Day Three – Thursday 14 May

KEYNOTE ADDRESS

WHY ABORIGINAL PEOPLE MUST TAKE CHARGE OF THEIR OWN HEALTH.

Dr Sue Gordon AM, Children's Court Magistrate (Retired)

I acknowledge the traditional owners of the land we are meeting on and thank the organisers for inviting me. This is an environmental health conference and I am very pleased to be here. It is going to be a personal view of environmental health and I must say that my first work related contact with environmental health was with Dr Andrew Penman in the early 1980s in Port Hedland. He was with Community Health and he is now with the Cancer Council in New South Wales.

In that time I was with the old Aboriginal Development Commission and we took a lot of things for granted about our environment, our health and those sort of things and as regards to dogs in Port Hedland, the Rangers, just wanting to cull the dogs, all they wanted to do was shoot them - and then up fronts Andrew Penman.

He started to explain to people about diseases in dogs, right across Hedland and the Pilbara, talking and getting the trust of people and the communities. He spoke about what happens, about dog faeces on the ground, leaking taps, pools of water with children playing in it. I learned about hook worm, I did not know anything about hook worm. He explained to the people, the visual thing about plastic rubbish bags. He explained the effect and we went to the sea in and around Hedland and he actually showed us the effects on wildlife and that was the first time I had actually myself taken much notice of the stubbie rings, the plastic ones, the fishing lines, shopping bags, mesh, all of those sorts of things and he started to show us all of these things in the environment and the effect, not just to our health but to the animals around us.

No one had really explained diseases as such, he sat down, and I am going to give an example of what used to be called the Old Twelve Mile reserve in Port Hedland and then it went to its Aboriginal name of Tjalka Warra. He sat down and spoke to old Aboriginal Moses about how you cannot see the diseases; there is the skinless and hairless dogs and the dogs that have got sores. He spoke about all those things and then he spoke to them about those people who had station backgrounds; what did they do to animals, about animal dipping. And then he went out and bought a couple of old second hand barns and he put one at Tjalka Warre and started dog dipping and it was brilliant because people could equate to that. He knew about the feeling that Aboriginal people had for their animals especially desert people and older people. He explained to them again about hook worm and how it was in the Kimberley region. He explained about clean ups and clean ups were high on the agenda.

So he began the first environmental health worker program in Port Hedland in the early 80s I have watched over the years since then and that work grows to people like yourselves who work in that area of expertise. The awareness amongst Aboriginal people and the fact that there is dog immunisation, dog sterilisation we did not have a lot of that in the early 80s. There were a lot of litters of puppies around, but we did not have all of that and a lot of that began as free. People, who can pay, can pay, and a lot of our people are earning good money so they can pay. They are understanding that it is a responsibility that we have in our own environment and it affects our health and it affects our children's health.

As you know, environmental health is not just about dogs or cats. It is about our total environment health and how it affects our daily lives. The type of house you live in, big, small, humpy: is it suitable, is it just shelter? If you have got kids is it good for their health, it is safe for the family, do the toilets work properly, are all the taps working properly? If not, is there someone who knows how to change washers etc? If it is a community, is there an environmental health worker who notices these things? Is there dangerous situations?

I sat on the board of Homes West Commission, in Western Australia. Part of my job as a Commissioner on Homes West was to see all the housing. And some of the housing was just appalling. And that is just the white people. Then there was our mob with some of the bad tenants and there was a lot of dangerous situations that people were putting their children in. Rubbish, disease collecting. One of my pet hates is those wretched disposable nappies, all of those sorts of things.

As you know, I was Chair of the Task Force for Northern Territory Emergency Response. Regardless of your thoughts about that, environmental health also played a major part in that. Community clean ups, helping people to get a little bit of extra money to do some clean ups. School nutrition programs, which is about health, which is also about environmental health that children live in.

The housing has been a big worry of mine since I worked in the Territory, because it has been so slow, but the strategic alliance programs which the Northern Territory and the Commonwealth Government are doing with three major consortiums, is not actually off the ground as yet. So in the meantime, we have had a wet season and a dry season and people are still waiting for housing, but I believe that is going to start pretty soon.

Environmental health is also something that I have had to deal with as a Magistrate during over 20 years on the bench and you are probably wondering what the hell have environmental issues got to do with a Magistrate, how do we deal with that.

In our criminal court, children who come from homes where there is a lot of drinking, drug taking or violence, all those things, what those kids actually live under are dangerous environmental health conditions. A house can be a two storey, two bathrooms, and four bedroom mansion and kept beautifully clean, but the children who have to put up with their family drinking to excess, drug taking and/or violence are suffering in an environmental situation that is not conducive to good health. Coupled with that, you then get mental health issues arising for those children and the consequences, as you all know, are long term and can be intergenerational.

Parents often don't think about the consequences of their actions and this leads me onto my pet subject of child abuse.

The hidden consequences of child abuse and the effects of the environmental health and health generally through child abuse is

also long term and generational. Child abuse consists of neglect of children, which can be by not giving them regular nourishing meals, not giving them adequate clothes for the conditions they live in. Example, desert winters below zero and kids not having sufficient warm clothing. Neglect is also leaving children in conditions to fend for themself or leaving them with people who abandon them. These are all things that I dealt with in the Children's Court over 20 years.

Long card games, long drinking sessions also lead to neglect of children and they are often put into an environment which is dangerous for their health. I have had to listen to that in court, where children because of long card games, which was in the Perth area, parents had left the kids with family who then decided to go and do something else and sniffers have been left in charge of kids and rapes have taken place. That is not the norm, but that can happen and it is not conducive to children's health.

Physical abuse of children can also be as a result of environmental conditions, frustration, drinking, drug taking, intergenerational trauma and this is environmental health. Sexual abuse of children is just as insidious and can also arise out of environmental health conditions.

Overcrowding, the appalling and horrific overcrowding of Aboriginal people is well known, it's costing billions of dollars, but it is still not enough. During the time we were in the Territory, the Territory Government said they need 5,000 houses to even touch the surface and they are not getting that, they are getting some. So, the damage in houses, houses that are badly damaged, houses that have asbestos, houses which are not good for the wellbeing of children; that also can lead to abuse.

Family violence, not just men attacking women, but yes, women attack men as well and again through drinking, drug taking, intergenerational trauma. The consequences are long term. Family violence can be fatal, and again, it affects children and it is the environmental health of children.

Violence amongst adults, if witnessed by children, puts them in an environment when after awhile they think violence is normal and they can suffer emotional abuse. I have had people say to me "hang on, if they don't see it what effect". But children, even if they hear violence taking place, especially with family, they can suffer from emotional abuse.

Over the period I was a magistrate, I have listened to horrific evidence at trials, where we are required under law where the required standard is met to remove children from their families and given that I was removed, it is very hard to do. But in this modern world where families have ability and finances to look after children there should be no need for abuse of children. Families, black, white and brindle subject their children to horrific abuse of all kinds. I have had to see photographs of environmental conditions that children have had to live in, black, white and brindle.

I have seen environments and heard the evidence, seen videos of houses that are full of human faeces, filthy wet clothing, unwashed piles of dishes, absolutely appalling conditions, drug paraphernalia, and children are expected to grow up in that. Often those children have to fend for themselves. Happily, it is only a handful of children in Western Australia, because that is what I was dealing with, black, white and brindle whose parents subject them to this. I should not say happily, but it is happy that it is not a bigger group.

Environmental health covers a wide range of areas and of course, us older people, and I am now one of those, as my sons say "old people" such as myself have to also watch and consider our environmental health. I chair an organisation called Sister Kate's Children, and we formally became incorporated in 2001. That's the institution I grew up in in Perth, Queens Park. We have got part of the land back, we are building aged persons units, but we also look after each other in as much, most of my members are now over 70. We have a system where I ring three or four people, somebody else has got to ring three or four people, so there is this network of looking after each other. But also making sure their home environment is safe because older people get into all sorts of strife.

We started this in 2001 because we lost a couple of our boys, as I call them, who died at home on their own, because nobody really cared. Their families had abandoned them and they just died in their home and that is very sad. So we have this where we go and we look after each other and we meet on a regular basis and if anyone wants a job done around the house and your environment is very important. It might just be that someone is getting very cluttered in the house and that is not going to be conducive to somebody who hobbles around a bit, you might start falling over boxes or piles of papers or something.

Now, my husband passed away ten years ago and having been together for a long time it was very hard. So I will just go back a little bit. In the late 1970s when my family found me, which was excellent in so many ways, it also gave me my family health background. Now, the Stolen Generation people have not found their families have no idea of their family's health. I found out my mother's diabetic problem and I was diagnosed as a diabetic, I never new a thing about diabetes. I did not know what to do, I did not even know what a Type 2 was, I had to go and find those things out.

Getting back to when my husband passed away, knowing I was a diabetic, I drank too much. I still went to work and I was still a magistrate and people could see this magistrate but nobody knows the baggage that comes behind us. No one knows about my background so to speak and I was a diabetic and people who drink too much, and you are a diabetic and don't eat properly, you are actually trying to kill yourself. So I still had to work out how I was going to do this so basically I crawled into a bottle to drown my sorrows after I lost my husband, but then I had to jump back out of that bottle so it is almost like the genie in the bottle, because my environmental health was affecting me.

I took leave, I started to get my house back in order, I have always gardened and I have always had my own vegetable patch, so I started to get back into that. I still was down in the dumps, but my two gorgeous sons said "pull yourself together, Mum" or words to that effect. Boys are not very smooth about it, but that actually equated to a few weeks of my life and since then, I have watched my environmental health , I have two little Jack Russell's, I've got grandchildren, I need to keep the place clean, especially when they

crawl on the floor, because it immediately shows if you have not kept the floor clean, because they get dirty clothes.

I have a big family who visit and also because of my position, people expect a lot more of me and it is very hard for people to understand about what goes behind you because they have no idea, they just see this magistrate and you are supposed to be 'wiser than wise' and you have all of your own baggage that you carry around. But, it is your environmental health that you are living and working in.

So for good health, and I often have my grannies with me I also, about two years ago, I started carrying around my own anti-bacterial hand gel, because kids are always getting dirty hands and I started a bit of a trend in the Children's Court and when I went to the Territory, the Australian Army is pretty soft because they all have these packs of anti-bacterial gel, washing their hands all the time. I thought, they are not as hard as I thought, so as an older person I had to make sure my home environment was suitable to me getting older. I have a one level house, have wide stairs at the front and a rail and wide stairs at the side and I can drive my car into the garage quite easily. I have two steps up to my back veggie garden and as I said I do all of my own gardening, then I can hear you thinking what has this got to do with environmental health.

Well, have a look at the face, some of you might have seen it. I have some super glue on my face and some stitches, I have a reddish nose with bits off it and here and I have half a black eye here, and no, I have never had a fight in my life, I don't fight, but this Monday afternoon, I had just come home from a Board meeting and I had not been to the pub, I was putting my two Jack Russell's around the side and they are usually very well trained and they usually just run around, I lock the gate and I can drive the car in. But the little one decided to come back under my feet, bang! Those of you who have fallen in your life will know straight down. I was laying there and the dog is licking me and I am thinking I have broken my nose. I could not believe this so was thinking what happens next.

I went all numb and wobbly, so I went to my neighbour and the bloody woman was out! I got my daughter-in-law on my mobile, lucky for mobile, she was fifteen minutes away so she came and my little sixteen month old grandson took one look and burst our laughing. Covered in blood, and that is the sympathy. I was at the local hospital, five minutes away, that's why we bought the house there because the doctor was only five minutes away and the fire and police are all five minutes.

So I am lying on the bed and the doctor said "I'll do this, this and this, I won't put stitches in." In the meantime, there had been conversations with the other two grannies, said if they put stitches they have to put three as another granny had three stitches and she wanted me to be the same. The doctor said no stitches then he said to me there should not be any scaring so I said "does that mean I can continue with my modeling career?" When he finished laughing, he said yes.

The two little grannies in Perth, the 6 and 9 year olds, they reckon I look really cool and they want me to go to junior footy on Sunday, so the other kids can see me. It is embarrassing, I was at a Board meeting and a friend of mine said "have you been in a car accident" and I said "no, I fell" and they said "that's what happens to old people" and suddenly you are labelled "old people".

My eldest son at the hospital photographed me on his mobile and emailed it, whilst I am lying there, blood everywhere, emailed it to the other son. So I don't know who has seen this email, former Magistrate Sue Gordon beaten in hospital, or something.

It has made me rethink my environmental health. My older son is a civil engineer so while we were in the hospital, waiting for the doctor, he has designed a ramp for the side and he said we should be talking about a frame. I said hang on, I just fell once. He said we have to start thinking about all these things. It is like I have suddenly become really ancient and I said look just hang on. He said no, no, we have designed the ramp and we will get it sorted out for you old girl – so there you go.

So environmental health affects all ages, but as an older person and now semi retired, although I work just as hard as I did before, I am more conscious of my environment. I sit on the Indigenous Implementation Board in WA, this is just another area that adds to the growing concern, especially older people and another one, which is very important to you is Judiciary in Western Australia have been pushing for absolute years, the requirement for more Aboriginal interpreters and this is also beneficial to the sort of work you do. There needs to be more Aboriginal interpreters.

I think that you all do a marvellous job because Aboriginal people taking control of our own health is just very important.

I don't have a local Aboriginal medical service near where I live. There is one in Perth. I have a Chinese doctor which I have had for 30 years, we have just got old together. I think sometimes he thinks he is a black fella too. He is very good and I encourage all my members of the Sister Kate's Organisation to make sure they look after their own health and their environment, where there health is affected.

I think those are the sorts of things, I have tried to make this light hearted for you because I think you can get a bit bored with stats, I used to do that as a magistrate I think, but if anyone wants to ask me any questions I think environmental health is something we have overlooked for years, it is just of such a great concern and it is just so important. I cannot emphasise enough, after my time in the Territory and I saw the people who were doing the work, I just could not believe that we have not done this a long long time ago.

Thanks for listening to me.

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LAUNCH OF *DOG HEALTH PROGRAMS IN INDIGENOUS COMMUNITIES: AN ENVIRONMENTAL HEALTH PRACTITIONERS GUIDE*

Julia Hardaker, Animal Management in Rural and Remote Indigenous Communities, **Xavier Schobben**, Northern Territory Department of Health and Families

Xavier: My role is to introduce Julia and more importantly the work that is currently being undertaken by AMRRIC, particularly since the recommendations from Cairns in 2007. Its genesis was when AMRRIC came into being when it was launched in Terrigal in 2005. Since then AMRRIC has done a great job in advocating and providing dog health programs across most of northern Australia, WA and some parts of Southern Australia. Importantly, one of the recommendations arising from Cairns, particularly after some the great work that Dr Sam Phelan had done in conducting dog health programs in indigenous communities. *The Conducting Dog Health Programs in remote Communities: Environmental Health Practitioner Guide* was developed to provide an appropriate guide or a companion document to that original Samantha wrote (which was the *The Conducting Dog Health Programs In Remote Communities: A Veterinary Guide*). We thought the *Environmental Health Practitioner Guide* would be a fairly comprehensive document which we thought would be 20 or 30 pages, or something like that, but you know Sam Phelan, it is fairly comprehensive and the page count is somewhere above 500. That's okay, a lot of that will be very useful, the publication which Julia will extol the virtues of does contain some good resources.

