with industry groups and members, whatever other discussions are necessary for us to continue to explore what is in the draft report, and to really get a feel for what the impressions out there are of the scientific and technical robustness of the assessment that we've made and the recommendations that are contained in that draft report.

Dr. Beth Cookson:

Once again, thanks to all for joining us today. It's been really great to have this interactive session. I'm sorry that it wasn't a roundtable. It would have been nice to have seen the faces on the other side of the room rather than a television screen, but I'm hoping that we do get those opportunities in the future. And thanks very much to David for facilitating this session this afternoon.

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David Pembroke: Fantastic. Really enjoyed it. And Dr. Gross and any closing remarks from you?

Dr. Kally Gross: No, I think Beth summed it all up, I would say. Thank you very much to everyone for attending and for their questions, and we really look forward to your submissions.

David Pembroke: Thank you once again, on behalf of the Department of Agriculture, Water and the Environment for your time today. Again, you are encouraged for your submissions and certainly the department looks forward to that. Also there is that timeline that was in the presentation as well. You would do well to go back and have a look at that just to understand where you can make your contributions, what that indicative timeline looks like, because I know the department are very keen to hear your views along the way.

But on behalf of the team here today in Canberra, thank you very much for your time and we will see you next time when we talk about prawns.

[Webinar ends]