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Perceptions of Drinking Water Quality in First Nations Communities and General Population

FINAL REPORT

Ce rapport est également disponible en français

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EXECUTIVE SUMMARY

Health Canada (HC), in collaboration with Indian and Northern Affairs Canada, assists First Nations in ensuring safe drinking water in their communities. Part of the challenge facing HC is the role of perception of the members of First Nations communities with regards to the safety of their drinking water. Water treatment, monitoring and testing are ineffective if people don't believe that their water is safe to drink and are using alternative sources, such as bottled water, instead of that provided by the community. The purpose of this research is to gain insight into the views of the First Nations on-reserve population on the quality of the water to which they have access on reserves. This will help to assess the effect of current on-reserve water quality programs and allow us to compare perceptions of water quality to those living in other small communities. The major objective is to find out how people feel about the safety of their water, and whether there has been a change in this perception since the implementation of the First Nations Water and Wastewater Action Plan (FNWWAP) in order to measure how effective programs are (whether through increased communication, education or actual improvement of facilities, treatment and monitoring) in increasing people's confidence in and use of the water provided by the community.

The study involved the collection of a brief (seventeen minute) interview with roughly 700 residents of First Nations communities and (fifteen minute interview) with 706 residents of other small communities (not on a reserve) with populations of less than 5,000, which are not bordering a large urban area. In addition to the randomly selected 700 cases with First Nations residents, an additional 200 cases were completed were residents of communities that had experienced a Drinking Water Advisory (DWA) in the previous 12 months. First Nations respondents were screened for recollection of a DWA in their community in the previous 24 months. Common questions were used to assess perceptions of water quality, safety, changes over time and uses of filtered, unfiltered and bottled water, as well as incidence and frequency of DWA and, in the case of First Nations residents, recall of public service announcements addressing DWAs on the radio. Results are national in scope and were collected by telephone from February 3 to March 5, 2011.

MAIN FINDINGS

Results highlight the difference in confidence levels between First Nations and other residents when it comes to the quality of their water. First Nations residents are less positive about the quality of the water they receive than are residents of other small communities. Fewer than half of First Nations residents rated the quality of their drinking water as good, which is considerably lower than the 65 per cent of residents of other small communities (i.e., the general public) who provided the same positive rating about their own water. In fact, one-quarter of First Nations residents consider their drinking water quality to be poor, whereas a much smaller proportion of residents of other small communities provided the same type of negative rating of their water. There is considerable difference in perception of water quality based on water source. Those using piped in water report considerably greater confidence than households using wells as the main source of water (54 per cent versus only 32 per cent of well water households giving their water a positive rating and 44 per cent of well water households giving their water a bad rating). Comparison to results in 2007 and

2009 suggests, however, that perhaps the perceptions around water quality have improved steadily over time for First Nations in the worst cases, given that somewhat fewer today (25 per cent) say that the quality is poor, compared with the 33 per cent who provided this rating of the water quality in 2007, and (to a lesser extent) the 27 per cent in 2009.

In terms of safety, results were marginally more positive; whereby three in ten First Nations residents view their tap water supply as very safe, and four in ten think it somewhat safe. Nonetheless, nearly three in ten feel that their water is either somewhat or very unsafe. Again, there is considerable difference in views about safety of their water based depending on the water source used. Those relying on water that is piped in are much more likely to feel safe about their water (78 per cent feel very or somewhat safe) compared with households using wells for their water (53 per cent feeling very or somewhat safe, and 22 per cent feeling very unsafe). Considerably higher proportions of residents of other small communities perceive their tap water supply to be safe (88 per cent saying somewhat or very safe, compared with 71 per cent of residents on reserves). Results suggest a slight improvement since 2007 and 2009 for First Nations on-reserve (62 per cent said that their water was somewhat or very safe in 2007; 69 per cent in 2009).

Among First Nations residents living on-reserve, the region they are located in, their proximity to other communities, and the population size, along with whether they have had any Drinking Water Advisories (DWAs) (currently or in the past) each have linkages to perceptions of the quality and safety of water on their reserve. This is also true of the number of individuals in the home which contribute to a sense of vulnerability, as they tend to increase concerns about water quality and safety.

The presence of pollutants and/or mineral content was noted by one-third of First Nations respondents as the reason they think their water supply is unsafe. A comparison against the responses of residents of other small communities suggests that First Nations residents are considerably more likely to suspect outdated or unsafe treatment procedures and facilities for the quality of their water (21 per cent of First Nations who consider their tap water unsafe compared with only seven per cent of the same segment of the general public). Other members of the general public are slightly more apt to blame flooding and runoff for poor water quality in small communities.

Two in five First Nations residents believe that their water quality has remained the same over the past five years. Just slightly fewer believe that the water is now safer than it was; however, one in five judge the water to be less safe to drink than it was five years ago. The general public, on the other hand, are much less apt to point to a deterioration in their water quality over the last five years. Results for First Nations communities show no change in the number of residents who judged their water to be very or somewhat unsafe.

In terms of what would make First Nations on reserve feel safer about their tap water quality, water filtration/treatment and/or utilities infrastructure topped the list, according to one in four. This was followed by more frequent water quality testing. These options were also the top two cited by other members of the general public in small communities.

When prompted specifically about the types of information that would help to reassure them about their tap water quality, nine in ten First Nations residents living on-reserve each said that more information about water quality testing procedures/frequency of testing or the acceptable levels in tap water, or information about the quality of tap water on their reserve, would make them feel safer. Eight in ten also wish to know more about what to do in case of a Drinking Water Advisory (DWA), as well as being provided with a telephone number or website they could access to check on the current quality of their reserve's tap water. Compared to residents of other small communities, there is a higher demand among First Nations reserve residents for more information about quality of tap water on their reserve, water quality testing procedures/frequency of testing, what to do in the case of a DWA and a telephone number or website that would allow them to check current quality of tap water on their reserve. Numbers of First Nations residents on-reserve wanting more specific information have increased by an average of ten percentage points since 2009.

First Nations residents are generally less apt to use their tap water across all applications compared with residents of other small communities. They are most likely to use their tap water for brushing teeth and washing food, followed by its use in cooking and, to a lesser extent, coffee or tea preparation. It is less frequently used for drinking or for food preparation that involves mixing ingredients with water. And these are less frequently used applications on-reserve relative to the usage in other small communities (in the general public). In most cases, there is a slight decrease of a few percentage points in use of tap water for individual applications on-reserve since 2009, with the most notable increase occurring in coffee and tea preparation and cooking.

Only one in four residents on-reserve uses purely unfiltered water for drinking. Usage of unfiltered water increases to just under half of residents in its application for food and beverage preparation, such as water for use as an ingredient in food preparation or for coffee or tea preparation. It increases again for cooking, washing food, and brushing teeth. Residents on reserves are more likely than residents of other small communities to use bottled water or a combination of bottled and filtered water for all applications explored in the survey.

One in five First Nations people living on-reserve said that they use bottled instead of tap water because they prefer the taste or smell of bottled water, or because they don't trust their tap water. Among the general population, most respondents said they use bottled water instead of tap water because they prefer the taste or smell, or because it is more convenient/easier.

More than four in ten First Nations people living on-reserve indicate that they have been or are currently under a Drinking or Boil Water Advisory. This is compared with just over one in four residents in other small communities. In fact, seven per cent of residents on-reserve reported a Drinking Water Advisory at the time or within a few weeks of the survey collection (in February/early March).

One-third of First Nations people on-reserve who reported a DWA within the past eight months also reported that they recall hearing a public service announcement on the radio, most of them saying that they found the announcement useful. Three in ten have seen a door hanger addressing DWAs on their reserve, with nine

in ten saying that they found the information on the door hanger be useful. Half indicated that they have seen a poster discussing DWAs. Of those who have seen the poster, most found it to be useful.

Just over half of First Nations residents and four in ten members of the general public say they feel safe as a result of chlorine being added to tap water. Similarly, one-half of First Nations people and four in ten members of other small communities support the addition of chlorine to drinking water. Among those who oppose it, just over half of First Nations residents cite a concern over chlorine's effect on health. These concerns include lack of knowledge of the effects of chlorine on health (19 per cent), the belief that it is detrimental to health (17 per cent) and that it is poisonous (17 per cent). A dislike of the taste of chlorine (17 per cent) also registers as a reason for opposition among those who oppose chlorine. Health concerns are less pronounced among those in smaller communities in the general population. Those in this group are more likely to cite their belief that nothing needs to be added (31 per cent) or that they don't like the taste (27 per cent).

Both the taste and smell of chlorine in water are cited as elements that First Nations and other small community residents notice. The majority of both respondent groups say they notice a difference in the taste of water that has chlorine in it compared to water without the chemical and more than half of each group says they don't like the taste. Seven in ten First Nations and the general public also notice the difference in smell of chlorinated water. In fact, roughly six in ten First Nations and half of other community residents have looked into alternate sources of water. First Nations residents are less likely to have sought out alternate sources of water due to its smell than due to its taste, although just under half have, as are four in ten residents of the general public.

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SOMMAIRE

Santé Canada (SC), en collaboration avec Affaires indiennes et du Nord Canada, aide les Premières nations à s'assurer de la salubrité de l'eau potable de leurs collectivités. Le rôle que joue la perception des membres des collectivités des Premières nations en ce qui concerne la salubrité de leur eau potable représente l'un des défis auxquels SC doit faire face. L'épuration, la surveillance et l'analyse de l'eau s'avèrent inefficaces si les gens ne croient pas que leur eau est bonne à boire et s'ils utilisent d'autres sources, comme de l'eau embouteillée, au lieu de celle fournie par leur collectivité. Le but de la présente recherche est de mieux comprendre les points de vue des résidants des Premières nations vivant dans une réserve en ce qui concerne la qualité de l'eau à laquelle ils ont accès dans leur propre réserve. Cela aidera à évaluer l'effet des programmes actuels touchant la qualité de l'eau dans les réserves et nous permettra de comparer leur perception de la qualité de l'eau avec celle de résidants d'autres petites collectivités. Le principal objectif de la présente étude consiste à savoir comment les gens se sentent par rapport à la salubrité de leur eau et à découvrir s'il y a eu un changement dans leur perception depuis la mise en œuvre du Plan d'action pour l'approvisionnement en eau potable et le traitement des eaux usées des Premières nations (Plan d'action pour l'eau), de manière à mesurer l'efficacité des programmes (que ce soit par le biais d'une communication accrue, de formations ou d'une amélioration réelle des installations, de l'épuration et de la surveillance) et à augmenter la confiance des gens à l'égard de l'eau et de l'utilisation de l'eau fournie par la collectivité.