Julia Hardaker: Firstly I would like to acknowledge the traditional owners of Wongatha people, and thank them for having us here on their lands. Thank you to WGATSIEH for the funding that led to the development of this manual. Also thanks to the focus groups, who really told us what they wanted in this manual. And I think that when Sam first started too she thought it would be 30-40 pages too until she met with all you mob and everyone told her about what was needed to be in the manual and yes it is nearly 500 pages.

I thought what I would do is to take the liberty of introducing AMRRIC as I wasn't sure if all of you know about us and I apologise to those who do know this information.

AMRRIC is a collective of vets, university staff, Indigenous community government councils, EHP's, various government and non-government departments and really anyone who has an interest in supporting our work can become a member of AMRRIC. We are a not-for-profit organisation and the only organisation focused on the critical need of dog health, research and education. We do far more than benefit dogs and animals. We contribute significantly to improvement in community health and well-being. We use dog health as a model for human health. Our theory is that if people understand their dogs' diseases and how they can be improved they will start to look at their own diseases as not unsoluable. So a little about what we do. Sue Gordon has just told it all just like she did the first time I met her when I attended a meeting at FaHCSIA in Darwin. She just admitted she's pushy! She invited herself into the meeting that I had with FaHCSIA. I sat down and just sat there, I didn't have to say a word about what we did and what we're all about. Sue launched into this big long spiel and part of it is what she talked about today. Sue made it was clearly understood why we have dog health programs. So thanks Sue, for making my job easier.

AMRRIC has a vision that communities are safe and healthy for people and their companion animals. In a very practical terms this means having fewer animals, healthier and better behaved animals and owners that take responsibility for the health and welfare and behaviour of their animal companions. Our objectives include

- aiding sustainable dog health programs throughout the Australian states and territories
- promoting and developing scientific research into improving animal management practices
- conferences and other educational sessions to promote best practice
- coordinating dog health programs for communities that request our assistance
- supporting those communities in managing their dog health programs through veterinary support, public health support and Indigenous environmental health worker support.

Our dog health programs are focussed on the needs and wishes heath of local people regarding their dogs. And I emphasise wishes of local people regarding their dogs we do not enforce ours on theirs.

Our programs are focused on building capacity for community ownership and them driving their own programs. Through the provision of veterinary services we provide desexing program expertise. We provide a means of managing large dog populations like these in the slide.

Education and training is one of our critical platforms. The sustainability of programs is achieved through training community members to maintain the elements of dog programs in between vet visits so they are acting as paravets. Our vets work alongside Indigenous community members as they are vital and integral members of the team. We hope to build a more formal school education program to raise awareness in children, especially around the treatment of animals. We aim to address cruelty to animals because of the established links between animal abuse and child abuse. We have undertaken some of those programs in schools in recent times. We have also hosted a number of highly successful conferences for vets and other practitioners.

Just to touch on some of our current partnerships. They include the Australian Animal Welfare Strategy through DAFF. We have just been given some money from them to develop an educational DVD that will actually accompany this manual. So it will give some of the three-dimensional and other parts that can't be told in a flat book.

We are a lead partner with The Australian Research Council linkage program. Queensland Health which brought us over to Queensland last year to provide veterinary training workshops. That great mob in Queensland including our friend over there, Clayton, who is on our AMRRIC board. Clayton did a fantastic job on the cultural awareness program. We are partnered with James Cook University,

Menzies School Of Health Research, Cambridge University, UK as collaborative research partners. NT Environmental Health through the development of this manual, various education institutions, assisting NT Shires to develop their animal welfare and control strategic frameworks. And we have international connections through Canadian and Bali dog programs and other programs we support with policies and ways to approach government funding.

Some of our key resources include: our web-based manual for vets that Xavier talked about, which is free to all members, the manual that we going to be talking about today, multiple online papers and documents and resources in our resource library. Most of those are available to the general public, some are member only access. And we have a series of zoonoses fact sheets online.

We know that history has shown that short term strategies for dog health programs only have short term effects. Community developed control programs offer a real way forward. Many of you are already doing that but we don't see that in every area that we work in. As Sue alluded to, the older forms of treatment of culling don't work as a stand alone measure and unfortunately that's still going on. Just in the last month Tiwi Shire decided that they would kill 413 dogs in a community which they did to enforce a dog policy. People told us this that they didn't know what was happening and that the vet spoke to them rudely. That's what the Shire said was going to happen and that's what happened. It's a typical example of historical approaches which have failed to change the situation. These methods have not worked:

- knee-jerk reactionary models
- white fella top down dictatorial approach
- culling that never works as a one-off
- poorly planned and spasmodic vet visits
- no community ownership
- no community involvement

So we need new approaches and as I said, this is not reinventing the wheel. We not telling you anything that many of you don't already do. So we are not being arrogant here. We must recognise past failures and have culturally sensitive bottom up approaches that are directed towards population control and training local people and focussed on education and dog health, well coordinated visits to achieve the shift from perceived pests to pets.

We all know that the best solution to achieve sustainable programs is undertaken by you, the EHPs, and we have had the pleasure of working with some of you. So as a result of all of you, and the goals that you set at the last conference, here we are launching the manual.

So I thought the person that really should be setting the scene is Sam Phelan who cannot be here today as she has a brand new baby. But in between breast-feeding and a load of other kids, and with the pile of dogs and chooks in the back yard we have a video message from Sam to play.

Same Phelan: Hi everyone, I'm a vet who has worked with AMRRIC for the past 6 years. Some of you may know me from my work in the Katherine region. Other people may know me because I presented the *Vet Manual for Working in Indigenous Communities* at the last conference held in Cairns. It was really as a result of that veterinary manual that I wrote and also a promise that Xavier made at a conference we are launching the manual. Xavier came out and shook my hand on a $10,000 promise to produce a manual for environmental health workers. And that's what we are launching today. It's exciting, even though it's not quite done yet, but it is at the printers. So it's closer!

The origin of that manual, as I said, was the work done on the previous vet manual, which was really a guide to how to work in Indigenous communities as a vet; what you will need tools of the trade and also how to get around communities. When it came to doing an environmental health workers manual, we needed to consider both working from an ESL perspective and also working from a perspective of people that can't read English easily. It looks at running a vet program from a person living in a community's point of view. The work you are required to do isn't rocket science. It is solid, good and relatively simple to work, but translating that information to make it seem simple is quite difficult. I had recruited my sister, who became the illustrator for the environmental health worker manual. And then we looked at how we were going to present the material in the best possible way for environmental health workers who may not speak English as their first language, and who may not read English very well. The process of developing the manual was by holding two large focus group meetings, one of them the students from Batchelor. Both groups were incredibly generous with their information. The goodwill surrounding people's intellectual property that they gave to the manual was incredible. And I thank both of the focus groups for making it the manual that it is now, because without their help they just it would not have been what it is today.

We started with focus group meetings at Batchelor and that was great because the range of Batchelor students included people with a lot of history of working and running dog programs in their own communities, right down to students that had just come in. I think they were Cert II students, some of them Cert III students, so a bit of a mixture there, some people with pretty limited knowledge of what the work could entail. They put together ideas about the best way of presenting that information to a non-English literature or non-English speaking audience. So the use of illustrations Julia will talk about later, evolved from the focus groups at Batchelor. The second part of the focus group meetings were hosted by Queensland Health, who brought together what they call their 'top gun team' of environmental health workers who were already working in the field delivering dog health programs in their own communities. And this group really redefined the content of the manual. What problems they had faced what information they wanted and how that information could be best presented was all covered in two-days of focus group meetings in Queensland. With all of that information we came home and nutted it out together, my sister and I, going through how best to present the information in a pictorial fashion. It was three-step delivery, in that they have the information that's with stand alone picture, then you have an overlay of information for a semi literate audience, and then you have a large selection at the back of each chapter, with more detailed information in a written form. It's still relatively simple but we worked very hard to ensure that there wasn't any information left out. If people really knew this manual they will know everything they need to run a dog program safely and effectively in their own community.

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We sat down and wrote the manual over a period of six months, and then it went out to peer review. It came back from peer review in dribs and drabs, but by the end of February this year we had most of it back and we made the changes we needed to make. The focus group participants all reviewed it as well as additional people working in education or working in health fields or working in environmental health. And at this stage it is with the printers. I cannot wait to hold it in my hand in one piece. I hope that you have a great rest of the conference and enjoy Kalgoorlie.

Julia Hardaker: So let's explore the manual. Sam uses the term EHP (Environmental Health Practitioner) as a broad term to include EHOs, EHWs, AMOs, AMWs, and really anyone who is into running a dog program, and in some places that may be a clinic sister in a remote community. It really could be anybody. As Sam described, each of the drawings are really beautiful, and you will get to see them featured throughout this presentation. We were asked to design the manual in this fashion, where the overlay tells the story, the colour picture, actually tells the story even without the words. The black-and-white drawing behind it is designed as an education tool that people can actually write on in thier language to tell their story and can be used for educational tools in schools for kids to colour in and to tell their stories.

So what does the manual include? Obviously I can't tell you all of it so it's going to be a brief overview. It covers:

- dogs, EHPs and dog programs, their cultural and spiritual significance of the story about dogs, why people have them and what their roles are
- planning a dog program, dog germs and immune systems, germs that cause diarrhoea
- common skin problems in dogs
- parasites, how to treat them, worms in dogs that can get into people, what to use to kill parasites, getting rid of mange, worms and common dog sicknesses
- top watch programs and other exotic diseases
- a chapter on dogs are not dingoes, and all that means
- dog breeding, stopping dogs breeding
- putting animals down, 'finishing them up' or euthanasia
- dog bylaws, dog bites, the law and the EHP
- animal welfare, running a pound, record-keeping and program evaluation and what the shop can stock

The manual constantly emphasises the key role of the EHP in animal welfare and control programs. It acknowledges you as the most important component of any dog program and a team that runs a well planned dog program can address over population and make dogs stronger and healthier. Many problems can be fixed with only a little bit of outside help - which is great news because so many times we see Shires and people are just bringing vets into the communities as the sole solution to dog problems so there is a huge emphasis on dollars when it need not be.

The more the EHP team fixes, the more dog owners like the program and engage in it and then the cheaper it will be for the community.

Now, I think that 'deadly mob' from Queensland helped Sam come up with this model for community engagement and planning, which is a brilliant model. I won't go through the whole model, but basically it's a very systematic way of going about working with the community to plan and manage the problems as they come up around issues concerning dogs. It doesn't suggest doing it all at once, but rather tackling the issue one at a time.

So it looks at what the community can fix, who's going to do it, what resources they need, what budget will they have, which is sadly often limited, how do they get training and what outside help will they need. Then it looks at how they going to go about doing that work.

Some chapter highlights:

Look at Chapter 3 for instance; dog's germs and immune systems. This one looks at what germs are and how germs can build up in the environment, how they get into us, how the immune system fights germs, and tables of germs that people and dogs share. A big focus of our work is on healthy dog's healthy communities. We are constantly looking at zoonoses that are germs that move from dogs to people and make them and us sick. This manual covers that extremely well.

It covers germs that cause diarrhoea, how dogs get diarrhoea germs, how they give these germs to people and how the EHP stop dogs and people sharing germs. It describes how to work with the clinic, and all about the germs that people and dogs share. An example of this is how dogs spread diarrhoea and germs to people. In the picture in the manual you can see dog licking kids, sharing bowls of food, faeces in water that people are swimming or bathing in, flies moving from faeces to food and by not washing hands.

In Chapter 5 it covers common skin problems in dogs and parasites in the skin. So, it covers things like mange, ticks, fleas, lice, ringworm, sores on dogs and people. And of course, it covers all the ways in which you identify them, how they are to be treated and things that you can do to prevent those things from speading. The entire manual is not just drawings, but throughout the body of the text and behind each of the set of diagrams which lead into each chapter there is a significant amount of text and it's highly illustrated.

It covers worms in dogs that can get into people, round worm, hook worm, heart worm, hydatid tape worm, Strongyloides. There is a chapter on what is used to kill parasites and mange and worms. It's really beautifully illustrated.

It covers using Ivermectin programs, the dose rates, safety in handling, planning those programs to get rid of mange, ticks and heart worm. It covers other common dog sicknesses, like TVT trans venereal tumours; which is a sexually transmitted cancer, parvovirus and how to treat it, how to heal dog fight wounds and how to run awareness campaigns and get rid of TVT.

Chapter 9 covers top watch and exotic diseases. So that's about working with quarantine for rabies is obviously applicable to people working in the top end. The manual talks about how the environmental health practitioner can work with quarantine top watch program to make sure that we don't get rabies and screw worm fly into our country.

Chapter 11 is about dog breeding. It covers normal breeding cycles, problems with breeding, taking care of puppies and a number of other issues. It covers stopping dogs breeding. So why do we want a stop dogs breeding? Desexing operations, chemical alternatives such as covinan and planning the desexing programs. I have here a quote "Desexed dogs make better pets, they also cause less humbug, undesexed dogs are more cheeky, they also cause more humbug, desexed dogs have fewer worms this keeps the dirt in their yards cleaner".

It covers putting animals down, 'finishing them up' or euthanasia. It covers reasons why you may need to be putting dogs down, ways to put them down humanely, through lethal injection and shooting. It covers giving lethal injections and what the implications are for that community and what they need to do to administer lethal injections. It also covers the appropriate disposal of carcasses.

The next chapter covers dog bylaws. How they are made, how to enforce them and planning a dog registration program. In the chapter 'dog bites, the law and the EHP', we look at how you can avoid being bitten. First aid, dog bites, the types of biting dogs; fear biters, dominant biters, the law and biting dogs, choosing the right dogs for your community are all covered. It includes sedation and planning how to stop dog bites in your community. It also has in one of the sections a school program; teaching kids how to stay safe in your community and not be bitten.

Chapter 16 looks at animal welfare laws, what they are, how are they made and who enforces them. It covers the EHP and animal welfare laws, making animal welfare in your community better and school education. Running a pound, types of pounds, and reasons for having them, things to think about before a community gets a pound and all too importantly record keeping and program evaluation is included. Why do we keep records, what do we keep, what sort of records are there for each dog, sensus forms and drug usage record forms are there too. It looks at what the shop can stock. We've been working with outback stores in the Northern Territory, trying to get them to get some of these products pictured into the stores. There is a lot of criticism out there about the state of dogs and people say, 'Aboriginal people aren't responsible pet owners' so we try to get them to get products into the shops so that we can have responsible pet ownership. This is something that the EHP can take a big part in.

