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# NEWSLETTER DECEMBER 2021



## BC2/5.2 Conditions - request for feedback

In January 2021, the Department of Agriculture, Water, and the Environment (DAWE) implemented updated conditions for BC2/Class 5.2 biocontainment facilities. The updated conditions also now incorporate AA classes 7.2, 7.5, 7.6, 7.7 and where applicable Class 6.1.

The new BC2/5.2 Conditions and associated Informative Text documents can be found here: <https://www.agriculture.gov.au/import/arrival/arrangements/requirements#class-5>

The DAWE are completing BC5.2 transition audits in 2021, auditing existing approved facilities against the new conditions, with non-rated corrective action requests being issued for non-conformances.

As these transition audits occur, the RLC has received feedback from several members who are experiencing difficulties understanding and/or meeting the new conditions. Further issues have been experienced when applying for new facility approvals.

In response, the RLC seeks wider feedback in order to compile and provide a submission to DAWE on behalf of ABSANZ members. This will outline the specific conditions members are requiring clarification for and any related questions.

To inform this submission and to ensure the views of all ABSANZ members are represented, please provide your valuable feedback to Julie Harvey - [julie@absanz.org.au](mailto:julie@absanz.org.au) by 31<sup>st</sup> January 2022.

## From the President:

### A warm welcome to everyone



*I would like to extend Season's Greetings to you all on behalf of the Board, Julie, and myself. With any luck, we will get to enjoy the Christmas break with our friends and loved ones.*

Starting out as a 'Country Tradie', I am used to a relaxed 'round table approach' in seeing a project come together as the sum of the various contributions from all sorts of people. When each person knows and takes charge in their role, and the pleasure of seeing the client achieve their dream.

When I look at the ABSANZ membership, it seems similar; people from all types of skills backgrounds combining to achieve the desired outcome. I hope to encourage this by asking for your thoughts, from your own perspective on all subjects including what you want from your membership, so that we can feed this information to the various committees for consideration. Who knows where even a simple idea could lead us?!

I would also like to add that I wholeheartedly agree with, and support, previous Board's ideas of having awards and recognition. With your input, this is an area that I would like to expand on next year.

**Succession.** It would seem strange to mention this when the dust hasn't settled from the recent election. I mention it because I would like to encourage you all, no matter what position you hold, or how senior you are because I would like to encourage you all, no matter what position you hold, or how senior you are, to volunteer – to write articles for this newsletter, contribute to education and training, share new findings or opinions, in fact anything that is of interest to you. Perhaps consider joining a committee. Aside from benefitting ABSANZ enormously it could benefit your professional life. You never know where it could lead.

I feel very privileged and honoured in my position as President, and I look forward to what we can achieve together next year.

Warm Regards  
Allan

>>>Continuing on

Webinar series...

# Professor Catherine Bennett your webinar questions answered

## Schools

**Q.** How will the return to school, in particular the completely unvaccinated under 12 primary school students, impact the numbers, and should we be concerned about spread and clusters within primary schools? Should primary school kids be wearing masks when they start back this month and into next year? I ask this partly because my daughter is starting school next year, but also because there hasn't been much about this in the conversations in the media. However, I've read about schools overseas implementing mandatory masks in primary schools with their return to school after the northern summer. While I recognise that young kids are less susceptible to COVID and long COVID, as a numbers game there will be some that get seriously ill, more if there are no mitigation strategies in place.

**A.** States have put measures in place to identify ways to make schools safer, especially checking and addressing ventilation etc. and asking all adults on campus to be vaccinated. Masks are being required in different ways according to State. Masks are being required in different ways according to State, Vic mandating masks in all by the very young, and NSW recommending but not mandating in primary schools. Recent studies by the NCIR in NSW and MCRI in Victoria have found that whilst kids are more likely to be infected by the Delta variant compared with previous strains, they don't spread it amongst themselves as easily as adults, which is good news. Eventually states might settle on a common plan when they are able to see what minimum measures need to be in place to keep things safe. The other big change is rapid antigen testing. We hope this will be used to keep kids in school. If a child is found to be positive and might have been infectious whilst in class, the authorities can check those who sit closest or hang out together, and let classes continue for the rest if they test negative. They could test each morning before school for a few days to check they didn't pick up the virus.

## Vaccine

**Q.** Does the %vaccination rate required for herd immunity depend on the R factor of the target pathogen, or is it always 70-80%?