L'étude a comporté la collecte de renseignements par le biais d'un court entretien (de dix-sept minutes) avec environ 700 résidants des collectivités des Premières nations et (de quinze minutes) avec 706 résidants d'autres petites collectivités (autre que des réserves) de moins de 5000 habitants, qui ne sont pas situées à proximité de grands centres urbains. Aux 700 répondants choisis au hasard dans les collectivités des Premières nations se sont ajoutés 200 autres résidants de collectivités ayant fait l'objet d'un Avis concernant la qualité de l'eau potable (AQEP) au cours des 12 derniers mois. Les répondants des Premières nations étaient invités à dire s'ils se souvenaient d'un avis de cette nature qui aurait été émis dans leur collectivité au cours des 24 derniers mois. Des questions communes ont été utilisées pour évaluer la perception de la qualité et de la salubrité de l'eau, des changements survenus au fil du temps, de l'utilisation d'eau embouteillée, d'eau filtrée et d'eau non filtrée, ainsi que de l'incidence et de la fréquence des AQEP et, dans le cas des résidants des Premières nations, le souvenir de messages d'intérêt public à la radio au sujet d'avis de ce genre. Les résultats, de portée nationale, ont été recueillis au téléphone du 3 février au 5 mars 2011.

PRINCIPAUX RÉSULTATS

Les résultats mettent en évidence la différence remarquable entre les niveaux de confiance des membres des Premières nations et les autres répondants lorsqu'il est question de la qualité de leur eau. Les résidants des Premières nations sont moins positifs que les résidants d'autres petites collectivités à l'égard de la qualité de l'eau à laquelle ils ont accès. Les résidants des Premières nations sont un peu moins de la moitié

à trouver que leur eau potable est de bonne qualité, ce qui est de beaucoup inférieur au 65 p. 100 des résidants d'autres petites collectivités (c.-à-d. le grand public) qui ont évalué leur eau de façon positive. En fait, le quart des résidants des Premières nations considèrent que leur eau potable est de mauvaise qualité, alors que la proportion des résidants d'autres petites collectivités qui ont jugé leur eau de façon négative est beaucoup plus faible. Il existe une différence considérable dans la perception de la qualité de l'eau selon la provenance de cette eau. Ceux dont l'eau potable provient d'un aqueduc se montrent beaucoup plus confiants dans sa qualité que les ménages dont l'eau provient surtout d'un puits (54 p. 100 évaluent leur eau de façon positive, contre seulement 32 p. 100 des ménages dont l'eau provient d'un puits, alors que 44 p. 100 des ménages dont l'eau provient d'un puits jugent qu'elle est de mauvaise qualité). Toutefois, une comparaison avec les résultats de 2007 et de 2009 donne à penser que les perceptions entourant la qualité de l'eau se sont peut-être améliorées de façon constante au fil du temps pour les Premières nations, dans les pires cas, puisque la proportion de ces résidants qui affirment aujourd'hui que leur eau est de mauvaise qualité est plus faible (25 p. 100) que les 33 p. 100 qui avaient ainsi évalué la qualité de leur eau en 2007 et (dans une moindre mesure) les 27 p. 100 qui étaient de cette opinion en 2009.

En ce qui concerne la salubrité de l'eau, les résultats sont légèrement plus positifs : trois résidants des Premières nations sur dix considèrent leur eau de robinet comme très salubre et quatre sur dix croient qu'elle est plutôt salubre. Néanmoins, près de trois répondants sur dix sont d'avis que leur eau est plutôt insalubre ou très insalubre. Les divergences d'opinion quant à la salubrité de l'eau sont encore considérables selon la provenance de l'eau. Ceux dont l'eau provient d'un aqueduc sont beaucoup plus portés à avoir confiance dans sa qualité (78 p. 100 la jugent très salubre ou plutôt salubre) que les ménages qui tirent leur eau d'un puits (53 p. 100 la jugent très salubre ou plutôt salubre tandis que 22 p. 100 la jugent très insalubre). Les résidants d'autres petites collectivités estiment dans des proportions beaucoup plus élevées que leur eau de robinet est salubre (88 p. 100 la qualifient de plutôt salubre ou très salubre, comparativement à 71 p. 100 des résidants des réserves). Les résultats laissent entendre une légère amélioration depuis 2007 et 2009 pour les membres des Premières nations vivant dans une réserve (62 p. 100 ont affirmé que leur eau était plutôt salubre ou très salubre en 2007, et 69 p. 100 en 2009).

Parmi les membres des Premières nations vivant dans une réserve, la région dans laquelle ils se trouvent, leur proximité avec d'autres collectivités, la taille de leur population ainsi que le fait d'avoir reçu ou non des AQEP (maintenant ou par le passé) sont tous associés à la perception qu'ils ont de la qualité et de la salubrité de l'eau dans leur réserve. Il en va de même pour le nombre de personnes dans un ménage, lequel contribue au sentiment de vulnérabilité puisqu'il tend à accentuer les préoccupations concernant la qualité et la salubrité de l'eau.

La présence de polluants et/ou de minéraux est mentionnée par le tiers des répondants des Premières nations comme la raison pour laquelle ils estiment que leur eau est insalubre. Une comparaison avec les réponses des résidants d'autres petites collectivités donne à penser que les résidants des Premières nations sont beaucoup plus susceptibles d'attribuer la mauvaise qualité de leur eau à des procédés et des installations de traitement des eaux désuets et non sécuritaires (21 p. 100 des membres des Premières nations qui jugent leur eau de robinet insalubre, contre seulement 7 p. 100 du même segment dans le grand

public). Les autres membres du grand public sont plus enclins à attribuer la mauvaise qualité de l'eau dans les petites collectivités aux inondations et aux écoulements divers.

Deux résidants des Premières nations sur cinq estiment que la qualité de leur eau est demeurée la même au cours des cinq dernières années. Ils sont un peu moins nombreux à penser que l'eau est maintenant plus salubre; cependant, un répondant sur cinq croit qu'il est moins sécuritaire de boire l'eau maintenant qu'il y a cinq ans. Le grand public, par contre, est beaucoup moins susceptible d'affirmer que la qualité de l'eau s'est détériorée au cours des cinq dernières années. Dans les collectivités des Premières nations, les résultats ne révèlent pas de changement quant au nombre de résidants qui jugent que leur eau est très insalubre ou plutôt insalubre.

Quant à savoir ce qui rassurerait les membres des Premières nations vivant dans une réserve sur la qualité de leur eau de robinet, pour un répondant sur quatre c'est la filtration et l'épuration de l'eau et/ou l'infrastructure et les installations qui viennent en tête de liste. Des analyses plus fréquentes de la qualité de l'eau viennent au second rang. Ces deux options sont également celles que retiennent le plus souvent les membres du grand public dans d'autres petites collectivités.

Invités à préciser quels genres de renseignements pourraient les rassurer quant à la qualité de leur eau de robinet, neuf membres des Premières nations vivant dans une réserve sur dix voudraient davantage d'information sur les procédés d'analyse de la qualité de l'eau/la fréquence des analyses, les niveaux acceptables dans l'eau de robinet ou de l'information sur la qualité de l'eau de robinet dans leur réserve. Huit répondants sur dix voudraient également être mieux renseignés sur ce qu'il faut faire lors de l'émission d'un AQEP et avoir un numéro de téléphone à composer ou un site Web à consulter afin de vérifier la qualité actuelle de l'eau de robinet de leur réserve. Comparativement aux résidants d'autres petites collectivités, la demande est plus forte parmi les membres des Premières nations vivant dans une réserve pour davantage d'information sur la qualité de l'eau de robinet dans leur réserve, les procédés d'analyse de la qualité de l'eau et la fréquence des analyses, la marche à suivre lors d'un Avis concernant la qualité de l'eau potable ainsi qu'un numéro de téléphone à composer ou un site Web à consulter afin de vérifier la qualité actuelle de l'eau de robinet dans leur réserve. Le nombre de membres des Premières nations vivant dans une réserve qui réclament davantage de renseignements particuliers a augmenté de dix points de pourcentage en moyenne depuis 2009.

Les résidants des Premières nations sont généralement moins susceptibles que ceux d'autres petites collectivités d'utiliser leur eau de robinet pour toutes les fonctions mentionnées dans l'étude. Ils sont plus susceptibles d'utiliser leur eau de robinet pour se brosser les dents et laver des aliments, puis pour cuisiner et, dans une moindre mesure, pour faire du thé ou du café. L'eau est moins fréquemment utilisée pour être bue ou pour préparer des aliments qu'il faut additionner d'eau. Et ces fonctions sont moins fréquentes dans les réserves que dans d'autres petites collectivités (parmi le grand public). Dans la plupart des cas, on note dans les réserves depuis 2009 une légère baisse de quelques points de pourcentage dans l'utilisation de l'eau de robinet pour chaque fonction mentionnée, et l'augmentation la plus marquée concerne son utilisation pour faire du thé et du café ainsi que pour cuisiner.

Seul un résidant des réserves sur quatre ne boit que de l'eau non filtrée. L'utilisation d'eau non filtrée augmente jusqu'à un peu moins de la moitié des résidants pour la préparation de nourriture et de boissons, comme pour préparer des aliments additionnés d'eau et pour faire du thé ou du café. Elle augmente également lorsqu'il est question de cuisiner, de laver des aliments et de se brosser les dents. Les résidants des réserves sont plus susceptibles que ceux d'autres petites collectivités d'utiliser de l'eau embouteillée ou une combinaison d'eau embouteillée et d'eau filtrée et non filtrée pour toutes les fonctions abordées dans le sondage.

Les membres des Premières nations vivant dans une réserve ne sont qu'un sur cinq à affirmer qu'ils utilisent de l'eau embouteillée au lieu de l'eau du robinet parce qu'ils préfèrent le goût ou l'odeur de l'eau embouteillée ou parce qu'ils se méfient de leur eau de robinet. Parmi les membres du grand public, la plupart des répondants disent utiliser de l'eau embouteillée au lieu de l'eau du robinet parce qu'ils préfèrent son goût ou son odeur ou, encore, parce que c'est plus commode ou facile.