Q. Owen Ashby, Department of Health WA: Can you comment in relation to how the manual may affect the WA dog health program? And secondly I hope the emphasis on the community and the environmental health worker is going to be maintained, so they going to be responsible for the dog health and vets will not come in and want to take over the program.
A. I will answer the last one first. Obviously, we don't work in all the community and we don't have a say in what vet's do. I guess I can only talk on behalf of AMRRIC affiliated vets and on behalf of the work we are currently undertaking in the NT Shires where we have been brought on board as consultants to write up animal welfare control frameworks. So here we are having a direct influence on policy and in the way in which vets come and work in communities. We can influence the Shires regarding vets who may tender for programs or those they may just keep who have been working in a community. Those vets are going to have to meet a certain set of requirements and to work in a particular way and probably to be AMRRIC members be working to the AMRRIC philosophy. So at that level are looking at a very big change so that we can change some of those horrible practices that we have seen in the past. As for the other States, at this point, we don't have that level of influence at government level, but it's something that we are working toward. And we certainly hope that this manual, and also the fact that FaHCSIA have just asked us to scope the need for the development of a national best practice guide and management to see whether guys like you Owen, feel that there is a need for a document like that we have a chance to set benchmarks around those animal welfare practices. Of course if it's coming from us it will have a really huge focus on the EHPs as the key to the program on the ground. So that partly answers your first question as well. How that will influence your work directly, I can't answer that. How it may influence the work of people on the ground I think it's fairly self explanatory. It's such a user-friendly tool such a broad range of people can use it. We think it can have a very powerful effect on the way in which dog programs are delivered. Each of the states and territories are at different places in the way in which programs are delivered. We are aware of that some of this information in the Manual many of you already know of this, but it also provides a whole education and research tool as well as being a very hands-on approach to be able to run programs. So we hope that the manual will put government organisations and others in a stronger position to be able to push through the importance and the need of dog health programs as a key component to improving environmental and human health. We really noticed it in Sue Gordon's speech, when she started straight into dogs as key components to improving community health. And this is why your contribution to this is so valuable.

Q. Thad Naggus: Apart from Clayton Abreu, is there any other Indigenous representation on the AMRRIC Board and, if not, are you willing to seek a greater presence of Indigenous people on that board?
A. The answer to the second part of the question, absolutely. We really do want to build Indigenous representation. We have had predominantly vets on the board in the past. And one of the things that I was keen and others are keen on when I came on board a few years ago was to get Indigenous representation, so Clayton was our first and we are currently seeking people who might be interested in being part of the Board. We also just applied to FaHCSIA, but got knocked back, for funds to establish an Indigenous advisory board to AMRRIC, so that group will directly guide our policy development so we hope to get the funding next time.

Q Michelle Major, Kowanyama Queensland: We are a member of AMRRIC. I haven't seen a vet in the last two years. How many times does the vet have to come into the community?
A. That depends on the size of the community and the number of dogs and what's been done there before, so it really has to be planned with the community and the vet to look at those things needed to establish a program.

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SUPPORTING ANIMAL MANAGEMENT IN ABORIGINAL AND STRAIT ISLANDER GOVERNMENTS

Clayton Abreu & Andrew D'Addona, Tropical Population Health Service, Queensland Health

On behalf of presenters Andrew and Walter we would like to acknowledge the traditional owners; the Wongatha peoples and that the organising group for allowing us to speak at this conference. We will talking about supporting animal management in Aboriginal and Torres Strait Islander Local Governments, the Queensland story.

There will be three presenters; Andrew myself and Walter. I will be talking about the background and history of the program.

Prior to March 2008 in Queensland we have 34 Aboriginal and Torres Strait Islander Community Councils. After the amalgamation this has reduced to about 16 Aboriginal and Torres Strait Islander local government, Torres Strait Islander Regional Council consists of 15 separate Island communities and the Northern peninsular area that which is right on the tip of Cape York consists of five separate communities. Although the one local government area we still support an animal management worker on each community. A bit of history, animals have significant cultural and social relevance with Aboriginal and Torres Strait Islander communities. Animals present, health and safety risk in all communities. A review of the Aboriginal and Torres Strait Islander environmental health program emphasises that this matter with community members, councils that are raising animal management as a significant issue in need of addressing. Part of the reasoning behind having this program if that local governments have the responsibility to manage their own animals in the communities under certain different legislation, the public health act, public health risks, land and protection, pest and stock management. All local government had to have a pest management plan. This includes feral animals, the animal care and protection act that bio security and DPI look after and there are local governments themselves who enforce local laws. Recently, the passing of the Animal Management Cats and Dogs Act 2008.

These councils have limited capacity and resources to handle these matters. So why do this program?

- There were heaps of reports of numerous dog attacks.
- Alleged animal neglect.
- Problematic animal numbers.
- The death of the child in a community from a dog attack.

So in 2006 Queensland Health elevated a cabinet submission requesting funding to assist Aboriginal and Torres Strait Islander communities with animal management. I'll pass you on to Andrew to talk about what we received from the cabinet submission.

Andrew: I would just like to start by acknowledging that the traditional owners of the land on which we are presenting today. So as Clayton said Queensland health put up a submission for funding for animal management, and although we didn't think we would get you we did. It was topical at the time as it was very close to when the child's death occurred from the dog attack. I guess that became a political topic, and therefore they chose to fund a program. So Queensland health, in partnership with Department of Primary Industry, Biosecurity Queensland secured funding to support animal management in Aboriginal and Torres Strait Islander communities. The initial budget was $2.73M that was to get it set up, see this provide some funding for capital infrastructure and develop the program. In 2007/2008 financial year it was $1.69M and ongoing about $2M to support the program. At that time all 34 Aboriginal and Torres Strait Islander Council were invited to apply for that funding. Obviously in getting money we came across quite a few challenges in developing and delivering the program. So I will run through a few of those.

The initial planning, what we were intending to do with this money? Was one of the questions that was asked. We put in the submission with some very general ideas of what we were going to use it for. However, when it actually came down to working out what we are going to do. There were a few clashes defining the roles between different government agencies. As soon as you get the money, everyone wants to be part of it, because getting the money is so hard to get. So we had to work out exactly what I wanted to deliver. Was going to do what. The provision of support for the community is obviously having 34 communities to support with very limited staff with the knowledge and skills to be able to get out there and do there was a definite challenge for the program and one we are still dealing with. Working in with so many other programs; natural resource programs even knowing they exist, working in with them can be a significant challenge.

Recruitment and retention of staff, I think we all know that that can be really difficult. Finding the right type of people to work on community in their own communities. The ability to fulfil their study obligations. The ability to fulfil the role in community can be quite trying role at times, and not one that everyone enjoys. Therefore, finding the right people is really important; inevitably you will go through a few staff in certain communities and to find the right person.

The local government themselves, understanding the funding and their roles and responsibilities with it. Honestly, when you go to a Torres Strait Island local government and say we're going to give you $70,000 they would jump at that because it's money. But making sure they really understand what it is therefore what their roles and responsibilities in delivering appropriate animal management in the community, and what it actually is meant to be spent on. And that's something that we have had problems with. Our animal management focussed feedback to us has been "they employed me but I haven't seen any of my equipment" or "can't access the vehicle" or " where has my money gone?"

Queensland Health is not normally a funding agency so this is a big challenge for us as we have never done this before, we have never actually been a funding agency. Trying to monitor the funding, to get reports back from councils has been huge challenge for us. And talking to the actual funding agencies. It's a huge challenge for them as well so it's something that we're having to deal with.

Selection and recruitment of a veterinary services. We heard in the presentations this morning that we really have to get the right types of vets with the right attitude to working those communities. And without making it sound to bad some vets seem to think it as

a money making venture as well. So trying to get the right people, and I'll acknowledge AMRRIC as we have run a training course with AMRRIC for vets working in communities that Clayton and some of our other colleagues presented at and did a fantastic job. That was about when vets do come into communities that they are aware of the program and that there are aware of how the program is supposed to work and the aware of their role within the program. So it's about minimising surprise value, if they haven't been to a community before.

In Queensland for some reason we have real trouble with the legislation and allowing our guys to do some of the animal health services between vet visits and been authorised to use Ivermectin and that sort of stuff is a real issue for us, which is something we are still working on. And obviously developing appropriate resources for using in community. We have done a lot of work at workshops. Negative media is quite important to us some of the communities are nearby to major centres. It doesn't matter how much good work is happening in the community it only takes one negative article to put doubts over the whole program because the politicians see this and say "What the hell are you doing?", "How come this is still happening?" The reality of this is that it can and undo a lot of your good work because people in community or the staff you're working with can say "Why are we wasting our time. If they never going to put a positive story out there about us?"

I said at the start, it was a bit of a decision to work out what we have to do with his money. So we came up with a plan or the Queensland government action plan for supporting animal management by Indigenous local governments. We had a few aims; to coordinate the animal management program, to improve health and welfare of animals, to provide capacity for councils to deliver sustainable animal management which I think is one of the key deliverables of it, to facilitate a whole government support network and council is to meet accountability and sustainable animal management.

The key for us, is being able to provide support to community. It is not up to us to be doing this is not our role, it is not what we want to do. Communities can do this, they just need some support and resources, educational or whatever it might be and that is our role in this program.

So, what was funded? As part of the funding agreements we gave councils. Obviously a major factor and one of the State government's major goals is providing employment in Aboriginal and Torres Strait Islander communities. The funding was there to employ an animal management worker; full-time funded wage. It was also there to develop and deliver a training program for animal management workers. And partially fund, the construction of central animal management infrastructure in community. Obviously the huge cost of infrastructure in community meant that we could not fund the whole lot, but it was there to try to help communities out with the building of things such as pounds and various other things. The purchase of essential equipment for animal management workers, contracting veterinary services where needed and provide support to council was an animal management workers to develop and implement animal management programs.

So, what are we actually delivered with this funding, so far? firstly, there was no actual management training program for animal management workers. So as a part of this we contacted in a training provider, a broker and developed a training course called 'Certificate II in rural operations and animal management in Aboriginal and Torres Strait Islander communities'. That was the first step. Anyone who isn't involved in training, and then tries to get involved realises it's a nightmare; all the rules and regulations and setup. That's why we got an external agency to for us; people that know what they are doing, they had all the contacts they know how to get funding. The training course is very expensive but we have had something like a 90-95% completion rate. It's about delivering in community one on one or in community in group settings, it is a fantastic program, and all feedback has been fantastic. So far we've had 31 employees graduate from the Cert II course.

Photo of graduates

We have started to develop a Cert III and Cert IV course in animal control and regulations to build a career framework for these guys to move on and further develop the skills of those people want to. So far we have 29 staff employed by Aboriginal and Torres Strait Islander councils as animal management workers. In the 2008-2009 financial year. We funded $1.9 million, and we put that into the program so far. And approximately $550,000 has gone into infrastructure.

Clayton: The program needed support and Queensland Health employed an animal management project adviser. He, Scott McIntyre, was based in Cairns and he covered from Cherbourg up to the PNG border. His role was to coordinate the project activities, from the outcomes of the action plan. He built an internal relationships statewide. So we had to ensure that and networks were maintained and developed so that project worked in with other programs, and so it was more of a coordinated approach. The position also provided strategic, technical and operational advice to not only the guys on the ground, but to Queensland Health staff are and other government agencies. Also in that position we had to make sure that we could monitor the program so he collected on the existing animal management before the program came into place, assisted on ground activities in community; making sure that they were getting the operational equipment and other stuff that they needed and make sure that communities were able to develop and maintain programs.

Other than that position there was other on ground support, and it was delivered by not only my position in Queensland Health,

but district coordinators based in Wiepa and the Cape, Torres Strait on Thursday Island in Townsville and he covered Mount Isa and the Gulf and other area coordinators based in Rockhampton and Towoomba. Also during the training we had student mentors to work on how to be a student. That was pretty successful, with a high completion rates of students passing the course. The RTA's acted as trainers and also as support.

Walter: When a dog comes to the pound, there is no holding period of five to six days in which time people can go to the council office and bail their dog out for a $25 fee. Not only is there a dog program on the island, but there also a horse and dumping problem. In fact, we have a lot of injured horses on the island mainly from dog attacks. Out of the budget we purchased uniforms for the staff to wear so that everyone knows their role, and it is a promotion for the work they do.

Q: I have a question about the Queensland Government funding for the Aboriginal environmental health workers. Was that full funding for wages?
A: Yes

Q: For how many workers for each community?
A: We have funding for all 34 communities and the environmental health worker program. So they are fully funded one position per community. Some communities such as Palm Island has employed an environmental health manager and has an environmental health team under him, they choose that funding from their own grant funding that they get from the Queensland government.

Q: I asked the question because with the changes to CDP and some workers are on CDP money, so was it difficult to get the money through Queensland government?
A: This was something that I was lately part of. But before that there were strong advocates in Queensland, Stuart Heggie who is a director of Environmental Health in Tasmania was a strong advocate. He went to see the Western Australia model and brought it back to Queensland in the early 90s. But we didn't get fully funded positions until late 2001, and that was the Cape York pilot program, and from that we had the expansion program to all the communities and from that funding we got the animal management funding as well back in 2006. Back to the programs we have the environmental health worker program, which we have fully funded position for and then we have the animal management worker program which we have a separate funded position for. Basically what he got paid back from the review of our environmental health workers, was the animal manager was such a huge part of it that you are either do animal management or you do other stuff. That brought about coping with the two roles and two separate funding bases.

Q: You mentioned that people were doing Cert III and IV does that mean that people have an increased in wages after they have done those?
A: That is a good question. Thank you for your question.

For those of you who don't know me my name is Michelle Howcroft. I am the new manager after the Torres Strait islands, I look after 15 communities. What I am currently working on if an incentive program so that the study and an AMW or EHW does they can progress and get better pay, and also attend more conferences. So it does encourage them to work harder towards their career. Your point before about the CDP, I can see that being a huge problem for us in the Torres Strait because we do get a lot of assistance with our EHWs we rely on them a lot to you assistance in doing a lot of programs, like cleaning out drains to stop stormwater issues is something that I am currently working on, so I'm interested to see what happens with the changes to that program because it will impact us a lot.

Andrew: One thing we did come across was what award do we put these people on? Once again we are learning as we go. These are issues that we come across are still working through in some circumstances and funding is semi-finite, and as you say, if people going up on qualifications and stuff, does the funding cease with an increase in wages or not?

The workers are employed by councils. We provide the funding and we provide a wage component and an operational component but we can't actually dictate to Council what their pay should be. We can provide recommendations but councils direct how they pay their workers.

Q: Matthew Lester: This links into the career pathway. Is there any view to expanding this training in the Cert II,III,IV to other environmental health units with a view to getting Batchelor as the next extension to a degree. That is probably a long-term goal, but that is a pathway which could lead to a difference in pay because there is a difference in the qualification.
A: We strongly support the environmental health workers and that pathway, and we're trying to link in the animal management workers and to look at environmental health as the next step for another pathway. Some may not use that way, some might go into other areas - it's up to individuals and individual councils.

Q: Is there a part where you can support council in upgrading our wages?
A: I'm not really able to answer that question.

I fully understand and I have been told all my life that size doesn't matter. And I am a firm believer in that. It's not enough that we are only a small group of people. This is a perfect opportunity to raise the on our website for advocacy for our people for wages, better support and training, and it's the ideal avenue to promote this issue it is an indigenous issue, always as being always will be like the land. We need to support ourselves and push advocacy for ourselves on this issue and be vocal about it. Don't just listen and be told that you are just a small group. We are not a small group were a great race and a large people and the problems are just as big if we rest and splinter and let it go at a state level and I apologise gentlemen. United we stand divided we fall, that's why we're not getting anywhere, that is why we have a national conference we only had every two years, and at least with the website it's an everyday thing

it doesn't stop and it's sustainable at the present next three years so it's important that we all raise these issues in that forum are not being rude gentlemen, and I appreciate all the support and work that you have done for us over the years but now is the time to utilise the support each other for decent wages, decent training and progression of these issues for our people.

