
*The world is full of pests and diseases that we don't want in New Zealand. The pre-border parts of our biosecurity system aim to keep those threats offshore and prevent them from arriving in New Zealand*

# A guide to New Zealand's biosecurity system

## *Part 2: Pre-border biosecurity*

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**In last month's article, we used a line of slices of Swiss cheese to represent the way that the different layers of New Zealand's biosecurity system work together to provide maximum protection. In this article we will take a closer look at the offshore or pre-border components of the system.**

### KEY MESSAGES:

- The goal of the pre-border biosecurity measures is to keep biosecurity risks offshore and away from New Zealand.
- Everyone who imports goods that may present a biosecurity risk has to comply with the regulations stipulated in the Import Health Standard for that commodity.
- New data-driven technologies could increase the speed and agility of the regulatory system, but are we willing to accept a higher level of risk that could come with that?

According to the Food and Agriculture Organisation, every year up to 40% of global food crops are lost to pests and diseases. We all know that New Zealand is a unique haven with relatively few pests and diseases compared to other countries and we would all like to keep it that way. The pre-border parts of our national biosecurity system aim to prevent unwanted pests and diseases from arriving in New Zealand.

Keeping plant pests and diseases out in an increasingly interconnected and complex world is not easy. All sorts of imported goods could bring pests into the country, from the obvious ones like plants for planting and seeds for sowing, to fresh fruit and vegetables, cut flowers, horticultural equipment, vehicles, soil, and even empty containers that could be providing safe passage for hitchhiking insects such as brown marmorated stink bugs or red imported fire ants.

The most effective method of protection would be to prevent anything from being imported into the country and to stop anyone from crossing the border, which is obviously undesirable and unrealistic. To enable the necessary movements of goods and people, the Ministry for Primary Industries (MPI) develops Import Health Standards (IHS) that must be followed to safely bring goods and personal effects into the country. If someone wants to import something that could bring an unwanted pest or disease with it, there has to be an IHS that covers that item. If there is no IHS, then it cannot come in.

Developing and maintaining these Import Health Standards is a huge task. Firstly, risk assessors from the Ministry for Primary Industries (MPI) conduct an Import Risk Analysis that aims to identify all the pests and diseases that could be introduced on or in that item, whether they could establish here, and what harm they could cause if they did. Then, MPI's risk managers decide how to manage the risks that have been identified. This could include treating the imported item with insecticides before it leaves its country of origin (which is an example of an offshore treatment) or conducting a diagnostic laboratory test for a particular disease. In addition, imported plants for planting, including budwood, have to spend time in MPI's post-entry quarantine facility before they are released into the country. This allows plant experts to check and test the growing plants for unwanted diseases in a contained environment.

There is a fine balance that needs to be found in this regulatory process. If the import requirements are too extensive, it becomes logistically or economically prohibitive to import something. If they are not restrictive enough, then more pests and diseases will arrive here. To ensure that an IHS is both fit for purpose and practical to apply, MPI includes a consultation process within the IHS development cycle. This is a public consultation process and anyone can make a submission. Horticultural industry groups often make submissions on behalf of their members. It is fair to say that some robust discussions can be had during these consultations as all parties try to find that sweet spot of enabling trade and innovation while protecting the country.

This is a very real tension. The *Fit for a Better World* strategy for accelerating economic development through the primary sector acknowledges that providing access to new high-value plant varieties and cultivars is essential to enable horticultural sectors to be high growth performers. However, with its biosecurity hat on MPI is unlikely to weaken border controls and put other sectors at greater risk from unwanted pests and diseases. The *Fit for a Better World* strategy also acknowledges that key regulatory systems like biosecurity need to modernise and become more flexible. This is a big challenge, but enabling the biosecurity system to harness the power of cloud-based data mining to monitor changing risks in real-time and provide evidence for intelligence threat forecasting could help MPI to meet that challenge.

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For the foreseeable future, static Import Health Standards will continue to be the bedrock of our biosecurity defences. While they are a slow and cumbersome tool, they serve their purpose well and are providing us with some of the best biosecurity protection in the world. We are not yet at the point where technology and innovation has enabled the system to speed up while achieving the same level of protection. Perhaps as a sector we need to think deeply about whether, in order to take better advantage of global advances in plant genetics, we are willing to accept a lower level of protection from unwanted pests and diseases. This a big, complex question to tackle, and involves stakeholders other than industry. For now, you will have to plan several years in advance if you want to bring new sources of plant germplasm or budwood into the country. ●