Plus de quatre répondants des Premières nations vivant dans une réserve sur dix affirment qu'ils font présentement ou ont déjà fait l'objet d'avis concernant la qualité de l'eau potable ou d'un avis d'ébullition de l'eau. Dans les autres petites collectivités, il s'agit d'un peu plus d'un répondant sur quatre. En fait, 7 p. 100 des répondants qui vivent dans une réserve faisaient l'objet d'un AQEP au moment de répondre au sondage ou quelques semaines auparavant (en février ou au début de mars).

Le tiers des membres des Premières nations vivant dans une réserve qui ont déclaré avoir fait l'objet d'un AQEP au cours des huit mois précédents ont également déclaré se rappeler avoir entendu un message d'intérêt public à la radio et, pour la plupart, avoir trouvé ce message utile. Trois répondants sur dix ont vu dans leur réserve un carton à la porte annonçant un AQEP, et neuf sur dix affirment avoir trouvé utiles les renseignements que renfermait ce carton. Ils sont la moitié à avoir vu une affiche où il était question d'un AQEP. La plupart de ceux qui ont vu l'affiche l'ont trouvée utile.

Un peu plus de la moitié des résidants des Premières nations et quatre membres du grand public sur dix disent se sentir en sécurité du fait qu'on a ajouté du chlore à leur eau de robinet. De même, la moitié des résidants des Premières nations et quatre membres d'autres petites collectivités sur dix se disent favorables à ce qu'on ajoute du chlore à l'eau potable. Parmi ceux qui s'y opposent, les résidants des Premières nations sont un peu plus de la moitié à s'inquiéter des effets du chlore sur la santé. Les sujets d'inquiétude comprennent le manque de connaissance sur les effets du chlore sur la santé (19 p. 100), la conviction que c'est nocif pour la santé (17 p. 100) et que c'est poison (17 p. 100). Le mauvais goût du chlore (17 p. 100) constitue aussi une autre raison pour les opposants à l'ajout de chlore. Parmi le grand public, les répondants des petites collectivités sont moins inquiets pour leur santé. Les membres de ce groupe sont plus portés à répondre qu'il n'est pas nécessaire d'ajouter quoi que ce soit à l'eau (31 p. 100) ou que le goût du chlore leur déplaît (27 p. 100).

Tant le goût que l'odeur du chlore dans l'eau sont des éléments que les membres des Premières nations et les résidants des petites collectivités disent remarquer. Les répondants des deux groupes affirment en majorité que l'eau traitée au chlore goûte différemment de celle qui ne contient pas de ce produit chimique, et ils sont plus de la moitié dans les deux groupes à dire qu'ils n'en aiment pas le goût. Sept répondants sur dix, tant des Premières nations que du grand public, remarquent également une différence dans l'odeur de l'eau traitée au chlore. En fait, environ six membres des Premières nations sur dix et la moitié des résidents d'autres petites collectivités ont recherché d'autres sources d'approvisionnement en eau. Les résidants des Premières nations sont moins susceptibles d'avoir cherché d'autres sources d'approvisionnement à cause de l'odeur de l'eau chlorée qu'à cause de son goût, même si un peu moins de la moitié l'ont fait, tout comme quatre répondants du grand public.

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1. INTRODUCTION

1.1 CONTEXT AND RATIONALE

Health Canada (HC), in collaboration with Indian and Northern Affairs Canada, assists First Nations in ensuring safe drinking water in their communities. Health Canada works in partnership with First Nations communities to ensure drinking water quality monitoring programs are in place in communities south of 60 degrees parallel, as per the *Guidelines for Canadian Drinking Water Quality* (GCDWQ). Environmental Health Officers (EHOs) work in collaboration with Community-Based Drinking Water Quality Monitors (CBWMs) to review and interpret drinking water quality results for bacteriological parameters. Drinking water quality results are then disseminated to First Nations communities and other appropriate stakeholders. The department facilitates water sampling and testing through the on-going support and training of CBWMs. Quality assurance and quality control are maintained by EHOs. If a community does not have a CBWM, with the community's permission an EHO will sample and test drinking water quality for microbiological parameters.

EHOs are also responsible for recommending, orally and in writing, to the appropriate parties that a Drinking Water Advisory (DWA) should be issued in the event of unsatisfactory drinking water sampling results in water distribution systems with five or more connections. It is then the responsibility of Chief and Council to issue the DWA, orally and in writing, to all users of the drinking water, government health officials, elected officials, the media, and the general public. The EHO is available to provide Chief and Council advice, assistance and recommendations.

Part of the challenge facing HC is the role of perception of the members of First Nations communities with regards to the safety of their drinking water. Water treatment, monitoring and testing are ineffective if people don't believe that their water is safe to drink and are using alternative sources, such as bottled water, instead of that provided by the community. Therefore, it is necessary to find out how people feel about the safety of their water, and whether there has been a change in this perception since the implementation of the First Nations Water and Wastewater Action Plan (FNWWAP), formerly known as the First Nations Water Management Strategy (FNWMS), in order to measure how effective programs are (whether through increased communication and education or actual improvement of facilities, treatment and monitoring) in increasing people's confidence in and use of the water provided by the community.

Perceptions around water quality and safety clearly have a strong impact on decisions about how to use tap water. Most residents on reserves use their tap water for a wide range of everyday applications, such as tooth brushing, food preparation and cooking. Depending on whether the tap water is or is not safe, there are households either drinking unsafe tap water, or households consuming bottled water who need not do so.

1.2 RESEARCH OBJECTIVES

The purpose of this research is to gain insight into the views of the First Nations on-reserve population on the quality of the water to which they have access on reserves. This will help to assess the effect of current on-reserve water quality programs and allow us to compare perceptions of water quality to those living off reserve.

Specific objectives include:

- Assess perceived satisfaction with quality, quantity and safety of drinking water quality on reserves;
- Understand purposes for which tap water is used on reserves;
- Determine the sources used in supplying First Nations households with water;
- Understand awareness and views about use of chlorine in drinking water as well as support for fluoride treatment of drinking water;
- Compare responses to similar research conducted in 2007 and 2009; and
- Evaluate the perception of drinking water quality of First Nations living on-reserve compared to the general population living in similarly small communities.
- Evaluate the view of First Nations residents living in communities that report having had drinking water advisories versus those who report not having such advisories

1.3 METHODOLOGY

During the data collection, the survey team collected 706 interviews with residents of small communities in the general public, as well as 700 cases among residents of First Nations reserves across the country. Stratification was conducted to increase the representation of smaller regions of the country. In the small communities where members of the general public were interviewed, the community size was capped at 5,000 residents. As well, any communities that were located within or immediately next to (i.e. within 1 km) Census Metropolitan Areas (CMAs) were also excluded, assuming that they would have access to urban water filtration systems. All reserve communities were included in the First Nations sample, including 17 per cent that have more than 5000 residents. From the two sample frames built (i.e., all communities that are not classified as a reserve and are not located near a large city, with no more than 5,000 residents, and all reserve communities), a randomly selected number of households were drawn for the telephone survey samples. All participants were asked if they consider themselves an Aboriginal person and if they live on a reserve for at least six months a year. In the analysis, 10 cases that were originally collected in the general public sample were re-coded to the First Nations sample of on-reserve residents, based on the answers of these respondents. Each of the two samples yields a level of precision of up to +/-

3.7 per cent for the sample overall at a 0.05 confidence level (i.e., 19 times out of 20) and +/-8 to 10 per cent for most sub-groups that could be isolated in the analysis (including regions).

In addition to the core 700 cases of First Nations residents randomly sampled, an additional 200 cases were completed with residents of communities that had experienced a DWA in the previous 12 months. Samples households were further asked if they had experienced a DWA in their communities in the previous 24 months in order to be considered in-scope of this oversample of DWA cases. These oversample cases were not include in the main analysis of overall findings for First Nations or in the sub-group analysis of differences by First Nations segment of the core sample. They were included with the 700 core cases, however, in an examination of differences of results in First Nations communities that had and had not experienced a DWA. This ensured that this element of the analysis had sufficient DWA cases to detect reasonable differences within these two sub-sets (DWA/non-DWA).

The survey data were collected over roughly one month from February 3 to March 5, 2011. Data collection relied on standard monitoring and call-back techniques (i.e., rotation of sample to different times and days of the week and multiple call-backs). The average length of the interview was 15 minutes for the general public and 18 for First Nations residents on reserves (including a few additional questions targeted for only residents on reserves). The survey collection obtained a response rate of 15 per cent for the general public and 21 per cent for First Nations residents on reserves. Appendix B presents details of these calculations.

Prior to conducting the general population survey, the survey instrument was tested with 20 participants, with changes to the survey questionnaire being made after the first 5 to 10 and then again after 10 interviews, to ensure that any changes were addressing particular issues experienced in the interviews. These related to small wording changes and skip logic. Test cases were included in the final data set and analysis. The final survey instruments can be found in Appendices A and B.

Survey data were weighted regionally to reflect population figures for First Nations people living on-reserve and for small communities with populations of under 5,000 (i.e., the general public). Survey data were also coded for open ended responses and tabular results were generated to test for differences between residents of First Nations and residents of other small communities in the general public. Results for First Nations residents on reserves were also generated in tables by key segments of the sample, including demographic characteristics (e.g., gender age, education, presence of children), characteristics of the community (e.g., size, proximity to a large centre, frequency of Drinking or Boil Water Advisories) and perceptions about the water (e.g., quality, safety, change over time).

Some questions are repeated measures from a survey conducted with First Nations residents in 2009 and also 2007[1]. Where applicable, survey results from 2009 and 2007 are featured in the charts and discussed in the report. Additional questions related to chlorine and fluoride in drinking water were added in 2010 and have no comparison from 2009 or 2007.

[1] Custom questions included on the 2007-2008 EKOS Research First Nations On-Reserve Syndicated Study.

1.4 SAMPLE CHARACTERISTICS

The following is a comparison of the sample for First Nations residents on reserves as well as the sample of residents of other small communities under 5,000 (in the general public).

