Australian Greens Additional Comments

1.1 The Australian Greens welcome this important and timely report. The Greens felt this inquiry was necessary due to the increasing urgency of antimicrobial resistance, which in recent years has gone from terrifying future possibility to a challenge of daily clinical practice in Australia. As is evident from the report and the evidence received, the problem is real, acute and on a worrying trajectory.

1.2 The Greens heard from various stakeholders who raised the problem and expressed concern about the lack of concerted government action to mitigate the serious health risks posed by the rise of antimicrobial resistance. As became clear, and as the evidence received by the Committee has since borne out, there is no central agency tasked with the monitoring, surveillance and reporting of the problem nor with developing and enforcing measures to slow its development. While the inquiry heard that some countries, such as Canada and Denmark, have made coordinated efforts to tackle the problem, sadly Australia cannot be counted a world leader in this space.

1.3 The problem is not a new one and has been brought to the attention of government before. In 1997, the Joint Expert Technical Advisory Committee on Antibiotic Resistance was established to report on the problem and make recommendations for tackling it. Although it reported in 1999 and many of the recommendations were welcomed by government, the lessons were clearly not taken to heart. The terms of reference for the present inquiry were therefore framed around the recommendations made by JETACAR and the action or inaction that has taken place in the intervening decade and more.

1.4 The inquiry was wide-ranging and thorough and draws a clear picture of the current state of readiness in Australia. Evidence was received from a wide variety of experts in the medical and healthcare professions, agriculture and food science, pharmaceutical industry and government. As the report makes clear Australia needs to lift its game in terms of readiness and response. Since 1999, there have been rapid and worrying rises in the prevalence of multi-drug resistant infections and the Australian Greens come to the conclusion that our response must be broad, coordinated and properly identified as a national priority.

1.5 The Greens agree with the recommendations of the Committee but make the following additional comments.

1.6 The Greens agree with the Committee's concerns that current and future government responses, including the establishment of the AMRSC and the AMRPC Steering Group, run the risk of following a similar trajectory to the JETACAR recommendations – languishing in committee followed by in-principle support and a lack of effective, coordinated action. For this reason, the Greens strongly support the first recommendation which calls for the establishment of a national centre or independent body to coordinate Australia's response to this growing threat. An Australian Centre for Disease Control, modelled after the European equivalent, is one promising option.

1.7 The World Health Organisation strategy, as mentioned in the report, outlines a multi-pronged strategy for dealing with the problem.¹ Three important aspects of this plan focus on slowing the rise of AMR pathogens; strengthening surveillance; and dealing with infections when they occur through regulation.

Stewardship and vigilance

1.8 Noting the report's conclusions about the seriousness of the problem and the lack of a pipeline of new antibiotic agents, it is incumbent upon us to look for ways to slow the rise of AMR pathogens and to extend the lifespan of current antibiotics as long as possible. Evidence received suggests our current tolerance for the use and overuse of antibiotics may be too high.

1.9 It is therefore clear we need better monitoring of the use of antibiotics so that we can identify problem areas and curb overuse of the antibiotics that must be preserved for infection control in seriously ill human patients. Comprehensive monitoring of antibiotic use would not necessitate intrusive regulation at the clinical level. Valuable data could be gleaned through monitoring which would be in the form of aggregate data and sampling in particular institutions or areas.

1.10 Monitoring should also include their use in animals. One of the failings in our response to rising AMR has been lack of coordination between health bodies and agricultural stakeholders. The authorities and researchers need good data on which antibiotics are being used in agriculture so that all agencies can work together to allow agriculture to thrive without putting human health at risk.

1.11 Monitoring must also include the prevalence of multi-drug-resistant pathogens. Most importantly, where they lead to infections in humans and are detected in a clinical setting. Because of the risk of transmission, the incidence of particular Multiple Drug Resistant (MDR) bacteria in animals and imported meat should also be measured.

1.12 As antibiotic use in agriculture has the potential to undermine the effectiveness of these antibiotics in humans by leading to the evolution of MDR bacteria, gathering data on antibiotic residue in domestic and imported meat should be a priority and should focus on "critically important antimicrobials in humans" as recommended by the World Health Organisation.

1.13 The Greens support Recommendation 9 calling for research and development into means to reduce the use of antibiotics in farmed animals. Due to the urgency of the issue, we would urge government to immediately begin work with the industry to develop guidelines to change best practices and do whatever possible to reduce reliance on antibiotics.

1.14 The Greens also share the concerns of the Committee regarding non-medicine antimicrobial agents such as nano-silver. As evidence to the Committee outlined, the

¹ World Health Organisation, *WHO Global Strategy for the Containment of Antimicrobial Resistance*, 2001, pp 1–2.

unregulated use of potentially valuable antimicrobial agents, largely for marketing purposes, could have serious public health consequences.²

Dealing with infections

1.15 The ultimate and inevitable problem that results from AMR is the rise of drug-resistant infections in human patients. As the experts made clear and as Chapter 1 makes clear, such an infection is at best expensive and painful and can easily be life-threatening. Any response to the problem must therefore include monitoring and reporting of such infections. The tracking and response to potential outbreaks or clusters of MDR infections represent a clear public health threat.

1.16 Furthermore, since a reduction in multi-drug resistant infections is the ultimate goal of any program to contain AMR, a measure of their prevalence is the most meaningful way to evaluate the success of other measures. This underscores the need for monitoring as outlined above. Because of the potential for outbreaks, a system of MDR infection monitoring should be as close to real-time as possible.

Mitigating the harm of MDR pathogens

1.17 Since a rise in serious MDR infections is inevitable (and is already occurring apace), the Australian healthcare sector must be prepared to meet this challenge and provide safe care to patients in an environment where the risks associated with infection are significantly higher than we have experienced in the past. In short, since we are losing the ability to cure an infection with medicines we must take greater care to prevent infections occurring in the first place.

1.18 Evidence received made it clear that there is significant potential for hospitals and other facilities (such as in aged care) to improve infection control procedures. There is at present no nationally coordinated effort to develop and enforce best practices in this area. While a comprehensive response to the threat may require the facilities themselves to be redesigned,³ there are other measures, such as improved cleaning regimes, that could be developed and put in place cheaply and quickly.

1.19 The Greens therefore support Recommendation 8, that the Australian Commission on the Safety and Quality of Health Care coordinate the development of a national system of enhanced infection control including minimum hospital infection control standards. These standards should be mandatory, measurable and enforceable.

The research pipeline

1.20 Given the threat the rise of AMR poses to global human health, it is imperative that research into solutions be accelerated. As the report indicates, the inquiry heard evidence that the pipeline of new antibiotics is almost completely dry due to the perverse incentives that lead the pharmaceutical industry to pursue medicines that can and will be used in a more widespread fashion than a back-line antibiotic can or should be used.

² Friends of the Earth Australia, *Submission 3*, p. 2.

³ Pine Creek Fish Hatchery, *Submission 9*, p. 2.

1.21 It is therefore crucial that publicly funded research fills the gap. Although AMR is a global problem, Australian health is as much at threat as any nation's, and we are well-equipped to play a leading role in the medical research that could lead to new and effective treatments for infection.

1.22 The Greens therefore support Recommendation 10, that AMR become a National Research Priority Area.

Senator Richard Di Natale