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MISTER GERM HAND WASHING HYGIENE AND NUTRITION PROGRAM

Robert Barnett, North Coast Area Health Service, **Clayton Abreu,** Tropical Population Health Service, Queensland Health, **Dianne Penberthy,** Macksville Community Health

My name is Robert Barnett and today I will be discussing the Mister Germ Hygiene and Nutrition program.

I work for North Coast Area Health Service which is located on the North Coast of NSW. This is where the Mister Germ program kicked off in NSW and during my presentation I will refer be often referring to the North Coast. I would like to note here that this presentation focuses on the program being delivered to preschools not primary schools.

The North Coast of NSW has experienced ongoing outbreaks of communicable disease in children aged between 0-5. Back in 2006 over 25 children from one preschool became ill with gastro symptoms and this preschool requested assistance from the public health unit on how to manage the outbreak. It was identified that this preschool needed hygiene information for parents and staff and it was felt a handwashing program would benefit the preschool. Young children, especially those in child care are particularly vulnerable to infectious disease for several reasons, exposure to germs in group care, immature immune symptoms, they participate in behaviours that spread germs, like thumb sucking, putting objects in their mouths, and lack of control of bodily fluids.

Also back in 2006, Aboriginal Health requested assistance from the Public Health Unit in resolving outbreaks of communicable disease in several local Aboriginal communities on the North Coast that where particularly affecting children and the elderly. In my role as an environmental health officer, I undertake community environmental health consultations and visited these communities experiencing illness. These communities have many environmental issues including inadequate housing, overcrowding, waste issues, un-maintained sewerage and water infrastructure, high dog numbers and limited pest management.

As a disease prevention strategy the Public Health Unit decided that a hand washing program needed to be established in local schools that is culturally appropriate for Aboriginal children.

Back in 2006 there was no NSW Health hand washing program available targeting Aboriginal children.

However, NSW EHO practictioners that had previously attended the National Indigenous Conference learnt of the Queensland Mister Germ program and felt it may be adopted by NSW. As Clayton mentioned permission was granted for the program to be implemented in NSW. A partnership was formed between various health services within the North Coast Area Health Service and a local AMS to establish how the Queensland program could be adapted for New South Wales. The Queensland model runs over 3 years in primary schools by environmental health workers, however we do not have this staffing model so therefore at this stage it was decided that the program would be adapted for preschools and only delivered to primary schools on request.

I will briefly discuss the program's components that assist with meeting the programs aim and objectives, the first component being communiciable disease information. Schools that participate in the program are provided with the latest information on immunisation, health factsheets on communicable disease i.e. boils and prevention information e.g. nappy changing and cleaning sandpits. This information can also be passed on to parents.

The second component is the Mister Germ program presenters 'activities guide. This guide was modelled from the Queensland presenters' guide, however was designed to suit preschools. The guide contains a variety of physical, visual and verbal educational activities that show students what germs are, how they spread sickness and how this can be prevented.

Each activity has its own aim and some are compulsory and others are optional.

Day Three – Thursday 14 May

Examples Include:

- introducing Mister Germ
- washing hands activity
- insects carry Mister Germ onto food
- wash my fruit
- put rubbish in the Bin
- patting the dog
- ball activity

The duration of the activities are 5 minutes to 20 minutes in length.

Schools may develop their own activities. One school introduced the use of glitter to illustrate the spread of germs and another school has developed an activity called 'micro nasties' which encourages children to take their medicine.

A resource kit is provided with equipment and materials to run the activities. Estimate cost of each resource kit is less than $1000, however this does not include the cost of the costumes. However it is possible to run the program without the costumes. The majority of the funding for the program has been sourced from the NSW Aboriginal Environmental Health Branch.

This is a picture taken of the equipment used to deliver the Mister Germ program. As you can see the kit contains many items including the Mister Germ and Germinator Costumes. The Germinator character is a newly created character suggested by a local Aboriginal Elder, Martin Ballangarry.

The Germinator is a good character who teaches children about germs and Mister Germ is a bad character who spread germs.

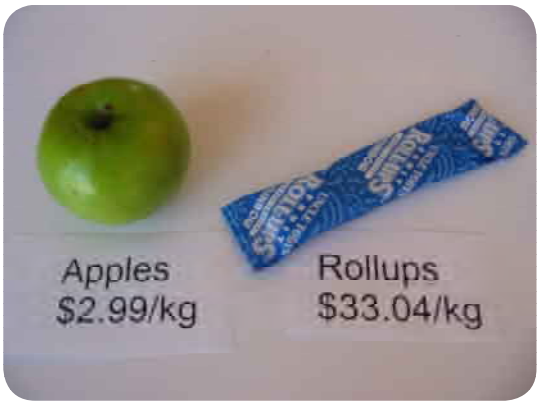
The posters were updated, good and bad picture cards were designed and promotional items such as stickers, pencils and rulers were purchased.

This program tries to teach children about good and bad germs. We let the kids know it's ok to play outside and get dirty but the program strongly encourages the children to wash their hands after going to the toilet and we use aids like a toilet seat and glow cream to show the pretend germs on a toilet seat.

After running a series of activities with kids we hope they use soap and wash their hands.

The nutrition component of the Mister Germ program was developed in partnership with the Port Macquarie Dietiticians department and is called the Great Lunch Box Dilemma. This resource was sourced from the Department of Health and Human Services, Tasmania. This resource is provided to the preschools in a template format that the preschools can use and display.

A display board is used to give a visual presentation of healthy lunch box ideas aimed at the parents to see when they come to the preschool.



An example of one of the pictures is of the cost per 1kg of rollups compared to the cost of 1kg of apples. This program aims to hit parents in the pocket. The Mister Germ program is flexible in that any local nutrition program can be incorporated. The idea is to utilise existing resources.

Another component of the program is food safety. On the North Coast of NSW we offer an existing local food safety program in conjunction with the Mister Germ program. The program we use is called 'Junga-Marlannggu Yurall' meaning 'Proper Handling of Food' in the Gumbaynggirr Nation language. This program was developed by the Regional Health Service Program to provide information to assist preschools to comply with the new Food Handling Legislation Standard 3.3.1 Under The Vulnerable Persons Act.

This legislation is not enacted in New South Wales yet, however it is in other states and territories.

It is still common practice in schools that kids blow out candles on birthday cakes so this part of the program provides information on this activity with focus on preventing the spread of disease.

Parents are still preparing food for the preschool children, meaning therefore it is unknown what ingredients are being used, and how and if any food safety precautions have been taken in the home environment.

In 2007 eight preschools across the North Coast trialled the Mister Germ program consisting of 360 children. Four of these preschools were Aboriginal.

All eight preschools recorded the daily number of sick children over two school terms, however only four schools were introduced

to the Mister Germ program and the results were compared, unfortunately given the small number of children, the length of the program and period of the year the program was delivered there wasn't much difference in the illness rate between the preschools. However the statistics showed there was a higher incidence of illness among the Aboriginal preschool children compared to the non-Aboriginal preschools. On one particular day 49% of children from one Aboriginal preschool were sick with running noses, gastro symptoms.

The evaluation feedback suggested there was a large increase in the frequency of handwashing among children and staff.

Schools are reviewing their policies around handwashing.

This program allows for EH practitioners to provide information on other EH matters e.g. lead, drinking water, copper logs, EH matters of interest to preschools.

There are potential research opportunities around this program to measure the impact of handwashing on reducing the spread of disease in preschool, however none are proposed at this stage. The PHU are happy in what the program has achieved so far. Current evaluations of the program is based on feedback received from the teachers, that has shown that staff and children have both increased their frequency of handwashing.

Just remember handwashing!

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'NO GERMS ON ME' HAND WASHING CAMPAIGN

Xavier Schobben & Natasha Clements, Northern Territory Department of Health and Families

Natasha Clements: I would like to start by acknowledging the traditional owners of the land on which we meet. We are here today to talk about the 'No Germs On Me' social marketing campaign. So what is all the fuss with hand washing? It's a question and a skill that we had ingrained in us as children. How many times were we asked "Have you washed your hands?" it was a question that was asked on a daily basis. Every time that we went to the toilet "Have you washed your hands?" Just before you sat down to eat dinner "Have you washed your hands?" So if we all have learned this valuable skill, then why is it that five minutes spent in a public toilet sees so many people leave that bathroom, without touching the tap let alone the soap dispenser. Studies have found that for every five people one person will not wash their hands. Take a look at your neighbour are they that fifth person? Where have their hands had been? Scary proposition!

So despite the proven health benefits of hand washing many people do not practise this habit as often as they should, even after using the toilet. Not washing hands frequently enough can lead to the spread of infections. Inadequate hand hygiene contributes to diseases such as salmonella and hepatitis. Because these diseases are spread by the ingestion of the tiniest faecal material handwashing after using the toilet cannot be over emphasised. Less commonly known is that handwashing spreads respiratory diseases such as the common cold, and flu. And whilst most people will get over the cold the flu can lead too much longer-term effects or problems, particularly for those people of chronic medical conditions.

So today's presentation will seek to provide you with a whirlwind tour of the handwashing project and the resulting campaign 'No Germs On Me'. I'll focus primarily on the marketing aspect of the campaign, the wins, the challenges and most importantly, the outcomes.

We start with Xavier to recapture the origins of the handwashing project before we get on to the campaign and its results.

Xavier Schobben: I have been blessed with having three magnificent project coordinators in Nicola Slavin, Annette Fuller who you met at Carins and finally Natasha Clements, they have done a sterling job, ably supported by Barbara Klessa, Fiona Smith in Central Australia, Kia Grieves, Ken O'Brien and the treasure trove of EHOs we have across the Territory. I would like to also just like to thank the AMRRIC funding that we received through WGATSIEH though enHealth endorsement and importantly though the auspices of Jenni Paradowski and the Department Health and Ageing. We would like to thank you Jenni for your continued support of WGATSIEH through enHealth, and we obtained funding from Department of Health and Ageing (DOHA) to continue on with this great project .

The handwashing project was developed to assist in addressing the high rates of infectious diseases amongst Aboriginal babies and children in the Northern Territory. Respiratory and intestinal infections impact not only on the health of children in the short term, but may also contribute to chronic disease in adulthood. Infectious diseases such as respiratory and intestinal infections are the leading causes of hospitalisations for Indigenous infants and children aged under five in the Northern Territory with rates many times higher than those in the non-Indigenous population. Research has also indicated that repeated infections during infancy and early childhood can also result in impaired growth, which can lead to long-term health repercussions. Primary barriers such as sanitation and handwashing after feacal contact has been found to be the most effective means of reducing diarrhoeal disease.

The handwashing project was trialled on an Indigenous community in both Central Australia and the top end of the Northern Territory. There was also a designated comparison community in both of these regions. The project commenced on the 9th of February 2006 and was finalised on the 15th of May 2008. The long-term goal of the project was to reduce the person-to-person and

environment to person transmission of pathogenic organisms that cause diarrhoea, skin sores and respiratory disease. There were four objectives and these will be reviewed in more detail when we will discuss the outcomes of the project. The project took just over two years from its inception to completion and funding as I have said was provided, thankfully, by the Australian government.

Briefly, the project involved a number of phases; Natasha will talk in more detail about some of these phases throughout the presentation. In a nutshell, the project concept involved undertaking formative research to determine the key barriers and drivers to handwashing, identification of trial communities, the development and testing of creative concepts, the actual launch, and most importantly, the evaluation.

Natasha Clements: There are several aspects to the handwashing campaign, none of which could taken place without the formative research. It was used to identify the barriers for people not washing their hands routinely with soap and the sorts of things that motivate people to adopt good handwashing practices. Several barriers were identified and I will briefly mention a couple;

- Handwashing wasn't considered a social norm, so washing hands was not considered a routine behaviour, and there was no social expectation of each other in terms of washing hands. Soap is not available in homes, so if it's not available you are certainly not going to use it. Some of the households did talk about using other types of cleaning products such as dishwashing detergent and shampoo.
- Handwashing was not seen as useful. Many people did not see the link between washing hands, and stopping the spread of germs.
- Health hardware wasn't being maintained, so if the tap wasn't working then you are unable to wash your hands.
- There was lower self efficacy, people didn't believe that they have control her of their own situation and the events in their lives.

On the upside, however, there were two key drivers for washing hands with soap:

- Soap is cheap.
- People expressed a positive attitude towards washing hands and soap.

Social marketing: so why would you use social marketing? The formative research basically guided the development of the social marketing campaign which included television advertisements, posters and stickers and point-of-sale materials which were all trialled in the intervention communities. The determinants of hygiene behaviour such as handwashing are complex and research indicates that simply teaching people the health benefits of handwashing does not result in substantial behavioural change. Internationally, there is an increasing awareness that in order to change handwashing behaviour on a large scale the principles of industrial marketing need to be applied. So this was the rationale behind choosing social marketing as a means of promoting handwashing to achieving the goals and objectives of this campaign.

The key difference between social marketing and commercial marketing is that the benefits of social marketing benefit individuals and society rather than the market organisation. Promotion of hand washing will have a far greater impact on public health than promoting drinking Coke as a means to 'winning the girl' in order to sell the product.

What were the chosen tools? We produced several tools to ensure that the campaign reached the widest audience. In doing so, it also ensured that there was sufficient support material available (ie posters, stickers) to reinforce the commercials. During the course of the presentation, I will show you some of these chosen tools and the advertisements.

There were 8 commercials that were filmed, and they used local talent. The style was a top and tail format, so essentially that meant at the commercial break, a poor handwashing scenario would first come on then at the completion of the commercial break, the same commercial would be shown with a positive reinforcement of handwashing. The commercials screened on Imparja for 6 months, and because we had a bit of extra funding available we did another 6-month block about a year later.

There were 4 posters and stickers developed; A3 posters, three of them each featured one of the critical junctures for washing hands, and the fourth one, tied them messages together. A bar sticker was developed using the five steps to effective handwashing, and then posters and stickers were displayed at key sites on the intervention communities, including the Council office; community stores; health centres and schools.

Point-of-sale materials: These were fantastic, they included a counter top display unit for soap, a large counter sticker featuring the logo and shelf talkers where the soap was displayed in the community stores at the intervention sites. We did have to alter some of those point-of-sale materials due to confusion of the message, i.e. purchasers thought the messages meant the soap was complimentary instead of for sale.

The hip-hop workshop was another tool. A professional hip-hop artist and DJ were contracted to hold the hip-hop workshop with the schoolchildren at the Central Australian intervention community. The artists worked with schoolchildren to develop a hip-hop song incorporating the hygiene message. This footage was then incorporated into a community service announcement and an educational DVD. The health education activities promoted handwashing and germ theory and were conducted throughout the duration of the campaign and beyond. Such activities included; handwashing and hygiene themed literacy and numeracy days, colouring competitions, demonstration of germs on agar plates and games with 'Gerry the Germ' - a fibre glass germ where students were able to use glo germ gel and UV light to witness their handwashing effectiveness . Most recently a hygiene activity book was sent across the entire Northern Territory to all schools, which was matched against a Northern Territory curriculum framework as a way of incorporating it into the education program.

The community service announcement was a 30 second announcement that featured the students footage from the hip-hop workshop and an educational DVD was also produced,

targeted at lower primary students.