Characteristics of the Samples

	FN	GP
Province		
British Columbia	22%	10%
Alberta	12%	8%
Saskatchewan	15%	10%
Manitoba	17%	7%
Ontario	15%	10%
Quebec	10%	33%
Atlantic Region	5%	19%
Yukon/NWT/Nunavut	4%	2%
As far as you know, how far is your community from the closest major city (in kilometres)?		
1-50 km	33%	45%
51-100 km	17%	23%
Over 100 km	34%	25%
Gender		
Male	39%	39%
Female	61%	61%
In what year were you born? (What is your age?)		
<25	6%	2%
25-34	14%	10%
35-44	16%	13%
45-54	26%	21%
54-64	20%	26%
65+	14%	27%

◇	◇ FN	◇ GP
◇ **What is the highest level of education that you have completed?**		
◇ Grade school	◇ 23%	◇ 8%
◇ High school	◇ 26%	◇ 33%
◇ College	◇ 20%	◇ 29%
◇ University	◇ 28%	◇ 30%
◇ **How many people typically live in your household?**		
◇ 1	◇ 12%	◇ 19%
◇ 2	◇ 24%	◇ 44%
◇ 3-4	◇ 33%	◇ 28%
◇ 5+	◇ 29%	◇ 7%
◇ **How many of those who typically live in your household are children?**		
◇ None	◇ 48%	◇ 71%
◇ 1-2	◇ 33%	◇ 23%
◇ 3+	◇ 18%	◇ 5%
◇ **Age of Child(en)**		
◇ Under 2	◇ 29%	◇ 18%
◇ 2-5 years old	◇ 36%	◇ 28%
◇ 6-11 years or older	◇ 52%	◇ 40%
◇ 12 years or older	◇ 49%	◇ 51%
◇ **How many people over the age of 64 live in your household?**		
◇ None	◇ 71%	◇ 68%
◇ 1+	◇ 28%	◇ 32%
◇ **Excluding any young children or seniors over the age of 64, is there anyone living in your household who is vulnerable to illness?**		
◇ Yes	◇ 22%	◇ 12%
◇ No	◇ 74%	◇ 86%
◇ **Is your house used as a daycare for children who do not live in your household?**		
◇ Yes	◇ 5%	◇ 2%
◇ No	◇ 93%	◇ 98%

◇	◇ FN	◇ GP
◇ **Household with Vulnerability (Inc. y**oung children/day care, senior citizen, or someone with illness)		
◇ Yes	◇ 42%	◇ 38%
◇ No	◇ 58%	◇ 62%

As shown in the table of sample characteristics, there is a greater concentration geographically in the west for the on-reserve sample, and First Nations communities are more often located large distances from major urban centres. The gender split is similar between the two samples. The First Nations sample is considerably younger than the one collected in other small communities in the general public. The level of education is also considerably lower in First Nations communities, particularly in the proportion with grade school. The number of people in the household is often higher in First Nations communities, with three in ten (29 per cent) reporting five or more household members. Twice as many households report children in them in First Nations communities relative to other rural communities, and children are often younger (with more than twice as many of households with children reporting at least one child under than age of two). Including young children, seniors, the presence of a daycare in the home and other vulnerable members of the household, marginally more First Nations households on-reserve can be classified as a 'vulnerable household[2]'. Survey results show that perceptions of water quality vary based not only on the characteristics of the community and incidence of Drinking or Boil Water Advisories, but also on the characteristics of the household, including whether or not they have young children, vulnerable household members, and are generally considered a 'vulnerable household'.

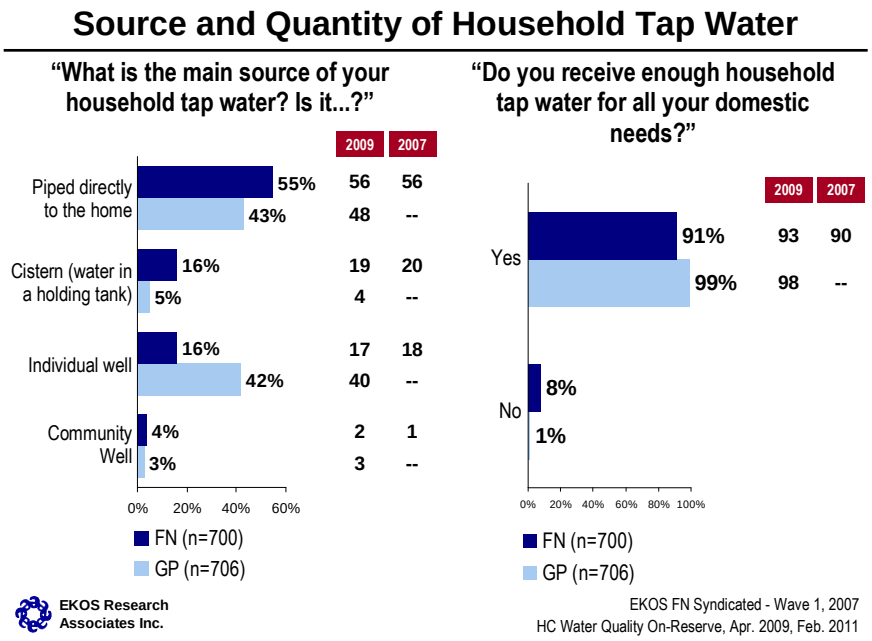
[2] Vulnerable household is computed on the basis of having young children (or operation of a day care), a senior citizen, or someone who is otherwise considered vulnerable to illness in the home.

2. WATER QUALITY

Study findings explore the perceptions of First Nations residents on reserves and compare them to the results of residents in other small communities (i.e., with populations under 5,000) in the general public. First Nations results are also compared over time to results collected in 2009 and, where applicable, 2007. Sub-group findings within the First Nations sample of residents living on-reserve are also provided. Survey findings examine overall perceptions of residents regarding the quality and safety of their water supply, as well as perceptions about the change in the quality and safety over time. Some elements of communications are also explored, including the type of information that would enhance confidence in the water supply and also recall of Drinking Water Advisory announcements in First Nations communities.

2.1 SOURCES OF WATER QUALITY

Over half (55 per cent) of First Nations people on-reserve indicate that their main source of household tap water is piped directly to the home. Other sources of tap water reported by First Nations respondents include a cistern (16 per cent), or an individual well (16 per cent). While these results have not changed significantly over time among First Nations residents, fewer residents of other small communities in the general public have their water piped directly to the home or through a cistern, and are much more apt than those on-reserve to use an individual well as their source of tap water. While nearly all (99 per cent) of the general population indicate they receive enough household tap water, 91 per cent of those on-reserve feel they have enough for all their domestic needs (within two points of the results for First Nations communities in 2009).



- First Nations residents on reserves in British Columbia (66 per cent) and Quebec (65 per cent) are more apt than those in other regions to report having their water piped directly to their home. Those in Alberta (29 per cent) are more likely than other areas of the country to have an individual well, while those in Saskatchewan (24 per cent) and Manitoba (23 per cent) are more likely than others to have a cistern as their tap water source. Of the First Nations residents in the survey sample, water piped into the home is reported marginally less often in reserve of more than 5,000 residents (50 per cent), compared to 57 to 61 per cent in reserves with fewer than 5000 residents). Individual wells are cited more frequently than elsewhere in communities with more than 5000 residents (26 per cent; a decrease of nine points from 2009).

2.2 Perceptions of Water Quality and Safety

Survey respondents were first asked to rate the quality of drinking water in their communities. Results highlight the difference in confidence levels between First Nations and the general public when it comes to the quality of their water. First Nations residents are less positive about the quality of the water they receive than are residents of other small communities. Half of First Nations residents rated the quality of their drinking water as good (49 per cent), which is considerably lower than the 65 per cent of residents of other small communities (i.e., the general public) who provided the same positive rating about their water. In fact, one-quarter of First Nations residents (25 per cent) consider their drinking water quality to be poor, and the same proportion (24 per cent) provided a more neutral (neither good nor bad) rating of the quality of

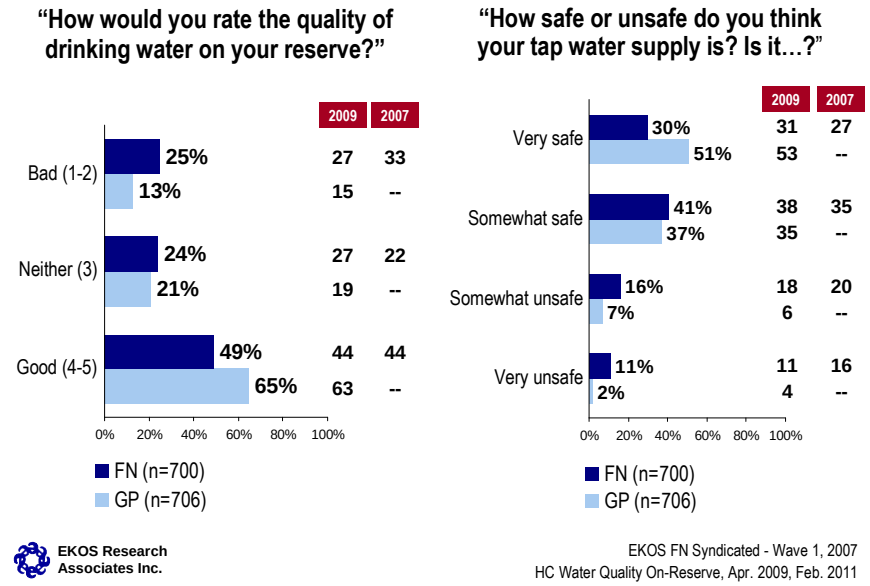
their drinking water on-reserve. Smaller proportions of residents of other general public small communities provided the same type of negative or neutral rating of their water.

These results are similar to results obtained among First Nations residents two years ago, in 2009. The comparison suggests, however, that perhaps the perceptions around water quality have improved marginally in the worst cases, given that fewer residents of reserves today say that the quality is poor, compared with the 27 per cent who provided this rating of the water quality in 2009 and one in three (33 per cent) in 2007. Positive ratings are also up by five percentage points.