**A.** Good question, it depends on a whole range of things including the R number, and the R number itself changes depending on how the community mixes or any public health measures in place. Different suburbs will have different R numbers for e.g., depending on average household size, the types of occupations etc. Different variants also have different R numbers, even subvariants within a group like Delta. But it also depends on the effectiveness of the vaccine, and this too changes with population profile as the more people who are immunocompromised etc., the less protection the population has generally. Herd immunity is reached when the virus is unable to keep infecting sufficient susceptible people to keep it viable and spreading. Even if we don't get quite to that point, the virus is still slowed down and the Reff drops as an infected person will on average infect fewer new hosts. It may not be enough to stop the virus on its own, but it will be enough to help the health dept. keep it under control.



## Victoria

**Q.** What could Victoria have done differently?

**A.** I think we got off to a good start and were successful in closing down the first wave completely, but it took a long time for the health dept to recognize that publicly and to use that info to keep the community on board with stage 3 restrictions. That might have been enough (with masks) if there had been clearer messaging. There should also have been far more evaluation and analysis of our own data to understand how to tackle transmission risk, but in fact the systems were struggling to cope with case numbers. Better epi intelligence would have given more confidence for opening up... the last 6 weeks of lockdown in Melb with case numbers under 20 could have been managed with contact tracking. The other big lessons which have been acted on were the need to partner with community leaders, the need for a decentralised public health response, and a more rigorous quarantine process with adequate physical measures, staff training and resourcing, and ongoing quality control. Finally, there was lots of expertise that wasn't utilised. emergency management teams weren't called on even though we have the training and experience that would have really helped. Advisory teams were more focused on clinical expertise than public health or community engagement. There were plenty of skilled students who offered their services but there was no process to build, rapidly train and oversee a volunteer workforce. that could have changed things dramatically if we had public health grad students assisting the non-health customer service people brought in to conduct contact tracing.



## Epidemiology career...

**Q.** Why did you choose Epidemiology as a masters subject 21 years ago?

**A.** I actually studied epidemiology as part of my practical training in microbiology as an undergrad many years earlier in! I loved the detective work we had to do to find the source of a (constructed) outbreak working through lab tests after we contaminated our hands with harmless but distinguishable microbes that were shared in an organized sequence of handshakes. Funny how some things stick with you... when I had the chance to work at the RCH in Melb in the Epi and Biostats unit whilst completing my PhD, it revitalized that interest. So, I then decided to do the specialist applied epi master program at ANU to formalize my epi skills, and haven't looked back.

**Q.** What technical background – maths and stats, medical, scientific – do most Epidemiologists have?

**A.** Many come from medical/clinical backgrounds or basic sciences but with a penchant for applied work. It helps to have at least basic biology and some quantitative methods. It depends on the area you move to as well. Micro and population genetics training helped me in infectious disease epi as I understood the pathogens, the lab side of investigations, evolutionary biology which is used in the genomics side of things now and the stats. But there are lots of backgrounds that would also bring transferable skills, and over time this has moved away from being a medical specialty to a broader career path.

# A word from incoming Vice President, Dr Bernadette Bradley

I am grateful to have been elected as your new Vice President of ABSANZ. After three years of experience as an ABSANZ Board Director, during which I contributed to the Education & Training and Membership Development Committees, I now feel that I have a broad understanding of the operation and functions of ABSANZ and am ready to serve in the Vice President role.



I look forward to supporting our new President to fulfil his responsibilities to ensure the efficient and effective organisation, conduct and performance of ABSANZ's Board and Committees. I commit to promoting an environment of trust, respect, and openness to ensure consultative and constructive relationships between us all.

I have found serving as a member of the ABSANZ Committees and on the ABSANZ Board to be one of the most rewarding parts of my career over the past several years.

It has given me the opportunity to be more creative and innovative than my paid position allows.

In fact, I can't imagine being a Biosafety Partner without my involvement in ABSANZ.

I want you all to have the same opportunities that I have had and so I invite you all to join the ABSANZ Committee that you interested in and plan to apply to join the Board in the next few years.

I hope you that you will learn valuable skills, enjoy the community, and feel more fulfilled in your career, like I have.

If you would like to contact Bernadette, please email her,

[Bernadette.Bradley@absanz.org.au](mailto:Bernadette.Bradley@absanz.org.au)



## Join a committee, learn, grow, and contribute...

*Bernadette is an exceptional example of how contributing to ABSANZ may assist with progressing through the association. By participating in Education and Training, as well as Chairing Membership Development, her contribution has seen her progress to Vice President of ABSANZ.*

## Become an active part of ABSANZ and make a difference...

- Where do your interests lie?
- Would contributing to ABSANZ assist your career progression?
- Would it look good on your resume to say that you contributed to change, or that you participated in working groups?
- Do you have an hour a month available?