The benefits of social marketing: Social marketing costs a lot of money, but there are a lot of good benefits to it. Marketing traditionally has one main goal and that is profit. Companies such as Coca-Cola, Nike and Holden spend exorbitant amounts of money on marketing due to its proven ability to persuade viewers and listeners to buy their products. On a much smaller scale, the health sector uses the same concept to persuade the public to change their behaviours. How this is achieved and the degree to how it works varies, but in the case of the 'Did you wash your hands?' social marketing campaign, a number of secondary benefits were achieved in addition to the goal of improving hand washing practices. 'Did you wash your hands?' formed a talking point, 'should the government be seen to be promoting a health message that isn't correct English?' but the slogan was easily remembered. So I guess it worked out quite well. It went on to be well used and well remembered after the completion of the program. By using local talent, the commercials and support material united and engaged communities. There was a certain sense of pride of seeing local people featured in the commercials. Of importance to the Northern Territory Environmental Health Program the campaign raised the program's profile so all of a sudden we were no longer just inspectors, we were the 'germ people'. We also had new resources and opportunities available to promote handwashing.

However, there are always risks with every campaign. The risks associated with social marketing;

- Be aware of the unintended messages. You don't want the local talent to be tarnished as a 'germ boy' .
- Beware of getting caught up in the fun of the creation. I had a ball with this, but remember you are trying to promote a message. You're not there to just have a huge amount of fun.
- It is easy to get carried away with the storyline and the development of other ideas such as competitions and educational activities such as Gerry. The risk is that you miss the point of the message and you may find it difficult to maintain control of that message.
- Remember marketing companies are paid to make money off you and their creativity. That is why they are paid big dollars. It doesn't matter to companies if the messages they create isn't the message you are trying to sell.
- Other risks include control of resources on completion of campaign. Whilst the fact that the resources and message are being used is a positive, it is important that it is used appropriately. For example, posters lose their effectiveness if they are tacked up on a wall of other posters with no further promotion undertaken.
- Social marketing tends to have quite narrow demographics, even large corporations can only target sub-populations such as teenagers, or males, or 20-somethings.
- A major downside to SM is the cost. It can be very prohibitive especially for small organisations. However, the lessons learnt from this campaign can be applied on a smaller scale for an effective campaign to be undertaken at the local level.

So did the campaign achieve its objectives and ultimately its goal?

In terms of whether objective one of the project was met it is difficult to say definitively. In the Top End intervention community there was an increase in the self-reported rate of handwashing after going to the toilet and after changing babies' nappies however there was no change in the number of respondents who reported washing hands before touching food.

In the Central Australian intervention community there was an increase in the self reported rate of handwashing after going to the toilet and before touching food. There was however no change in the number of respondents who reported washing hands after changing babies' nappies.

In relation to Objective Two, Central Australia reported an increased awareness about the importance of washing hands after the three key junctures. In the Top End there was an increase in awareness of the benefits of washing hands after going to the toilet and before changing babies' nappies but not before touching food.

Objective Three, unfortunately was difficult to measure as the questions used to assess attitudinal change did not turn out to be overly useful. It was felt that respondents did not fully understand the scale that was used. However, almost all of the respondents to both the pre and post handwashing questionnaires expressed a positive attitude to handwashing.

Objective Four was not met. Whilst the original project proposal did include a focus on the safe disposal of faecal matter it was later determined that this was beyond the scope of the project.

The decision to advertise the market research and development of creative materials as a single tender unfortunately restricted the number of submissions received. It would have been better to have advertised each of the contracts separately.

Contracting a marketing research company to undertake the formative research was not as effective as hoped. Conducting the research ourselves and redirecting the funds towards employing a second project officer, one for the top end and one for the central Australia would have been more effective. It was difficult for a single project officer to fully engage with both communities, which unfortunately meant that not as many community based strategies were developed and implemented as originally planned.

Ideally the social marketing campaign should have run for longer than 6 months. Given that routine handwashing with soap is not considered a social norm by the target population, intensive, long term exposure to the handwashing message is needed to engender sustainable behavioural change.

Throughout this presentation, I have provided you with an overview of this campaign, its key successes, lessons learnt and some tricks to be wary of when undertaking a similar styled campaign. To recap, the key success would have to have been the mass media campaign. The concept, campaign and resources have been well received in the NT and beyond. We have received enquiries from around Australia and internationally and are aware of the resources being used in Laos and Cambodia.

Since its formal conclusion, 'No Germs on Me' has been extended to

the mainstream audience across the NT including the development of more TV commercials, a radio commercial, a school film clip competition and the use of social network sites to further promote the message. Posters were distributed in shopping centres, on tabletops in food courts, in cinemas and other high usage areas including the toilets at Darwin airport.

The school film clip competition was won by Milikapiti School on the Tiwi islands and I would like to finish today's presentation with a snippet of their entry.

FOR MORE INFORMATION
More information can be accessed on from the NT Department of Heath and Families website (http://www.health.nt.gov.au/Environmental_Health).
Ph:1800 095 646 Email: envirohealth@nt.gov.au

HOUSING AND HEALTH: WHAT'S THE CONNECTION? HEALTH BENEFITS FROM AN ABORIGINAL HOUSING PROGRAM IN NSW

Jeff Standen, Behnoosh Khalaj, Wayne Smith, Aboriginal Environmental Health Unit, NSW Health

I'd like to tell a story today about Housing for Health. To start with I would like to acknowledge the Wongatha people for the warm welcome to Country and I also want to acknowledge my co workers; Benoosh Khalaj who is a statistician who has done a lot of the analysis for this project and Professor Wayne Smith my supervisor who has provided a lot of the academic guidance, particularly around the methodology for some of the more complicated parts of the project.

Housing for Health is a project we have been running in NSW for 10 years now. It has been part of the Aboriginal Health Strategic Plan since 1999 and it's all about creating environments that support good health, in particular, creating a home environment that supports good health. We have been running Housing for Health in NSW in partnership with the Department of Aboriginal Affairs. And we have also, at times, received funding from the Commonwealth through their Fixing Houses for Better Health Program, a parallel program which uses the same methodology as Housing for Health, only the funding source and funding amounts differ.

What is Housing for Health?

It is a methodology for surveying and fixing the houses which gives priority to safety and health. We buy the methodology 'off the shelf' as a tool to do assist us to do our job, much like we would buy Microsoft Office. It is a methodology that we believe, based on the evidence available, is a good approach to improving health in the home and in NSW we have been running the program for over 10 years now. The methodology has been used right across Australia and, more recently, internationally.

The fixing component is an important part of the licence agreement with Housing for Health. It forms an ethical component of the project, and there is a condition that there is "no survey without service". As a result the survey teams carry took boxes and fix basic things that they can safely fix, and tradespeople are attached to the project as well so that serious electrical and plumbing jobs, which can only be fixed by qualified trades, get fixed immediately.

All the work we do to the houses are strictly prioritised in terms of getting a health benefit and safety as well.

Stages of Housing for Health

There are five main stages to Housing for Health.

The first stage is Community Consultation and Feasibility. It is very important to be clear about the project at this stage because we don't fix everything in the houses and care is taken to explain to the people what we are not going to as well as what we are going to do so as not to set up any false expectations. We don't paint houses, we generally don't do guttering, and we don't build fences or carports etc. All the work we do is focussed on getting a maximum health benefit. If the community agree to the project we also do a feasibility study to arrange the logistics of running the project. At this stage we include all the community people.

Once the community agree to it, and the project is considered feasible, we then set aside a week for training and surveying houses. This week is the Survey-Fix 1 (SF1) stage of the project and involves a technical person such as an EHO doing training with the community team members in how to carry out the survey assessments. The team members then go out in groups with a team leader - a technical trained person - and they test about 240 items in each house; every light switch, every power point, every drain, every tap etc. All of these items are very methodically tested, and there is a standard test for each item. If they identify a problem and they can safely fix it, they do. For example if a shower rose needs replacing we have a box of shower roses and tools to replace it. It is a very intrusive process taking around 45 minutes to an hour, but by the time the team has finished there is some tangible benefit to the householder.

The data that the survey teams record goes back to a temporary office we set up somewhere in the community, where it is entered into a database. We then produce almost straight away a list of works for each of the trades; particularly plumbers and electrical trades, who go out and immediately start fixing all the urgent problems. The level of community involvement at this stage and the delivery of an immediate and tangible change to people houses immediately builds respect and relationships with the community. Even though we have promised that the trades will be coming to fix the urgent works identified, there is usually some scepticism and community members are often surprised when the tradies turn up about a half a day later. It's on the back of that relationship and trust that NSW Health can start to talk about other issues in the houses, and delivering other services as well.

Once we have done the urgent jobs we enter a Capital Upgrade Stage where we do the larger, less urgent jobs, such as replacing

hot water systems, installing safety switches, or sometimes we might have to re-wire a whole house. We sometimes find we have to fix bathrooms; we come across quite a lot of leaking showers and if the leaks affect other rooms in the house then that can compound crowding issues.
The fourth stage is Survey-Fix 2 (SF2), where we go back and do exactly the same survey, re-doing the training with the survey teams (many who participated in SF1). By doing exactly the same survey again it gives us the opportunity to evaluate the project; ensures that there are no outstanding items, and also gives the community an opportunity to audit our work. The involvement of the community in the project ensures the community has an understanding of what work has been done.

Then we report back to the community and funding providers and close the project.

Housing for Health Priorities

The Housing for Health priorities are also outlined in the National Indigenous Housing Guide. They are firstly about ensuring safety as top priority. This includes electrical safety, fire, gas and sometimes structural issues. In terms of structural safety, we are limited by the project budget, so for example, if there are white ants throughout a whole house it may be beyond our project but where we can, we deal with those smaller structural issues.

The next priorities are about providing a healthy living environment and many of you are familiar with this work over the last 20 years. They are outlined in the box below. Being able to wash people, particularly children, is the highest healthy living priority, followed by washing clothes and bedding, then removing waste. Improving nutrition through being able to prepare, cook and store food in the house reduces people dependency of having to go down to the store for a meal every day.

There are another five priorities (listed below in blue). These are important and we do address some of these but it really depends on how far the dollars stretch; if we had unlimited dollars we could go through and do everything but we don't have unlimited dollars. The top four are the critical ones.

Housing for Health priorities:

a) Safety First (electrical, fire, gas, structural)
b) Providing a Healthy Living Environment
   1. ability to wash people (especially children)
   2. ability to wash clothes/bedding
   3. removing waste
   4. improving nutrition and food safety
   5. reducing impact of crowding
   6. reducing impact of pests, animals & vermin
   7. controlling dust
   8. temperature control
   9. reducing trauma

In NSW, we have now been doing this for 10 years and we have a broad range of projects across the state. We have been doing projects in hot climates and in cold climates. We have done them in remote areas, in urban areas and in between. We have done projects in discrete Aboriginal communities and we have done Indigenous housing in mainstream towns as well. We have done houses in fairly good condition right though to houses that are in very poor shape. We have done work in a diverse range of houses from nearly half the Community Indigenous Housing in NSW.

FOR MORE INFORMATION

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DEMYSTIFYING INFRASTRUCTURE: A NATIONAL INDIGENOUS INFRASTRUCTURE GUIDE

Ruth Elvin & Eleanor Hogan, Centre for Appropriate Technology

Introduction

Before moving into the substance of this paper, a couple of acknowledgements and an apology need to be made. First, thank you to the traditional owners, the Wongatha people, for their warm welcome to country on the first day of the conference. Second, the work of co-author and project coordinator Eleanor Hogan was been fundamental to the progress of both the project and this paper, and it is a shame she was not able to participate in the conference. Third, an apology for the misleading title; this paper should have been titled 'Trying to Demystify Infrastructure', for it describes our attempts to do so in the development of a National Indigenous Infrastructure Guide. It is a Guide that we hope will help the victim of the following scenario:

What happens when the cistern doesn't flush and there isn't any water at the household tap? The solar bore is pumping, but water is only just trickling into an empty storage tank. A household water supply splits, sending a fountain of water into the air. You have to isolate the main because you can't find the isolation valve at the branch. The valve box is hard to find. You think it's near the generator shed under a mass of grass and vegetation, though there aren't any markers to identify the water main's alignment. Eventually you find the remains of the valve box, broken by the bobcat during a rubbish clean-up. The valve shaft is filled with soil and the area is contaminated by waste engine oil dumped on the ground from servicing the generator. And now the phone connection has dropped out again….

We hope that by the end of 2009, the harried victim will be reaching for the new National Indigenous Infrastructure Guide to help sort out some of these problems.

Understanding the development and maintenance of small community infrastructure is critical to Indigenous community

capacity building and the environmental health of communities in rural and remote Australia. Community capacity is undermined when infrastructure is inadequate, inappropriate or malfunctioning, with consequent impact on health and education. However, working with sustainable infrastructure in Indigenous communities throughout Australia presents particular challenges, particularly for those new to working with service provision to communities often distinguished by their remoteness, climate and culture. Information is scattered, inaccessible or varied across state borders, and seldom cross-referenced across different areas, such as water and wastewater. Where technical information is available, it is not necessarily related to principles of community involvement or sustainability. It has become increasingly evident that a single, coordinated guide to infrastructure development in Indigenous communities would be extremely useful. This paper describes issues in the development of the *National Indigenous Infrastructure Guide* (NIIG) in 2008-09 by the Centre for Appropriate Technology (CAT) in collaboration with the Australian Department of Families and Housing, Community Services and Indigenous Affairs (FaHCSIA).

NIIG was conceived in 2008 as a sibling to the *National Indigenous Housing Guide* (FaHCSIA 2007) to fill a perceived gap in accessible information about infrastructure delivery issues to Indigenous communities, particularly remote communities. It covers all of Australia and addresses the issues found in different climate zones and jurisdictions. In providing a systematic approach, it is akin to a 'one stop shop' similar to other comprehensive projects such as the Australian Indigenous Health*InfoNet* spoken about earlier in this conference.

NIIG aims to help communities to ask the right questions and to get appropriate solutions to infrastructure issues, and to provide a roadmap to local practitioners and service providers to help them make informed decisions in a community context. It is most applicable to communities where one or more services are not part of a main service grid. Communities of over 200 people are considered major communities in this context, with less than 200 people being 'minor communities' or outstations, depending on their service structure.

Scope

NIIG covers the following key infrastructure elements:

- water
- stormwater
- wastewater
- waste
- energy (including renewable energy)
- transport (roads, aerodromes, waterways)
- telecommunications.

In each section, users are led through a process of appraising, choosing, designing, installing, and maintaining an infrastructure option. They are able to access any part of the process needed; that is, if they already have septic system, users only need refer to the management and maintenance section.

In developing NIIG, the steering group suggested that the technical scope be limited to infrastructure fundamental to the immediate health and functionality of a settlement. Thus, NIIG follows the *National Indigenous Housing Guide*'s emphasis on water supply, energy, sanitation and waste management as being critical areas of infrastructure that contribute directly to environmental health. Transport and communications infrastructure (telecommunications, roads, airstrips, barge landings) were included because they are essential in ensuring that remote and very remote communities are not isolated. Similarly, stormwater drainage was also deemed a necessary inclusion in recognition of the impact of flood damage in flood-prone communities.

Housing, however, is excluded from the scope of the Guide because the National Indigenous Housing Guide already provides a comprehensive resource in this area. The overlap between the two guides, particularly in areas such as wastewater, is recognised by cross-referencing in NIIG and, hopefully, in future editions of the housing guide.

The technical infrastructure areas listed above comprise the second part, and bulk, of NIIG. The first part provides the foundation, the underpinning principles, and we have provided chapters on community involvement, and management and maintenance, which are then echoed throughout NIIG.