In terms of safety, results were marginally more positive; whereby three in ten First Nations residents view the safety of their tap water supply as very safe (30 per cent) and four in ten (41 per cent) think it is somewhat safe. That said, more than one-quarter of reserve residents feel that their water is either somewhat unsafe (16 per cent) or very unsafe (11 per cent). By comparison, considerably higher proportions of residents of other small communities in the general public perceive their tap water supply to be safe (88 per cent saying somewhat or very safe, compared with 71 per cent of residents on reserves). Results are similar to 2009.

Again, while a comparison to the general public highlights a much greater problem on-reserve, results over time suggest an improvement since 2007, when 62 per cent said that their water was somewhat or very safe and 36 per cent said that it was unsafe (contrasted against 27 per cent today).

Water Quality and Safety



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HC Water Quality On-Reserve, Apr. 2009, Feb. 2011

Among First Nations residents living on-reserve, the region they are located in, their proximity to other communities, and the population size, along with whether they have had any Drinking Water Advisories (DWAs) (currently or in the past), each have linkages to perceptions of the quality and safety of water on their reserve. This is also true of the number of individuals and children in the home which contribute to a sense of vulnerability and increases concerns about water quality and safety.

- Reserve residents in Quebec (65 per cent) and in British Columbia (57 per cent) typically provide more positive ratings of their drinking water quality. Residents on reserves in the Atlantic region (44 per cent), Quebec (40 per cent), and those closest to a major city, as well as reserves that have not experienced any DWAs hold more positive perceptions of water safety than others do (rating their tap water supply as very safe). More positive responses about safety come from reserve residents who believe there has been improvement in the safety of their tap water over the last five years. In contrast, residents on reserves in Manitoba (38 per cent rate quality as good) and Alberta (31 per cent) are more critical of the quality of their drinking water, as are residents of the largest First Nations communities (i.e., with 5000 residents or more), where only 34 per cent rate it positively. Water safety is rated lowest in Alberta (16 per cent) and Manitoba (25 per cent).

- Reserve households with children under the age of five and those who have vulnerable individuals in their home are more critical of the quality of their drinking water. Similarly, households with children particularly where the children are young (i.e., under two) are slightly less apt to feel that their water is safe. This is also true of households with more than five occupants.

- Ratings of water quality and safety are typically more negative among residents on reserves in Alberta (41 per cent rate quality as poor and 16 per cent view tap water supply as very safe), and in the largest communities (i.e., with over 5000 residents) (36 per cent poor and 23 per cent very safe), as well as in reserve communities where they are currently or have recently had a drinking/boil water advisory (five per cent rate safety of water supply as very safe).

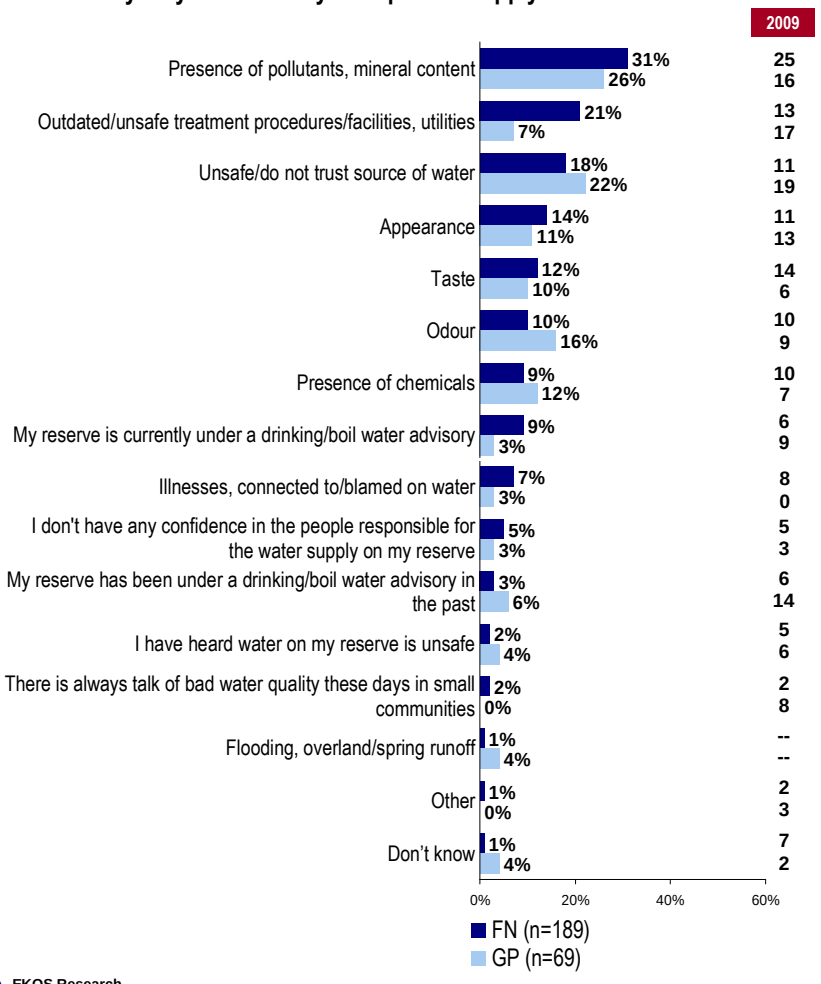
- Reserve residents with tap water piped directly to their homes are more likely to be satisfied overall with the quality (54 per cent view as good) and safety (37 per cent say very safe) of their tap water. Those with an individual well (44 per cent rate quality as bad and 22 per cent as very unsafe) or cistern (25 per cent rate quality as bad and 15 per cent as very unsafe) more often rate the quality and safety of their tap water poorly.

First Nations respondents who feel their tap water supply is unsafe (somewhat or very) were asked why they believe this to be the case. Top reasons were presence of pollutants (31 per cent), outdated/unsafe treatment procedures and facilities (21 per cent), and mistrust of the water source (18 per cent), followed by perceivable aspects of the water itself, such as appearance (14 per cent), taste (12 per cent) and odour (10 per cent).

A comparison against the responses of residents of other small communities suggests that First Nations residents are more likely to blame outdated or unsafe treatment procedures, facilities, and utilities, as well as the presence of pollutants. Members of the general public are more apt than First Nations residents of reserves to unsafe water source (22 per cent), odours (16 per cent) and the presence of chemicals (12 per cent), although the top reason cited by general public respondents was the presence of pollutants or minerals (26 per cent).

Reasons for Unsafe Water

"Why do you consider your tap water supply to be unsafe?"



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- First Nations residents of small reserves (less than 500 residents) are much more likely to suspect the safety of their tap water because their community is currently under a Drinking Water Advisory (20 per cent). First Nations residents on-reserve in Saskatchewan are more likely than those in any other region to suspect the safety of their water because of its taste (22 per cent). Those from larger First Nations communities are more likely to blame the odour of their water (21 per cent). Residents of more remote reserves and mid-sized reserves (with 1,000 to 5,000 residents) are most apt to have pointed to outdated or unsafe filtration infrastructures (27 to 30 per cent).

- First Nations women are also much more likely than male respondents to blame odour or taste of their water (15-16 per cent each). Those residents of reserves who are 35-44 are more likely than other age cohorts to say they do not have confidence in the people responsible for water in their community (12 per cent) or to point out the abundance of talk about bad water in small towns these days (eight per cent). The 55 to 64 First Nations age cohort is the most likely to have cited the presence of pollutants (44 per cent).

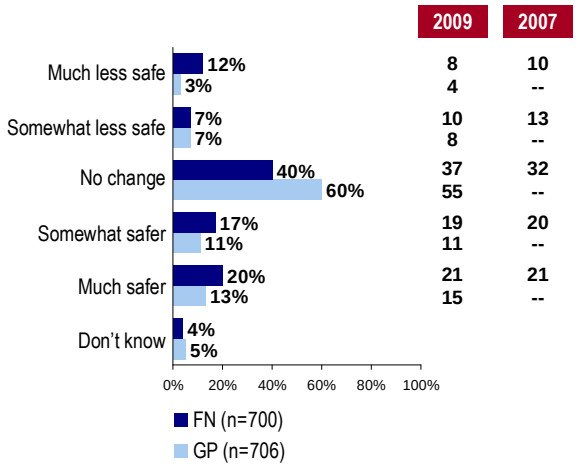
- First Nations residents saying that their water is unsafe were more apt to cite odour as their way of telling (18 per cent). Those saying that their water quality has not changed over time also more often point to odour (18 per cent) and taste (22 per cent). Those rating the quality of their water as poor were more apt than others to say it is the presence of pollutants that has them concerned (39 per cent).

- First Nations residents with piped water systems more often indicated presence of chemicals (16 per cent). Those with individual wells were the most likely to cite appearance (24 per cent). Those with cisterns most often said that they simply do not trust their water (41 per cent).

Respondents were also asked about their perception of any changes in water quality in the last five years and their perceived reasoning behind this decline/improvement. Four in ten First Nations residents believe that their water quality has remained the same over the past five years (40 per cent). More than one-third of First Nations respondents believe that their water is now safer than it was (17 per cent say somewhat safer, 20 per cent much safer). That said, just under one in five (20 per cent) judge their water to be less safe to drink than it was five years ago (seven per cent somewhat less safe, 12 per cent much less safe). The general public, on the other hand, are more apt to say there has been no change in their water quality over the last five years (no more or less safe to drink than five years ago) in comparison (reported by 60 per cent), although 10 per cent believe that their water has deteriorated over time. Results for First Nations communities have generally held since 2009, when results showed 18 per cent perceived their water supply to be less safe. Over the long term more are saying that there has been no change one way or the other since 2007 (40 per cent compared with 32 per cent in four years ago).

Perceived Change in Water Quality

"Would you consider your tap water to be more or less safe to drink than five years ago? Is it...?"