*ABSANZ would love more committee members. It doesn't take much of your time, yet what you gain far outweighs the time and effort. We are seeking participants in a variety of areas, so if you can give an hour a month, please ring Julie on the office for more information +61 3 9087 9988. Community involvement and examples of leadership in volunteer groups always provide a little extra on resumes ...*



## What does Association Management do?

*My career has been focused on supporting people to shine, encouraging them to reach their potential, and of highlighting their capability to others.*

That is where I sit within ABSANZ. I support the President and the Board to achieve the Strategic Plan, and I support the membership with networking and introductions. ABSANZ began "with the goal of strengthening biosafety and biosecurity related connections, collaborations and knowledge within Australia and New Zealand", and my role is to work with all of you to realise that continuing goal.

I have spent the past few months implementing the Strategic Plan, putting in infrastructure and systems such as the website, a shared drive, and App that support greater communication, and the sharing of information. Via these platforms, new connections are being made, creating the opportunity for learning and benefit to the entire ABSANZ community.

The capability and potential of ABSANZ is enormous. By utilising systems and working together, ABSANZ will continue to be recognised as "the peak body and leading voice for biosafety and biosecurity".

If there is anything that I can assist you with, or you would like to contribute to ABSANZ, please don't hesitate to reach out on +61 3 9087 9988, or via email, [julie@absanz.org.au](mailto:julie@absanz.org.au).



# FACT OR FICTION...

## Planetary biosecurity protocols...

In a new section of the newsletter, we are looking at Biosafety, Biosecurity, or Biohazard news from our members and from around the world. We're starting this month off with something that has been reported in both reputable and mainstream media with varying accuracy, but may well be a part of a Hollywood blockbuster...

Scientists warn, without good biosecurity measures 'alien organisms' on Earth may become a reality stranger than fiction.

Published in international journal *BioSciences*, a team of scientists, including Dr. Phill Cassey, Head of the Department of Ecology and Evolutionary Biology at the University of Adelaide, are calling for greater recognition of the biosecurity risks ahead of the space industry.

"In addition to government-led space missions, the arrival of private companies such as SpaceX has meant there are now more players in space exploration than ever before," said Associate Professor Cassey.

"We need to take action now to mitigate those risks."

Space biosecurity concerns itself with both the transfer of organisms from Earth to space (forward contamination) and vice-versa (backward contamination). While the research points out that at present the risk of alien organisms surviving the journey is low, it's not impossible.

Dr. Cassey said: "Risks that have low probability of occurrence, but have the potential for extreme consequences, are at the heart of biosecurity management. Because when things go wrong, they go really wrong."

The research provides clear evidence of how humans have spread organisms to the remotest regions of the earth and sea, and even into space.

To address the risks of invasive species from space travel, the authors suggest the emerging field of 'invasion science', which deals with the causes and consequences of introducing organisms into new environments, could offer valuable learnings. This includes the fact that insular systems such as islands, lakes, and remote habitats, are most vulnerable to invasion threats.

Further insights that could be applied include protocols for early detection, hazard assessment, rapid response, and containment procedures currently used in response to invasive species threats.

Dr. Cassey said: "It is far cheaper to prevent biological contamination by implementing protocols on Earth than it is on Mars, for example."

Both Dr. Cassey and co-author Dr. Andrew Woolnough from the University of Melbourne and the University of Adelaide suggest that with some of the best biosecurity in the world Australia is well-positioned to contribute expertise in this area.

"We have a fantastic opportunity to contribute to

international policy and to develop biosecurity mitigation measures that can be used by the expanding private space industry. This is an untapped economic development opportunity," Dr. Woolnough said.

Despite the value to space biosecurity, the authors state that invasion biologists have yet to be involved in Committee on Space Research Planetary Protection planning. In the research, they argue this should change because "greater collaboration between invasion biologists and astrobiologists would enhance existing international protocols for planetary biosecurity - both for Earth and for extra-terrestrial bodies that could contain life."

For more on this research, read [Scientists Warn of "Alien" Invasions and the Need for Planetary Biosecurity](#).

Reference: "Planetary Biosecurity: Applying Invasion Science to Prevent Biological Contamination from Space Travel" by Anthony Ricciardi, Phillip Cassey, Stefan Leuko and Andrew P Woolnough, 17 November 2021, *BioScience*. DOI: [10.1093/biosci/biab115](https://doi.org/10.1093/biosci/biab115)



**Do you have a story that should or could be told >>>**

*As a Christmas gift from ABSANZ, we will give a Maggie Beer Hamper to the most interesting, most unusual, or simply the most informative story, article, or anecdote for the next newsletter.*

*If you would like to contribute, please send us your story by December 10, and a Maggie Beer Hamper could be on its way to you for Christmas.*

*Please email to [admin@absanz.org.au](mailto:admin@absanz.org.au)*



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