Although NIIG's authors and collaborators take it as a given that without community involvement or planning a maintenance regime, infrastructure cannot contribute effectively to sustainable livelihoods, NIIG is deliberately explicit for people less familiar with those assumptions. NIIG thus documents:

- best practice approaches to infrastructure design, operation and maintenance; and
- recommended approaches to effective community engagement, planning and capacity building.

It also brings together existing research, codes and standards, resources and other material on community infrastructure.

Audience

Defining the audience was one of the more difficult issues faced by NIIG's developers. It is not an exhaustive manual for technical specialists: there are enough of those. Nor is it a basic 'how to' manual for the person on the street: this is not possible as not everyone has a grader or an engineering degree.

NIIG is primarily for the people working with infrastructure in Indigenous communities, including:

- Community Managers, Executive Officers, Essential Services Officers, Environmental Health Workers, Works Supervisors
- local and state government officers
- those planning and developing infrastructure projects.

NIIG's Development

The process of scoping and defining NIIG began in October 2007. Draft chapters were prepared between March and September 2008, and were reviewed at the Centre for Appropriate Technology and by government and non-government service providers and Indigenous people working in the various fields covered by NIIG.

Regional workshops were held in Alice Springs, Adelaide, Broome, Cairns, and Darwin with potential users of the Guide. Following the incorporation of feedback by March 2009, another workshop was held with the key reference group to approve the new shape of NIIG. The reference group represented Commonwealth and NT governments as well as programs such as Fixing Houses for Better Health.

NIIG began the long editorial process with FaHCSIA's Indigenous Communications Unit in April 2009, with final production and distribution expected towards the end of the year.

NIIG's Parameters

As already noted, NIIG complements the National Indigenous Housing Guide (2007). It also complements *The Environmental Health Handbook* (2001).

Both resources use an environmental health framework based on the assessment of health risks in a particular environment and the development of strategies that seek to eliminate or minimise this risk. *The Environmental Health Handbook* is useful for considering issues of health, housing and community infrastructure, and includes information about community development and land management. However, it limits the discussion of infrastructure to water supply, sanitation, energy and waste management.

The 3rd edition of the *National Indigenous Housing Guide* also provides a basic overview of health-related infrastructure. Its approach relies on the premise that a basic level of infrastructure is required to support health hardware and thereby reduce the risk of community health problems.

The critical performance factor here is 'reliability'. The *Housing Guide* utilises a lifecycle reliability framework to provide a checklist of best practice measures for each phase of the infrastructure lifecycle (design and specification, quality control, maintenance).

However, while both the *Health Handbook* and the *Housing Guide* offer good information on community infrastructure, it is not their primary focus. NIIG addresses this aspect of creating sustainable community livelihoods by providing an 'enabling platform' for understanding service needs outside the house.

In short, the *Housing Guide* stops at the front gate, while the *Infrastructure Guide* goes beyond the front gate, and even includes the roads out of town.

Issues in Developing NIIG

Guiding Principles

Not surprisingly, there was considerable debate over the shape of the guiding principles that underpin NIIG. Much of the approach to infrastructure in Indigenous communities refers to the history of service deficit created by remoteness, poor standards and lack of resources. HealthHabitat has documented this history in relation to housing through its Fixing Houses for Better Health programs. Individual and public health have been central themes of calls for improved service standards to Indigenous communities.

NIIG seeks to broaden this platform by enhancing the understanding of the role that access to essential services plays in sustaining remote Indigenous communities and assumes positive contributions by the communities to the process. It puts forward a framework of integrated principles that best serve the development, management and maintenance of infrastructure in Indigenous communities. They are: access and equity, environmental health, health and safety, appropriateness, affordability, and sustainable livelihoods.

This approach is also in keeping with the principles outlined in the National Partnership Agreements on Remote Indigenous Housing and Remote Service Delivery, which Ken Wyatt referred to in his keynote address at this conference and which have been explicitly incorporated in NIIG.

A Detailed or Holistic Approach?

We have attempted to take NIIG beyond 'just fixing things', but we admittedly struggled with the level of detail required in each area. How deep should we bury the pipes, how wide do we grade the road, how high to put the tank? The potential for useful detail was endless.

After much discussion, NIIG has ended up with a mix of some perceived necessary detail and information about where to get more detail, based on the authors' assessment of immediate need, and general likely usefulness. It is in this area that we expect and hope to get most feedback.

More generally, NIIG incorporates an analysis of the vulnerability context in which infrastructure is placed and should enable the identification of holistic strategies to improve the viability of infrastructure. These include:

- improved community engagement, planning and decision-making processes
- maintenance strategies including a systematic and holistic management framework that incorporates the complete asset lifecycle.

Refining the Issues

NIIG Regional Workshops

Workshops were held in Broome, Cairns, Adelaide, Alice Springs and Darwin, with participation from NSW agencies. Participants represented the range of potential service providers and users from Indigenous communities, government, power and water utilities, Telstra, Outstation Resource Agencies and other non-government organisations. Up to ten people attended each workshop, excluding CAT staff.

The general response was very positive about the value of NIIG and the unique contribution it would make as a resource for those working on community infrastructure projects, particularly in remote areas. Many thought NIIG would be more useful and have a broader application than the NIHG. There was strong support for a regularly updated NIIG and interactive Web portal.

NIIG was seen as potentially having multiple audiences, ranging from those with high levels of knowledge and experience to less-specialised workers and relative newcomers to the area. Consequently, they felt the NIIG had to be user-friendly and functional enough to cater to these audiences and to direct people promptly to what they want and need to know. Community involvement needed to be flagged as a key message.

However, the feedback also indicated that NIIG needed to be more streamlined, and replication of material from elsewhere needed to be eliminated, while it also needed to be linked more closely to the *Housing Guide*. We have tried again to balance these often conflicting requests, and no doubt the next round of feedback will let us know if we have succeeded.

As already noted, there was some debate about the need for guiding principles to inform the NIIG's integrated framework, and what they should be. There was robust support in several workshops for environmental health as an 'enabling platform' for the NIIG, with the argument that most priorities for infrastructure in remote communities were reducible to environmental health matters. This would also give the NIIG greater contiguity with the NIHG. However, it was more generally agreed that an environmental health platform might not encompass all the principles and issues the integrated framework seeks to address, which is why environmental health is a major, but not the only platform.

With regard to format, workshop participants agreed that a visually oriented design might be more appropriate for the NIIG's users. This interface should be a feature of both the print publication and Web portal. How much it ends up looking like the Housing Guide is in the hands of the FaHCSIA Indigenous communications design team and their budget.

Finally, in the feedback, there was NIIG's scope: the NIIG has been conceived of as a resource for those working with Indigenous communities where one or more services are not provided by a network or broader, reticulated grid. However, it was been suggested that a continuum be considered, as there are some grey areas where communities are 'half-in, half-out' of available networks. This is not entirely resolved, and we haven't focused on rural or urban communities that may find this useful. Again, feedback towards the second edition may help us understand the need, if any, in those areas for this guide.

The main message though from the workshops was: "Just get the Guide out there and see how it floats!" And so we will, with publication expected by late 2009.

It has been a huge project, done in less than two years by a small group of specialists committed to using their technical expertise to improve the chances of healthy and sustainable Indigenous communities wherever they are. It has been a privilege to be working with them, and we all look forward to your feedback about the usefulness of our NIIG.

Thank you.

Bibliography

FaHCSIA 2007. National Indigenous Housing Guide. 3rd edition. Commonwealth of Australia, Canberra.

Harris, G., 2001. Environmental Health Handbook: A Practical Manual for Remote Communities, Menzies School of Health Research, Darwin.

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ENVIRONMENTAL HEALTH OFFICER, COMMUNITY ENGAGEMENT TRAINING AND SURVEY

Thaddeus Nagas, Greater Western Area Health Service, **Helen Ptolemy & Bob Allen** Sydney West Area Health, NSW

Firstly I would like to thank the traditional owners, the Wongatha people for allowing me to speak today.

As part of the traineeship program we have been able to work alongside quite a few 'housing for health' projects. I'm from Broken Hill which is out in the wild west of NSW. I cover quite a few towns. Just to let you all know I'm not of Aboriginal descent, I'm a Torres Strait Islander fella working on Aboriginal Lands, amongst Aboriginal people nothing wrong with that; I'm having a good time and a lot of people made me feel very welcome.

What this project is about is that a past graduate of the traineeship program Greg. Highlighted during one of our regular trainee meetings that there has been a need because there is only a minor number of trainees within the health system and it's not a sustainable training package by that I mean we have no guarantee of employment at the end of it. We have guarantee of excellent training. It's good for us not only to absorb the information from the learned people that we work alongside but also pass on some cultural knowledge to our colleagues to give them some greater understanding what living 'black' is all about and learning to engage with our people our people, our communities and not just rely on government people above them that they can be proactive at their local level; including local government and from within their own public health units. So basically we came up with a plan about how we were going to go about training some of these EHOs; there had to be a more formal process and as usual people wanted data. So we had to jump through the normal hoops we have 51 qualified EHOs working in public health units across NSW so for us to develop a training package we had to first show that

there was a need to have it.

I am going to play a video clip and whilst this clip is on some of us older people in the room will be aware of this short video clip I want you all to think about your communication style whilst watching this video clip; not only with Indigenous people but everyone you are involved with during your working life.

Refer to video clip located on the CD

You may have just noticed that is the correct way to spell BBQ.

We conducted a survey late in 2008 to collect information hopefully form all EHA working in public health units in NSW Health so that we could evaluate if there was a need for this project convince the people working above us i.e. directors and those above them that there was a need for this training component. Other people that worked on the project were Robert Barnett who presented the 'Mister Germ' program, a senior EHO in Sydney by the name of Bob Allen and Helen Ptolemy, another EHO in NSW Health. We needed to basically get the message across that EHO work was not supposed to be left up to Aboriginal trainee EHO's, that it was everybody's business it was up to all EHO's, don't just leave it up to some of us younger people or less knowledgeable people to engage in communities and get the message across that environmental health in Aboriginal Communities was everybody's business. The existing training is very limited across all health services with cultural awareness training it's basically a broad brush type effect across NSW which doesn't really highlight some of the issues in local areas which someone might live and work in. Say you started to work in NSW Health in Sydney and then you were transferred out to 'back of Bourke'. You were considered as having appropriate cultural awareness training and not being aware of the issues locally that you were about to be confronted with in work environment. Even down to the point where you wouldn't know the of the language group, name of the local people, names of the reserves or local missions and the history in those communities.

Our training needs should be focussed on the items highlighted on the slides. Culturally appropriate communication you may have seen the way some people may want to talk a bit slower like they have problems but we still have a brain you don't have to talk slow and dumb everything down to us we will catch on if we don't catch on we will ask. Sometimes you feel like that we don't speak the same language as everyone else. Sometimes you can be offended but most times we have a bit of a laugh and a joke about it and a lot of times we play on it a bit too, just to make us feel a bit more uncomfortable.

A lot of work has already been done. EHOs have identified through our survey that project success have been improving. We asked people and basically the improvement has come about since the inception of the traineeship program for Aboriginal and Torres Strait Islander EHOs. Prior to that they said that could not get such successful figures of implementation. I am sure that all the Indigenous EHWs in this room will understand that there is a lot of community pressures and work pressures put on us to deliver these services in our communities and what we are trying to do in this trainee package is to alleviate some of this pressure from ourselves and share the burden across the workforce.

We hope to do lot of work in rules of engagement in communities to achieve better project outcomes through the following points as listed. This is proven to work and we have two areas where a lot of community based work is showing a lot of positive outcomes already in NSW one is being put together by a former Indigenous trainee who is now a Senior EHO; Glenn Pearce I'm very proud of that brother. Where he basically goes and starts at a community level, engages stakeholders and they sit down on a regular basis and plan and focus on what services are required within that community. That the community has interest in what they want delivered from that aspect they then go about trying to source funding so there is no double dipping. They talk to relevant stakeholders about coming to positive outcomes for those issues. It also happens out in the wild wild west where we call it now the Aboriginal Health and Housing Forum; houses have been attached onto it in the last 18 months. Some of you may be aware of the 'healthy housing program' which was trialled out there, it's a real trial area out there, and sometimes it is a trial working out there. Everybody wants to have a play out there because there are a lot of remote communities that they can play with and it's only a day's flight from Sydney. We get people coming into community quite often and we sit down in a similar process out there and basically get FaHCSIA, DAA, AHO Health and all of us together and try and plan and implement service delivery in Indigenous communities. Why do we need to do the training; well as in local Indigenous communities where there is a high turnover of staff there is going to be quite a high turnover rate of us trainees as well. Also people come to country areas to get a start after Uni and then move on for promotion so in the end we need to build that capacity in not just have that knowledge absorbed and then taken somewhere else maybe to a useless place like a city. Most people only get a job straight out of Uni; I know this successful person who I used to go to Uni with and she is going to start work up in Derby very soon. I am sure there will be similar places and people have had first year trainee EHOs out in Indigenous communities; we don't want to lose that knowledge.

Some of the key recommendations that we will want to put into this training package will be:

- Recognition is Aboriginal environmental health as a priority function of all EHO staff I mentioned that previous because of these reasons
- For further specialised training to be conducted and maintaining sustainable partnerships in collaboration with Indigenous communities focussing on their level of health needs. Plus also building in the ownership of the local level of the component; getting local people interested a lot will hang around a bit longer and nobody cares about us more than us and it's our kids getting sick on the land.

We hope to put this training package together. You have seen a map of NSW it is very spread out the area health services are divided up into 8 health areas I think. We plan to go to 5 difference regions and deliver these packages together. So that we can bring all the EHOs in those areas together into one unit so we are also speaking the same language and it will also give the capacity to let people in that whole area know about local Indigenous history and who the contacts are within community in that whole area. This would be a nightmare for a new person trying to start off in

health anywhere and within any state health service. I would have no idea about working in Western Australian. I know a little about Queensland but I have no idea about community contacts. Half the battle is getting a start of knowing where to go.

Cultural competence to allow participants to develop an understanding of themselves first and what they think and believe themselves of what culture is. I have sat in recent job interviews and given people jobs in DAA and that's the best question I have heard in my life when I have got people that ; Mary G eluded to it in one of her jokes last night – "don't worry about those people, there weren't even black when they were young!" A lot of people as they get older start identifying as Indigenous. I went to school with people used that used to make racist remarks to me then later on came along in later life and asked me to be a job referee for those people because now they are claiming to be Aboriginal or Torres Strait Island people. It is very difficult. The question was in that job interview "What does Aboriginal mean to you?" and it was quite interested to see people stutter and stammer and have no idea even at the point where people were saying "that's a good question, I don't know" and yet they had applied for an identified position within a government department to work with our people.

Some of the levels of cultural competence.

- Cultural aversion to overtly racist people.
- Cultural incompetence; the people that are opportunistic and just want to work our people to get their first job or can't get a job anywhere else – are they really interested in solving the health problems of our people?
- Cultural blindness makes and organisations look useless for our people it seriously does. Do they really care about us?
- Cultural pre-competence; access to information the best practice options.
- Cultural competence again; knowledge of community and clients.
- Cultural proficiency; working with everyone, community and in an advocacy role at all times.