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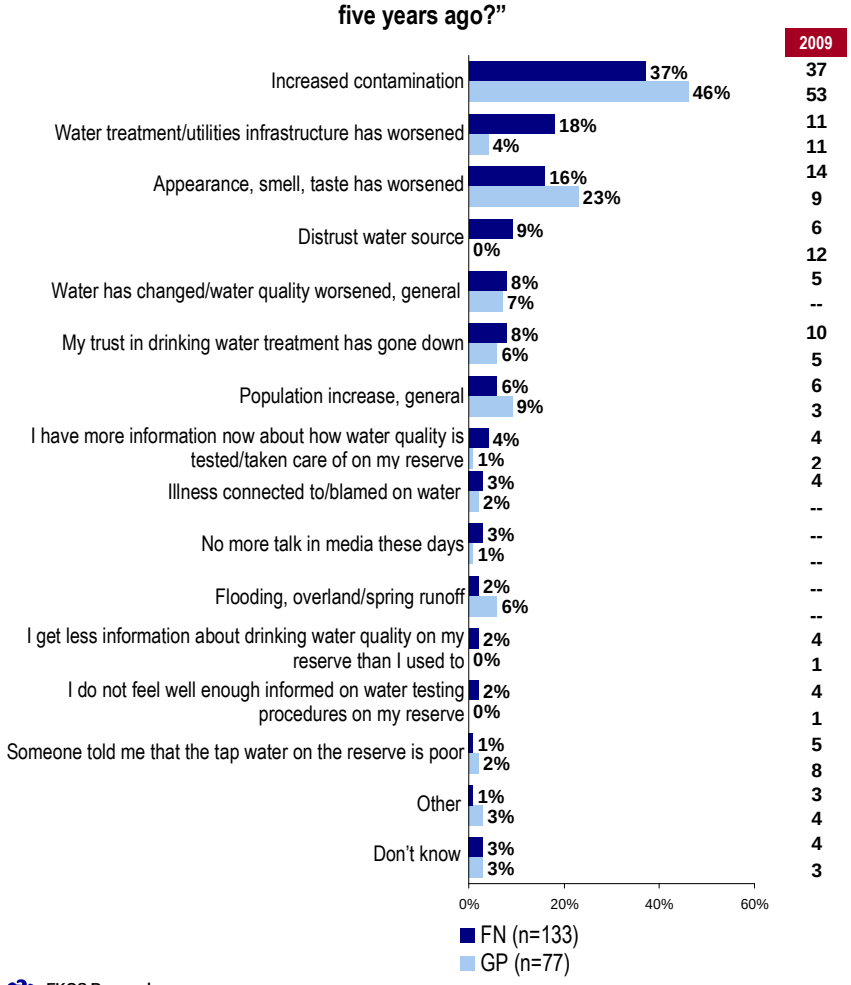
- More likely to consider their tap water to have deteriorated over time are those living in reserve communities that have currently or have recently had a DWA in place (33 per cent). Perceived deterioration of water quality also goes hand in hand with a general view that one's water is unsafe and of poor quality. In fact, 42 per cent of First Nations judging their water to be somewhat or very unsafe also report that their water quality has deteriorated over the last five years.
- Residents on reserves in Alberta are more apt than others across the country to say that their water has deteriorated over time (33 per cent).
- First Nations residents more apt to say their water quality has remained the same are within 50kms from a major city (45 per cent), as well as those who live on-reserve in Quebec (52 per cent).
- Reserve residents living in Saskatchewan (52 per cent) are more apt than those from other regions to view their tap water as safer than five years ago.

First Nations respondents who reported their tap water quality to be less safe to drink than five years ago were asked for their reasons for this. At the top of the list, more than one-third (37 per cent) identified increased contamination as the source of deterioration. Residents of other small communities in the general public considering their tap water as less safe today are even more apt to point to contamination as the problem (46 per cent of the general public noted this). First Nations on-reserve respondents were considerably more apt to say that their water treatment facilities/infrastructure has worsened (18 per cent said this, compared to four per cent of the general population) and to express distrust in their water source

(nine per cent, compared to zero in the general population). Worsening of water treatment facilities/ infrastructure has also increased among First Nations since 2009 when it was only cited by 11 per cent.

Reasons for Declining Water Quality

"Why do you consider your tap water to be less safe to drink than five years ago?"



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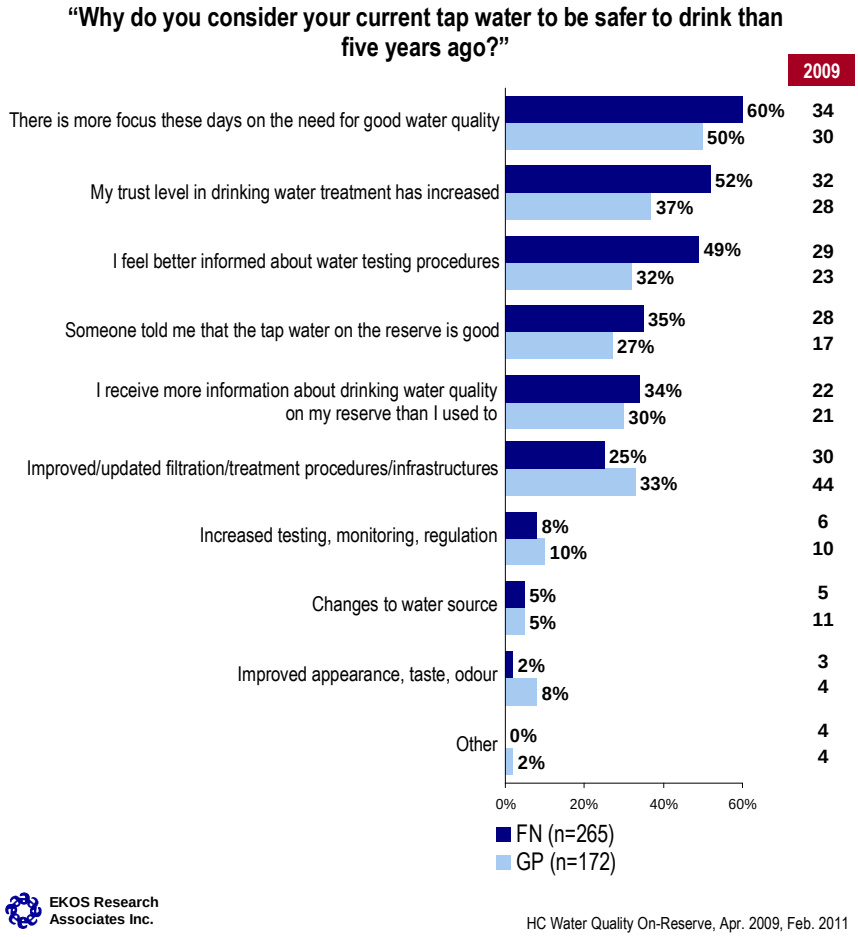
- Those residents living in reserve communities that are farther away from main urban centres are most likely to cite the worsening of facilities (26 per cent). Residents in closer First Nations communities point to a lack of trust over time (18 per cent).

First Nations respondents who felt their tap water quality to be safer to drink than five years ago were asked about their main reasons for this perceived increase in water quality. Six in ten (60 per cent) said that there is more focus these days on the need for good water quality. Half said that their trust level in drinking water treatment has increased (53 per cent), and that they feel better informed about water testing procedures (49 per cent). One-third of First Nations noted that someone had told them that the tap water (on the reserve) is good (35 per cent) or that they have received more information about drinking water quality (34 per cent). One-quarter (25 per cent) pointed to improvements in filtration, treatment procedures, and infrastructure. A handful of residents of reserves pointed to increased testing, monitoring, regulation; changes to water source; and improved appearance, taste, and odour as reasons behind their perceived increase in water quality.

There are two significant differences between the reasons provided for increasing water quality among the First Nations residents living on-reserve and those of the general public (living in a similarly small community). First, the general public were more likely to point to improved/updated filtration/treatment procedures/infrastructures as the foundation for feeling better about tap water today than five years ago. First Nations respondents, meanwhile, were more apt to report that there is more of a focus these days on the need for good water, that their trust in drinking water treatment has increased, and that they feel better informed about water testing procedures, or that someone told them it is good.

Reasons for Increasing Water Quality



- First Nations residents on reserves in Quebec (67 per cent) were marginally more apt to point to a greater trust in the treatment process than they used to have five years ago, and to say that they receive more information about drinking water quality (47 per cent).
- Those reserve residents between the ages of 25-34 (48 per cent) and 35-44 (46 per cent) were slightly more likely to say they receive more information about drinking water quality. Those reporting college-levels of education were more apt to point to improved filtration systems/infrastructure (31 per cent) relative to those with less education, as were those in the 45 to 54 age cohort. More vulnerable First Nations households (including those with young children, seniors or residents who are ill) were less likely to say they feel better informed, their trust has increased, there is now more focus on the need for good drinking water, and that they receive more information about water quality.

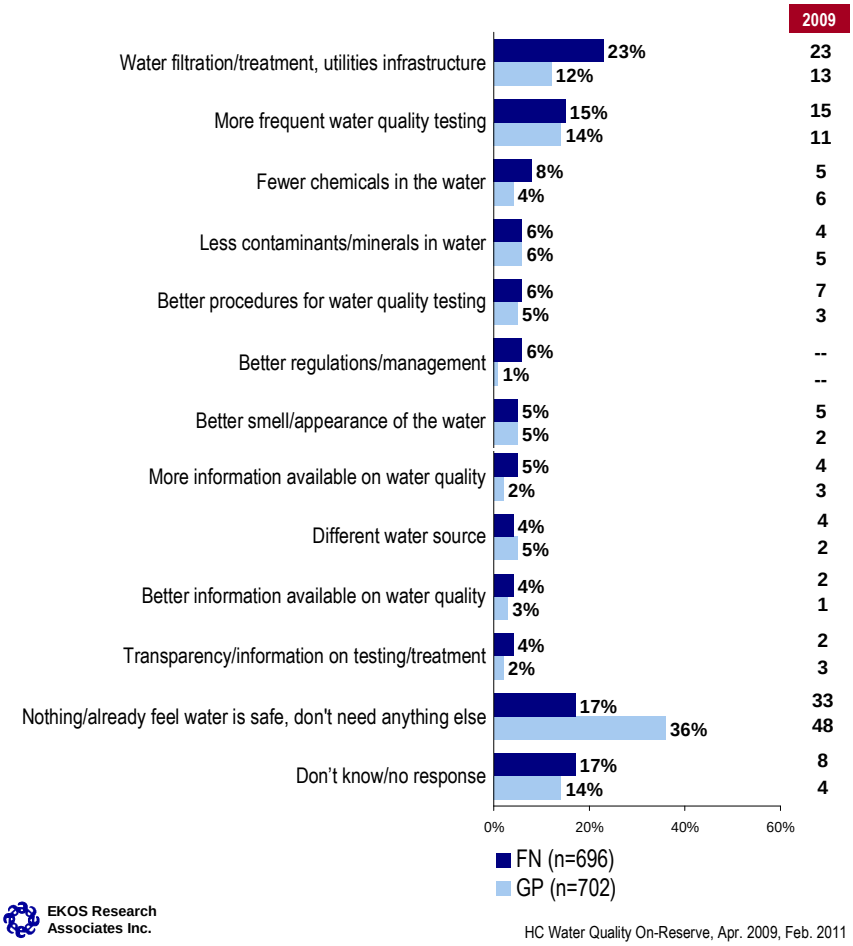
2.3 COMMUNICATIONS NEEDS REGARDING WATER QUALITY

Respondents were asked what would make them feel safer about their tap water quality (or even more safe, in the case of those who already think it is safe). At the top of the list among First Nations respondents was water filtration/ treatment and/or utilities infrastructure, cited by one in four (23 per cent), followed by more frequent water quality testing (15 per cent). Fewer than one in ten reserve residents said that better procedures for water quality testing would provide reassurance, and eight per cent noted fewer chemicals in the water, and a better smell or appearance of the water was noted by one in twenty as potential reassurance measures. One in twenty would feel safer about their tap water quality if more information was available on water quality, if there were less contaminants/minerals in water, or if they used a different water source. It should be noted that 17 per cent of First Nations respondents said that nothing was required as they already feel that their water is safe. In comparison, 36 per cent of other small community residents also said that no further reassurance was required.