It will basically cover a broad historical background of Indigenous history and then be taken back down to local people; people that you will be working with and engaging with. There will be a component of a role reversal as seen in a previous video clip; where we will sit down and ask those people a lot of questions about their history and some quiet personal questions to get them to get a feel of what it's like to be living black and people coming into your community. For example if a team of people in say 'Housing for Health' and don't think I'm knocking 'Housing for Health' I'm a great advocate for it, turned up at your place and knocked on the door with a team of 6 people and just started walking though and you had no idea what it was all about. They start to pull things apart and fixing things sometimes that what's happened to our people in the past and unfortunately it still happens the present day.

You need to be very well prepared before approaching a community. Sometimes unfortunately you may be aware it doesn't happen in your area. We need to make sure it doesn't happen in NSW. This is something that EHO's will be made aware of from the training package. I am sure a lot of people in the room will be aware of the benefits both for the associations and the organisations they work with about using Indigenous people to help them implement services in their communities. We to have found ' we can get into these communities a lot easier if we use black fellas we will only train them up a little but, we will only pay the a little bit and we will get our job done and we will get out of there.

I mentioned earlier that there needs to be a bit more sustainable component; don't just rape and pillage our knowledge and take it away so that you can get your job done and move along with your career – put a bit back including the money into that local community. All Aboriginal health workers face the same challenges. We live and work and play together. Other people have mentioned previously so I will reiterate it – we never knock off! I don't have a phone at home - I have one in my pocket I can turn it off. People ring me up at 3am. I live in Broken Hill which maybe long way away but you become identified in the area as the bloke to talk to. I had to push and request for a mobile phone because I was sick of people ringing me up at home. I don't mind talking to my mob just not at 3am in the morning because that's when they have their problem and they know you and they know you will talk to them and they know you have been though area and will come back.

There is an important point there under 'trainee' which I touched on earlier. Being of Aboriginal descent does not also guarantee cultural competence as I pointed out earlier I'm Torres Strait Islander decent working ion Aboriginal communities.

In conclusion we are all aware that there are no easy answers. In the past there has been introduced along range of solutions. That time hasn't finished there are more solutions; there are better ways. We need to develop more culturally appropriate interventions sorry to use the work interventions – it is not a joke. Minimum standards of cultural competence must be achieved at all levels; personal, system organisational, professional and individual.

Once again some of the older people in this room will recognise these words. It's been a long time, round about the same time as I heard this song and the words of this song for the first time as a very young child. I didn't realise the significance of it. My father took me along, it was winter time, and it was on Aboriginal health what he was doing because we would pull up in the Holden, open the boot and hand out Vitamin C tablets in the middle of winter. It is just as cold in Broken Hill and the outlining areas as it is here in the winter time. That was Aboriginal health. Whilst we were there, there was a big deal about someone turning on a tap in a place I thought was a rubbish dump because I grew up in Broken Hill in a mainly white society. It wasn't a rubbish dump they were humpies and it's where my people were living and I had the privilege of seeing the first chlorinated water supply being turned on. I was 7 years old and now I'm 44 and we haven't done enough. To many brothers and sister, aunties and uncles are passing away.

There are copies of these words, they are not my words but I believe in them. Thank you for your attention.

Statement: Clayton Abreu: I am glad that NSW Health has done this project, this awareness. We are doing it in our service it's a need it's given other staff within the service a different perspective on how to work in Indigenous communities and in Qld Health we have started to do that. With the VET workshop we had with AMMRIC

in Qld we did a similar program of how to work in Indigenous communities in Qld so we have that starting up in our service as well. But I see it as a need across all services not just environmental health.

Thaddeus: I will just highlight some of the issues I have faced since I started my traineeship. One day I was working a long way from home. I was at Uni and I got a phone call just before my Chemistry exam. The phone call was my son; my daughter had cut her wrists. I sat that exam and I couldn't get home in a hurry. I got home to talk to my boy. I went home and I tried to talk to my Director three times to tell him I needed to take some time off to be with my family. They were too busy to talk to me. I'm old and wiry and I find a way to get around things so I thought I'll make them talk to me. I took the work car home; I didn't drive it all round the place, just took it home and parked it in the driveway. My priority was looking after my kid. I thought that sooner or later they would realise that I took the car because you have to sign for it and they would come looking for it. Three days later they came looking for me. My Director knocked on the door and asked me if he could have the car back and I said "Yes, but I want to talk to you about something first mate" So I went through the issues. I had my daughter sitting outside talking about taking her back to country to make her strong. I said to my Director, I need a few days off. He was very supportive once he knew.

I took six weeks off work. In my absence, I apologise if anyone has lost a member of their family to suicide, a colleague that was asked to work with me for me to pass my knowledge onto him was making jokes "I wonder where Thad is, I wonder if we will find him hanging in a wardrobe" I raised this issue with quite a few people in the working environment who said that he was only joking. It was bloody serious to me! And it's serious to my people. I had to keep working with this bloke. I couldn't look him in the eye I had to face my back to him and give him a cultural history lesson about some of the plights faced by Indigenous people. He was one of the fly-by-nighters that come in get paid very well and yes he eventually left. He had also upset me previously because I had been maintaining and documenting all the changes since about 1950 in my local area of Council EHO's, State EHO's and they still made me work with this bloke, I still went on projects with this bloke and pass in the information on because it was helping my mob. I put my mob before I put me, all I wanted to do was to get physical but I am too old to break heads. But we need this sort of stuff to change these things happening. I'm sorry I got personal but it's just to highlight some things that some of us go though in our work place environments.

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BUILDING ENVIRONMENTAL HEALTH THROUGH COMMUNITY PARTNERSHIP

Chicky Clements & Louie Bin Maarus, Nirrumbuk Aboriginal Corporation, WA

Kullari Regional Environmental Health Services is a program of Nirrumbuk Aboriginal Corporation, funded by contract, through the Office of Aboriginal Health. Nirrumbuk Aboriginal Corporation is an Indigenous owned, non-government organisation that has experienced a high level of success in the delivery of services to discrete Aboriginal communities. This in part, can be attributed to the Indigenous membership of the organisation and the organisational philosophy which maintains social inclusion, cultural relevance and appropriateness.

The organisation utilises a similar structure to local government, where corporate governance is established with the Committee members who ensure that the organisations vision and primary decision-making evolves, to remain relevant and in-line with current community needs and concerns. The Directorship (predominantly local Aboriginal Australians) have understanding and involvement with community and cultural life and are able to exercise appropriate, flexible management of arising issues for the organisation and its employees, as well as sustain relevant and practical on-the-ground management of day to day work concerns.

In keeping with the Aboriginal and Torres Strait Islander Health Performance Framework Measure 3.09 Aboriginal and Torres Strait Islander Australians in the health work force, the majority of Nirrumbuk and Kullari Regional Environmental Health Services employees are Aboriginal (this is at all levels of employment, including the directorship and upper management). Indigenous employment is a priority for the organisation, as is employee professional development and career progression.

The Environmental Health Team is comprised of:

- Managing Director Environmental Health and Municipal Services
- Finance and Administration Manager (non-Indigenous) 0.5 FTE
- Supervisor Aboriginal Environmental Health (as part of regional team)
- Six Aboriginal Environmental Health Workers (AEHW), including two roving regional team members and four community-based AEHW
- Environmental Health Officer, Aboriginal Communities (non-Indigenous)
- Environmental Health Trainer and Educator.

Since the inception of Kullari Environmental Health Regional Services, due to a revised funding model, many structural and service delivery improvements have been made. Traditionally funding was of singular positions, based with distinct individual Community Councils. The change to a regional model has seen a number of benefits. These include:

- Staff retention is increased

- environmental health workers report an ability to give greater focus on the specific job role (with fewer diversions)
- increased ease of resourcing e.g. major equipment ad materialsare now shared between communities and retained solely for environmental health purposes
- Environmental Health staff are freely available to support each other as the positions are no longer isolated or confined to the one community
- mentoring between staff – each member has a different background, sharing knowledge and experience
- ability to travel and learn from experiences in neighbouring communities
- increased collaboration and ability to work together on designated projects
- greater variety of tasks, in line with training and exposure to the environmental health field
- same standard of service is delivered across the region
- an ability to tailor program projects to individual community needs (offering flexibility and variation)
- one system of management and financing
- ease of reporting
- ability to achieve a continuous presence in the region, through combination of community-based environmental health workers, a regional crew and roving staff of Environmental Health Officer, Educator and Management.

All members of the Environmental Health Team complete regular professional development and all team members have accredited environmental health training. In part this is related to the outstanding staff retention rate, which is particularly significant in view of the high staff turn-over normally witnessed in the Indigenous environmental health field. It can also be attributed to the commitment of Nirrumbuk management to improving environmental health and living conditions, and the overall health of local Aboriginal and Torres Strait Islander Australians.

The Kullari Regional Environmental Health Services management have undertaken and completed the Environmental Health certificates along side the other members of the team. This was a measure to ensure management has a sound understanding of the funded program, expectations of employees and the environmental health field. The outcome is that management are appropriate and capable support personnel for their team. In addition, the majority of the accredited training provided has given specific relevance and attention to Aboriginal and Torres Strait Islander needs, resulting in a workforce well equipped to address the needs of discrete Aboriginal communities. Both outcomes are in line with the Aboriginal and Torres Strait Islander Health Performance Framework Measure 3.13 Accreditation.

Further to the Measure 3.13 Accreditation, on-going qualification is fully supported by the organisation. An example is the Environmental Health Educator's career pathway which started as Environmental Health Field Support Officer, progressed to Environmental Health Trainer and is currently completing the Degree (Bachelor of Applied Science in Environmental Health). This will see the region have an Aboriginal Environmental Health Officer, able to be gazetted and authorised under legislation to investigate health issues (e.g. such as an outbreak of communicable disease). Within this field there is currently under-representation of Aboriginal and Torres Strait Islander Australians (reference Aboriginal and Torres Strait Islander Health Performance Framework Measure 3.14 Aboriginal and Torres Strait Islander peoples training for health related disciplines). Any team member who wishes to further their career, expand their knowledge and expertise is encouraged to investigate and undertake the required study.

The Aboriginal and Torres Strait Island Health Performance Framework 2006 Report references a customer satisfaction survey which *"found that the presence of an Aboriginal and Torres Strait Islander doctor at a community health centres was a main reason that Indigenous Australians attended the clinic (Hayman 1998)"* and that *"Patients report that an Indigenous doctor was "more understanding of their needs"*. Similarly, a large proportion of the opportunities, partnership projects and successful outcomes experienced by Kullari Regional Environmental Health Services can be attributed to the reflection of the local demographic in the organisations staffing. This assists the Environmental Health Services in maintaining a direct link with the Aboriginal and Torres Strait Islander Australians accessing the service, and in maintaining up-to-date knowledge of the community issues and concerns. With the majority of employees being local community members or with strong familial links to community, Kullari Regional Environmental Health Services is highly approachable and accessible in its service. The recent employment of a female team member has increased access to the service for some of the sensitive environmental health concerns, particularly for community women. Although a non-indigenous employee, this has been partially overcome by being a community-based position, which has significantly improved community links, accessibility and the responsiveness of the position. This difference is pronounced when compared to the more traditional basing of Environmental Health Officer for Aboriginal Communities in near-by major town centres.

The employment of local people has had associated benefits through increasing participation and access by the target groups. This can partially be attributed to the ability to use appropriate communication, the inherent knowledge of timing, who to speak to, when to seek information, the right questions to ask and when to take action and how. Through the innate existing knowledge of community and ability to access people and places, mis-understandings are significantly reduced. This basic knowledge and ability has instilled a heightened sense of community confidence in the service. It has also contributed to the ability of Kullari Regional Environmental Health Services to efficiently deliver outcomes, within reasonable time frames. This is particularly relevant when compared to time frames and outcomes of non-local, non-Indigenous organisations who have of necessity to invest greater resources into consultation and investigation, in order to ensure service delivery adequately meets the needs of the target group.

The Nirrumbuk Aboriginal Corporation and Kullari Regional Environmental Health Services model has seen significant success in delivering basic environmental health services, on a minimum budget. As highlighted in the Aboriginal and Torres Strait Island Health Performance Framework 2006 Report (Health System Performance Measure 3.15 Expenditure on Aboriginal and Torres Strait Islander health compared to need) there remains outstanding need in the regions discrete Aboriginal communities, and overall current health expenditure per Aboriginal and Torres

Strait Islander person is not sufficient to match need. This is the case in primary health care, as well as within the environmental health field incorporating housing, utilities and infrastructure. With increased appropriate funding and expenditure environmental health programs such as Kullari Regional Environmental Health Services would be better equipped to expand their preventative health model and make significant impact on health status and outcomes for their service communities.

Case Study – A Holistic Approach: Community Partnership with Djarindjin Aboriginal Corporation

The Aboriginal and Torres Strait Islander Health Performance Framework establishes key measures of health for the Aboriginal and Torres Strait Islander people of Australia. The report documents the importance of each measure, tables findings and provides discussion of the finding implications.

A number of the Frameworks Measures of Health, (including health conditions and status e.g. reasons for hospitalisation, acute rheumatic fever, rheumatic heart disease, end stage renal disease, children's hearing loss; life expectancy and wellbeing; and deaths), show a significant and re-occurring link to the quality of environment and living conditions experienced by many Aboriginal and Torres Strait Islander communities. Referenced throughout the document is the disparity between basic environmental health standards observed by Australia as a complete nation, and that of discrete Aboriginal and Torres Strait Islander communities. Infection and communicable disease are consistently reported at a higher rate for Aboriginal and Torres Strait Islander Australians, and the key finding given is the difference between environment, housing and living conditions.

The relationship between environmental health and health status (and outcomes) has been formalized by the Report under the Frameworks Tier 2: Determinants of Health. Environmental Factors referenced as Health Performance Framework Measures are 2.01 Access to functional housing with utilities and 2.02 Overcrowding in the house. Discussed as part of these measures are basic environmental health standards such as access to potable water, functional sewage systems, appropriate and functioning housing and the established nine Healthy Living Practices:

1. Washing people
2. Washing clothing and bedding
3. Removing waste safely
4. Improving nutrition: the ability to store prepare and cook food
5. Reducing crowding and the potential for the spread of infectious disease
6. Reducing negative contact between people and animals, vermin or insects
7. Reducing the negative impact of dust
8. Controlling the temperature of the living environment
9. Reducing trauma (or minor injury) around the house and living environment.

These healthy living practices have a palpable impact on health status and outcomes. Implementing healthy living practices can present a real challenge for many communities with many obstacles, in particular a lack of access to resources (e.g. equipment, materials, machinery, knowledge etc).

Kullari Regional Environmental Health Services, a funded program division of Nirrumbuk Aboriginal Corporation, has developed a close working relationship with the Djarindjin Community. This informal partnership has made steps to overcome the difficult reality of "no one organization, level of government or sector [holding] responsibility for environmental health" *(Aboriginal and Torres Strait Islander Health Performance Framework 2006 Report)*. Just as "the strategy seeks to streamline government responsibilities and better coordinate all parties" *(Aboriginal and Torres Strait Islander Health Performance Framework 2006 Report: Determinants of Health, Environmental Factors),* the relationship developed between the Djarindjin Community, it's governing body and Kullari Regional Environmental Health Services has seen the open flow of information and discussion increase, with a strong core of trust. The result has been the inception of and collaboration on a number of environmental and living condition projects, with the outcome of significantly improved environmental health for the community as a whole.