The general public place considerably less emphasis placed on water filtration and infrastructure. Compared with 23 per cent of First Nations indicating improved water filtration as a source of comfort only 12 per cent of the general public said the same. Residents of other small communities were as likely to point to more frequent testing as residents of reserves (14 per cent, compared with 15 per cent of reserve residents). The other striking difference is that more than one in three (36 per cent of residents of other small communities) said that they already feel their water is safe.

Perceived Requirements for Reassurance

"What would make you feel (even) safer about your tap water quality?"



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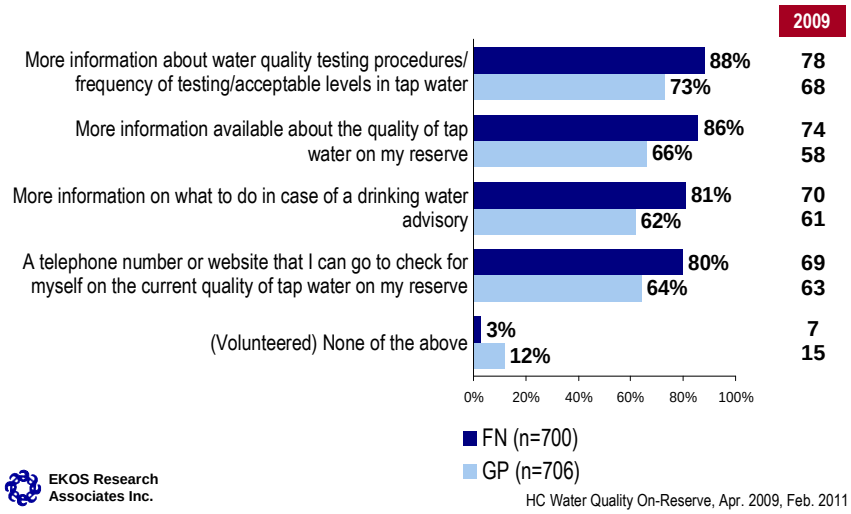
- Water filtration/treatment, and/or utilities infrastructure is more apt to make tap water quality safer according to First Nations residents on reserves who have had DWAs (29 per cent), and also those who had experienced three or more DWAs (38 per cent) in the past five years, those currently or recently under a drinking water advisory (40 per cent), in communities where the advisory has lasted three to four weeks (46 per cent) or longer (37 per cent).
- Water filtration/treatment, and/or utilities infrastructure were also cited more often as making tap water quality safer among residents of reserves in Alberta (32 per cent). Quebec reserve residents (29 per cent) were more likely than other regions to reply that nothing would make them feel safer as they already feel water is safe. Ontario reserve residents are more likely to say that more frequent water quality testing (23 per cent) and knowing why water is under an advisory (six per cent) will make them feel safer about their water quality.

- Those residents of reserves with more than five people in the household (30 per cent) and with three or more children in the household (37 per cent) are more likely to say that improved water treatment/filtration utilities and infrastructure would make them feel safer about their tap water.
- Reserve communities that have not had any previous DWAs (22 per cent), First Nations who consider their drinking water to be very safe (40 per cent), as well as those who view their tap water safety as having improved (20 per cent) or stayed the same (21 per cent) over the past five years are also less likely to need any further reassurance as they already feel water is safe.

Respondents were then asked about the types of information that would help to reassure them about their tap water quality. Almost nine in ten First Nations residents living on-reserve feel that more information about water quality testing procedures/frequency of testing or the acceptable levels in tap water (88 per cent), or more information about the quality of tap water on their reserve (86 per cent) would make them feel safer. Eight in ten reserve residents also wish to know more about what to do in case of a Drinking Water Advisory (81 per cent), as well as be provided with a telephone number or website they could access to check on the current quality of their reserves' tap water (80 per cent). Compared to residents of other small communities in the general public, there is a higher demand among First Nations reserve residents for more information in all areas surveyed (i.e., quality of tap water on their reserve, more information about water quality testing procedures/frequency of testing, what to do in the case of a DWA, and a telephone number or website that would allow them to check current quality of tap water on their reserve).

Perceived Requirements for Reassurance (Prompted)

"Please indicate which of the following would make you feel safer about your tap water quality." [Prompted list]



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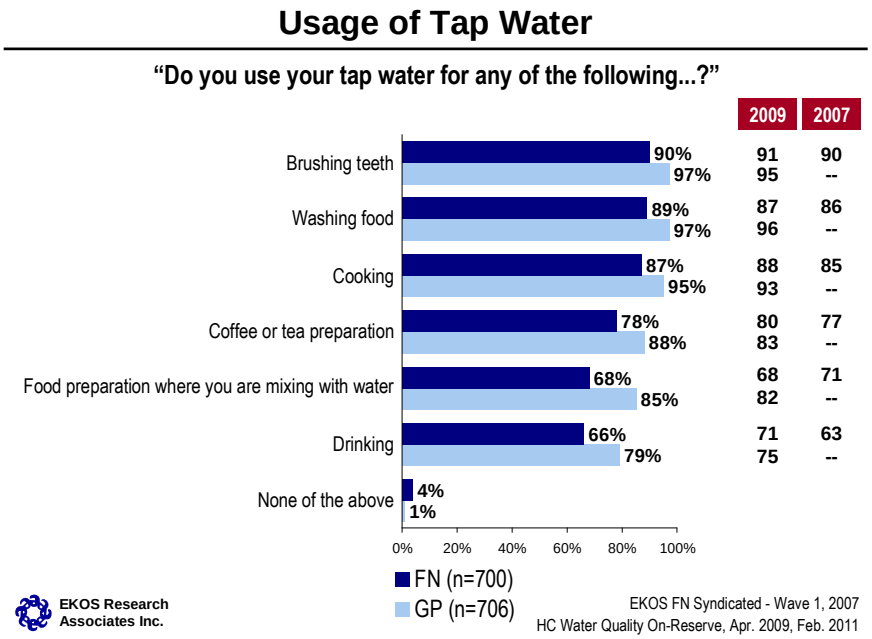
- First Nations residents on reserves in Alberta have a stronger demand for more information about water quality testing procedures (98 per cent) and more information about what to do in the case of a DWA (91 per cent).
- First Nations residents on reserves in Quebec express comparatively less demand than other regions for information about water quality testing procedures (78 per cent) and a telephone number or website with information on current water quality in their communities (73 per cent).
- Reserve households with five or more people in the household and three or more children are more likely than other households to want more information about water quality testing procedures (92 and 93 per cent, respectively).
- First Nations residents with only a high school education report the greatest demand for more information about the quality of tap water in their communities (92 per cent), while those with college level education and higher are less likely to want more of this information (82 per cent).
- First Nations residents who feel the quality of their drinking water is poor and/or their tap water supply is less safe are more apt to be looking for information in general.

3. WATER USAGE

The current chapter explores uses of tap water and frequency of using bottled or filtered water are also captured. Patterns of use are also profiled as well as a comparison to usage in 2009.

3.1 TAP WATER USE

First Nations residents are less likely to use their tap water across all applications compared with residents of other small communities. For example, tap water is used by most reserve residents for brushing teeth (90 per cent) and washing food (89 per cent). It is also used by most residents for cooking (87 per cent), and, to a lesser extent, for coffee or tea preparation (78 per cent). On the other hand, only two-thirds use tap water for drinking (66 per cent), or for food preparation that involves mixing ingredients with water (68 per cent). These are less frequently used applications on-reserve, relative to the usage in other small communities (in the general public), where 79 to 85 per cent use tap water for these purposes. In most cases, there is little change in use of tap water for individual applications on-reserve since 2009. The most notable change is in use of water for drinking which fell five points among First Nations, from 71 per cent.



- First Nations people on-reserve in British Columbia and Quebec (76 per cent from each) are more apt than those in any other region to report using tap water as an ingredient for food preparation, whereas residents in Manitoba are least likely to use tap water as an ingredient in food preparation (54 per cent) or for drinking (55 per cent). Saskatchewan reserve residents are also less likely (69 per cent) than others to use tap water when preparing coffee or tea. Residents of Quebec reserves are the most likely across the country to use their tap water for washing food (94 per cent). Residents of the smallest communities (population less than 500) also tend to use their tap water as an ingredient in food preparation more so than those in larger communities.
- Naturally, those on-reserve who use tap water for all uses explored in the survey are more likely to be comfortable with their quality and safety of water overall (rating the quality of drinking water in their community as good, the safety of the tap water as somewhat to very safe, and their tap water as safer today than five years ago).
- Those in reserve households that are more vulnerable are less apt to use tap water for all applications.

3.2 Use of Bottled and Filtered Tap Water

When asked whether respondents ever used bottled water for anything in their household, First Nations on-reserve residents (68 per cent) were more likely than residents of other small communities in the general public (40 per cent) to respond that they did.