Djarindjin Community and the governing body, Djarindjin Aboriginal Corporation, initially worked with Nirrumbuk and Kullari Regional Environmental Health Services to establish a 'Health and Housing' project. This project was education-based and supported through one-off funding from the Office of Aboriginal Health. The project was developed with key input from the community's Housing Officers and Nirrumbuk's Environmental Health Educator. A series of environmental health and 'health hardware for housing' education sessions were delivered on community for community members.

The Community Housing Officers advocated for at least one resident per house to attend (preferably the primary tenant), with the main focus being how to maintain functioning health hardware in the home. Links between environment, living conditions, healthy homes and personal/community health were included in the training. The relevance of maintaining housing and infrastructure was highlighted in terms of health, and information was partnered with the respective roles and responsibilities defined by tenancy agreements.

The Health and Housing Education progressed to raise community awareness of local health, environment and living conditions. This increased awareness triggered further collaboration between the two organizations, with the Community Council committing finance and Kullari Regional Environmental Health providing in-kind support for a number of projects, resulting in significant improvements to environment and living conditions. These projects are summarised below.

Kullari Regional Environmental Health was invited to partner with the community's existing Tidy Town program in order to further raise awareness of the importance of dog health. This included newsletter articles, a more detailed focus in the Health and Housing education program, posters, and a Gorrna Illa competition. Dog spaying was conducted over two days, with the support of the Environmental Health Team. The Community Council covered the veterinary fee, and utilized the spaying program as a component in the introduction of a two-dog per house policy. This project and

partner projects are detailed below in the following case study.

As an extension of the Tidy Town collaboration, Kullari Regional Environmental Health assisted with the design and construction of 'dog-proof' community bins and re-modelling a recreational shed into a breeze-way, creating a shady and sheltered community meeting place.

Creating a cool & shaded community meeting place

Community confidence in the Environmental Health Team increased with our strong, on the ground presence and through the successful implementation of short projects, providing practical outcomes, and tangible benefits for community members. With confidence and new depth of environmental health knowledge three major projects were developed, all having potential to positively to impact on health status of Djarindjin community members. These projects were investigating waste management and recycling options, pest management for housing and the community road upgrade.

Djarindjin is located off of the Cape Leveque Road, two hundred kilometres north of Broome. Adjacent to the ocean, and separated from the beach by sand dunes, the community roads were mostly deep sand and difficult to negotiate – for cars and people alike. This created access difficulty for the community members in every day tasks; such as getting to the school, the office, the shop or the clinic. Dust could also be a problem, with fine sand thrown up by vehicles and wind. In partnership with the Djarindjin Aboriginal Corporation and on a cost recovery basis, Kullari Regional Environmental Health Services completed road works to create a solid road base (by removing sand and replacing with compacted pindan and gravel).

Djarindjin Traditional Owners, CEO and Kullari Regional Environmental Health

The result of this project has been a marked decrease in dust and an increase in ease of access throughout the community. One of the most visible results and constant reminder of improvement has been the use of the new road by parents with prams and the community kids. The children have been able to move their bike, scooter and skateboard riding out from the house veranda and into the community – smiles all round!

Trying out the new road!

The Community has had a focus of improving their living environment for some time; this can be seen through their ongoing commitment to the Tidy Towns project, the openness to environmental health initiatives and the use of existing momentum to take action. In many communities, one of the main obstacles to improving environment and living conditions is the access to resources – often this is in the form of complete funding and access to appropriate expertise. Through the links between environmental health and waste, and Kullari Regional Environmental Health Services and the Djarindjin Aboriginal Corporation's respective roles in waste management, options for improving waste management and implementing recycling were investigated.

Kullari Regional Environmental Health Services had provided feedback to the Shire of Broome on the needs of the regions discrete Aboriginal communities. As part of the Shires tender and contract process for metal recycling in the area. This consultation process has led to a new contract and service provider, which will now see metal recyclers access the Dampier Peninsula and the local discrete Aboriginal communities. The Environmental Health Team introduced the new service provider (CMA Recycling) to the area and to the Djarindjin community, and facilitated discussions for metal recycling options - from tin cans to building and construction waste, through to the breakdown of car parts and car crushing. The project evolved and the partnership expanded to include an on-site induction to recycling for the Community Waste Management Worker (on-site at CMA Recycling in Port Hedland) and Kullari Regional Environmental Health Services transporting tin cans and/or similar metal via backload to Broome, in an effort to see the recycling effort remain economically viable. Recycling bales are now placed through out the community, and with continued promotion and program success the load of waste to landfill should be significantly reduced overall. This project will continue to develop, with the benefits being a reduction of loose waste in the community, less litter to be scavenged by animals, a reduction in flies, an increased awareness of waste and recycling, an increase

in life of landfill (with the associated environmental benefits) and an overall increase in community pride. A recent outcome of this project was the community's success in winning the Tidy Town Regional Award for Waste Management and Recycling. Waste management processes are a key community and housing service that assists in improving hygiene, environment and living conditions. This in turn, becomes a preventative health measure contributing towards reducing the burden of infectious disease.

The partnership between the Djarindjin Housing Office and Kullari Regional Environmental Health Services has recently progressed to include pest management for the community homes. The Djarindjin community are financing pesticide and basic equipment to target cockroaches and Singapore ants (which attack both food items, plastic and wiring in the home), and the pesticide-trained Environmental Health staff are applying the treatments. Pre-application information has been provided to each household detailing how to prepare for the treatment, as well as non-chemical measures to prevent both pests. The Environmental Health Workers are utilising the opportunity to provide informal education, face to face, on the best practice to discourage cockroaches and ants from the house.

Treating houses for cockroaches and ants

Due to the ongoing presence of Kullari Regional Environmental Health within the area and increase in profile, the service was able to provide assistance to the Department of Housing and Works and their contractor as part of an emergency response to loss of water for the community outstation, Ngamakoon. The community had been without access to water and carting drinking water from Djarindjin for a number of weeks. While the Department of Housing and Works had organized access to a neighbouring bore, due to the remote location and lack of easy access to appropriate equipment and machinery, the Environmental Health Team provided assistance to the contractor by clearing a track to lay the new water line. While the community has experienced on-going water related issues for an extended period of time, the impact of assistance from Kullari Regional Environmental Health was that on approval of new water supply by Department of Housing & Works, the outstation was able to have access to water, prior to the weekend and at a time of increased population – restoring access to functional housing and the associated water utility.

Kullari Regional Environmental Health Services has been able to make a positive impact on the environment and living conditions, with the partnership of the Djarindjin Community. Although there is no statistical data to correlate the project outcomes directly with the Aboriginal and Torres Strait Islander Health Performance Framework, it is reasonable to expect to see a continuation in the improvement of community health (through improvements to the living environment) and a decrease in associated infection and infectious disease, with positive impact on health status and outcomes.

The evolution of environmental health at Djarindjin is largely due to the partnership between Kullari Regional Environmental Health with Housing Officers and the initial impact of Health and Housing education; an increase in confidence and community awareness through short and tangible projects; and a continued on-the-ground presence. The environmental health improvements and completed projects were possible through the Djarindjin community's willingness to commit and the Environmental Health Teams ability to support the community with appropriate resources, including equipment, machinery and expertise.

An additional outcome has been the communities increased willingness to approach the different members of the Environmental Health Team with their health concerns, examples have included advice for hygiene and odour concerns in the community members own home; wastewater overflows in the house; tackling children's sickness; and talking to Elders about living with lots of dogs.

The partnership is looking forward to new challenges and projects, with the aim of further improving environmental health within the region.

Case Study – Healthy Dog Program for Indigenous Communities

The Aboriginal and Torres Strait Islander Health Performance Framework documents measures of performance against health status and outcomes, the determinants of health and health system performance. The relationship between health, housing and hygiene are consistently incorporated as relevant to health status and outcomes. Living conditions and environment are documented as key elements in the determinants of health. One of the nine Healthy Living Practices, referenced under the Health Performance Framework Measure '2.01 Access to functional housing with utilities' is 'reducing negative contact between people and animals, vermin or insects'.

Day Three – Thursday 14 May

For a number of years Kullari Regional Environmental Health Services has implemented a dog health and population control program for the regions discrete Aboriginal communities. This program has been included in the routine environmental health services in recognition of the impact of community dog populations on community health. While dogs have a strong and positive role in community life, dog populations can also negatively impact on community health. With large dog populations there is an increase in camp dogs (with no singular owner), a reduction in food availability, increase in dog fights and noise, a proportion of 'cheeky' dogs and dog bites, and an increase bin and rubbish tip scavenging.

Through studies conducted by Murdoch University and the University of Sydney, it has been demonstrated that dogs including companion dogs, carry a number of zoonotic diseases. Examples include giardia, cryptosporidium, salmonella and worms (e.g. hookworm, roundworm, tapeworm). Dog populations particularly unhealthy dogs and those living in close quarters with humans, have been attributed to spread of skin infections. This is due to the introduction of skin lesions on humans from scabies, flea and tick bites (and the associated scratching) and as carriers of the bacteria streptococcus. The impact of bacterial skin infection for Aboriginal and Torres Strait Islander communities is referenced throughout the Health Status and Outcomes detailed in the Report against Aboriginal and Torres Strait Islander Health Performance Framework Measures (e.g. including reasons for hospitalisation, acute rheumatic fever and rheumatic heart disease, end stage renal disease, children's hearing loss).

The community and environmental health impacts of large and unhealthy dog populations was incorporated in a community-based Housing and Health education project, delivered by Kullari Regional Environmental Health Services. The education project was developed in collaboration with the Djarindjin Community Housing Officers, and aimed to raise community and housing tenant awareness of the link between housing, personal and community health, and the respective roles and responsibilities of both Housing Office and the tenant. The Community Housing Officer advocated for at least one person per house attend the education sessions, with preference for the primary tenant. The community members and the Housing Officers gained an increased awareness and knowledge of the link between health and living conditions, which led to the decision to improve the community management of dog health and population.

The Housing Officers consulted with Kullari Regional Environmental Health Services to establish an action plan to address the community concerns. Initially dog health articles were included in community newsletter and Djarindjin's Gorrna Illa (Deadly Dog) Competition was held as part of the monthly Tidy Town Awards. The Environmental Health Team judged entrants on dog health, including a lack of mange (scabies), lack of infected sores and ticks, a healthy weight with shiny coat, and a friendly temperament that listens to their owner (i.e. comes when called). Gorrna Illa Prizes were presented at the monthly community barbeque, along with other Tidy Town awards.

As interest in dog health and population control measures grew, Djarindjin Community Council passed that the housing tenancy agreement would include a two dog per house policy. It was agreed that at policy commencement, a 'grandfather clause' for owners with more than two dogs could register all their dogs, but could not increase their dog numbers with 'new' companion animals and over time, could not replace any dogs beyond the 'two dogs per house' maximum. The Housing Officer gathered data including house number, tenant, number of dogs, sex of dog and whether the owner wanted any dogs euthanased or spayed.

Kullari Regional Environmental Health Services organised a dog spaying program with the local Broome Veterinary Hospital. In recognition of the community-based trial, Broome Veterinary Hospital agreed to subsidise their fees and charges, and bill based on a daily rate. The Environmental Health Team provided in-kind and resource support (e.g. providing transport and accommodation for veterinary staff, while the community covered the two day veterinary fee). The community's municipal service shed was converted into a surgical studio by the Environmental Health Team and Veterinary Staff. This included building temporary pre-operation and post-operation observation cages, setting up a sterilising unit, ensuring the operating table was well equipped and had enough light for procedures and potable water for cleaning.

On the day, the environmental health workers & the rest of the Kullari team were actively involved in the process. This included collection and return dogs, assisting with preparation of animals for operation, giving post operation care to animals, cleaning and sterilising surgical equipment, and explaining post-operation home care instructions to owners. Through out the two days, the local radio announcer for BRACs broadcast reminder messages to the community about the dog de-sexing and micro-chipping, encouraging people to make use of the service. The combined effort of the community, Djarindjin Housing Officers, Broome Veterinary Hospital and Kullari Regional Environmental Health Team lead to a highly successful project with positive outcomes.

The dog spaying program was held over two days, resulting in eighteen female spays and two male spays. The community had elected to give priority to female sterilisation, in the interests of reducing the number of litters born and the dog population over time. Based on veterinary projection, this de-sexing program has prevented the potential for a hundred and eighty (180) puppies being born annually (i.e. this is based on a female dog having an average litter of five puppies, twice per year). The reduction in the community dog numbers has the potential to result in a healthier dog population (through greater access to food, reduced dog fights, ease of administering routine healthy dog program to capture entire dog population). When coupled with the existing healthy dog program and treatment, there is a marked reduction in the potential for transmission of zoonotic disease within the community.

The dog micro-chipping component of the project was conducted by Kullari Regional Environmental Health Services, with the assistance of the Djarindjin Housing Office. A total of fifty-six (56) companion dogs were micro-chipped. Micro-chip information has been stored on a local database (for ease of access and use for the environmental health team and Djarindjin community) and registered against the national database. This process is to assist the Djarindjin Community Office, and Housing Officers to monitor

the dog population against their Tenancy Agreements and the two-dog per house policy.

Part of the success of the program can be attributed to the community's confidence in the Kullari Environmental Health Team. The discussion in the Aboriginal and Torres Strait Islander Health Performance Framework (Health System Performance Measure 3.09 Aboriginal and Torres Strait Islander Australians in the health workforce), references the inherent community trust born from employing Aboriginal and Torres Strait Islander Australians in the health workforce. All Environmental Health Workers, the Environmental Health Educator and the Director/Manager of Environmental Health Services are local Aboriginal people, who have lived and worked in the region for many years and hold a strong connection with the community. Utilising local knowledge, existing relationships and the inherent community confidence led to an engaged community and allowed the expansion of the dog health program to run smoothly, with no major hurdles arising.

As a result of the success of the dog health education, dog spay and micro-chipping program the Djarindjin community has decided to continue with Djarindjin's Gorrna Illa Program. This will include on-going education through school projects, raising community awareness (utilizing newsletters, the Tidy Town projects and local BRACs radio) and a continuation of the dog spay days (on an annual basis).

The on-flow affect of Djarindjin's Gorrna Illa Program, has been the neighbouring communities up-take of the project. Ardyaloon (One Arm Point) recently held a two-day dog spay program with the Environmental Health Team and Broome Veterinary Hospital, with similar statistical results (13 female and 7 male dogs de-sexed). Beagle Bay Community has referred to their Steering Committee and Reference Group for funding support. Similarly the Bidyadanga community has recently embarked on a three year research program (which includes dog spaying) partnering with AMRRIC, University of Sydney, Kullari Regional Environmental Health Services and Broome Veterinary Hospital to investigate the link between dog health and infectious disease, with the project including a dog spaying component.

This case study show cases a highly accessible service, which was developed through response to community need. The project has now expanded to be part of the continuous or cyclic program undertaken by Kullari Regional Environmental Health Services and the communities which continue to support the program. Many environmental health projects such as this are directly linked to primary health (status and outcomes). Utilising responsive consultation during project development, this project and others similar to it, address community health concerns in an effective and appropriate manner, and with minimal expenditure. The program demonstrates a sustainable preventative measure to improve the overall health of Aboriginal and Torres Strait Islander Australians.

FOR MORE INFORMATION

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