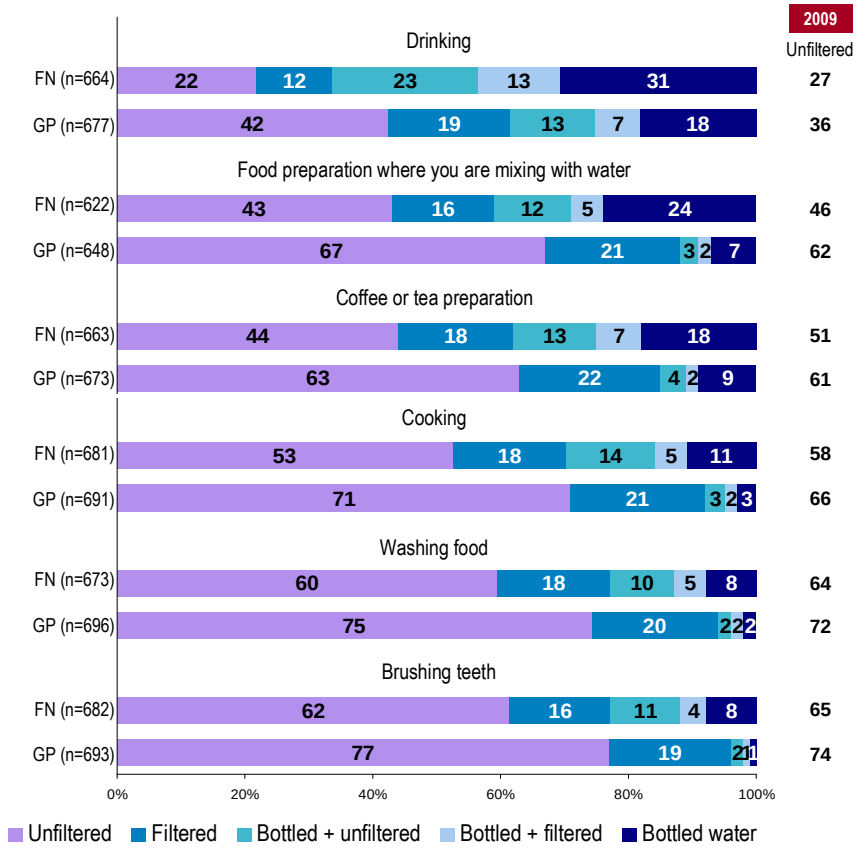
The analysis explored use of bottled versus filtered tap water versus unfiltered water across the six main applications under study. Three in ten (31 per cent) First Nations residents drink bottled water. Another 13 per cent drink a combination of bottled plus filtered water. Other sources of drinking water include both bottled and unfiltered (23 per cent), filtered only (12 per cent), or unfiltered only (22 per cent).

Usage of unfiltered water increases for food and beverage preparation, such as water for use as an ingredient in food preparation (43 per cent) or for coffee or tea preparation (44 per cent), and increases steadily for cooking (53 per cent), washing food (60 per cent), and brushing teeth (62 per cent). Even in these cases, however, fairly large proportions use only bottled or a combination of bottled and filtered water. This is fairly narrow for cooking, teeth brushing and washing food, with only eight to 11 per cent using bottled water alone, and another four to five per cent using a combination of bottled and filtered water. This climbs, however, for coffee/tea and food preparation, with 18 to 24 per cent of reserve residents using only bottled water, and another (7 and 5 per cent), using a combination of bottled and filtered water.

Residents of reserves are more likely than residents of other small communities to use a combination of bottled and filtered water for all applications explored in the survey. In general, use of unfiltered water has decreased slightly across all applications since 2009, although more so in coffee and tea preparation as well as in cooking, relative to other applications.

Filtered vs. Unfiltered Tap Water

"Is that filtered or unfiltered tap water in each of these cases...?"



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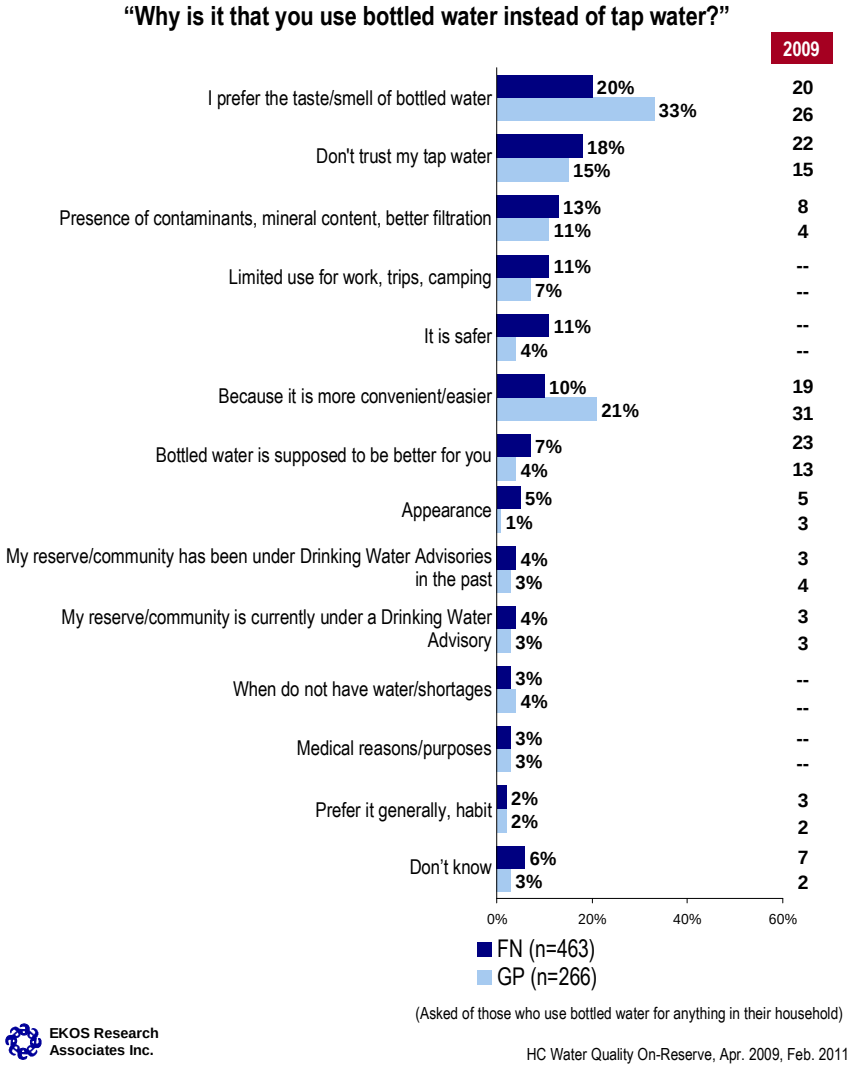
- First Nations people on-reserve in the Atlantic region are the most apt to use unfiltered water in a range of applications from brushing teeth (73 per cent) and washing food (70 per cent), to making coffee/tea (61 per cent) and even drinking (36 per cent). Similarly, residents of British Columbia are slightly more likely to use unfiltered water in washing food (53 per cent), for making coffee or tea (53 per cent), and for drinking (32 per cent).

- Those reserve residents who view their water as being of good quality and generally safe are considerably more likely to use unfiltered tap water, while those considering their water to be of poor quality and unsafe are more apt to use filtered and bottled water. Related to this, reserve residents served by piped water systems (who typically feel better about the quality and safety of their water) are also more apt to use filtered and unfiltered water, while those served by wells (who are far less confident; see pages 10 and 12 earlier in this report) more often rely on filtered water and bottled water.
- First Nations households with vulnerable persons in them are more likely to rely on bottled (and in some cases also filtered) water compared with those households with no vulnerable resident.

First Nations people living on-reserve provide a variety of reasons for using bottled instead of tap water. One in five said that they don't trust their tap water (18 per cent) or that they prefer the taste or smell of bottled water (20 per cent). One in six (13 per cent) choose bottled water because of the lack of contaminants and mineral content. One in ten said that bottled water is more convenient to drink (10 per cent), that it is safer (11 per cent) or that they use it for limited occasions (11 per cent) such as lunches or camping trips. Significantly more residents of other small communities in the general public reported that they prefer the taste or smell of bottled water (33 per cent) or the convenience (21 per cent), when compared with First Nations residents. A scattering of other reasons for using bottled water were also provided by residents on reserves, including that bottled water is supposed to be better for you, its appearance, that the reserve has had drinking water advisories in the past or is currently under a drinking water advisory, that they prefer it generally, or that it is a habit, or that they have a greater water supply with bottled water than tap water.

Reasons for Using Bottled Water Over Tap Water



- First Nations people living on-reserve in Saskatchewan are more likely than those in any other region to use bottled water because they don't trust their tap water (26 per cent). Residents on reserves in Manitoba are more apt to use bottled water because it is safer (17 per cent) or because of medical reasons (eight per cent). Ontario and Quebec reserve residents are more likely than others to use bottled water as it is more convenient and/or easier (18 per cent and 15 per cent, respectively). Residents of reserves in the Atlantic region are more likely to choose bottled water because they prefer the taste and smell (34 per cent). BC reserve residents are most likely to say that they use bottled water because their community has been under a water advisory in the past (10 per cent) or because of water shortages (eight per

cent). Residents of Alberta reserves are more likely to say they prefer bottled water generally (six per cent).

- As one might expect, First Nations residents who believe the quality of their water to be poor and/or unsafe are more apt to say they drink bottled water because they don't trust their tap water (33 per cent among those rating water as bad and 45 per cent among those saying it's unsafe). On the other hand, those reserve residents who believe their water to be of high quality more often reported that they use bottled water because it is more convenient (19 per cent among those rating their water quality as high). This is also the case with First Nations residents who see their water as unsafe (16 per cent). Those who are more positive about their water are also more inclined to say they used bottled water in limited applications (such as for trips or lunches) (17 and 21 per cent, respectively).
- Reserve households with young children (under 2) are more apt to say that they use bottled water for feeding the youngest members of the household (20 per cent).
- Those living in large reserves of 5000 residents or more are more apt to say they use bottled water instead of tap water because they don't trust their tap water (26 per cent), while those in the smallest communities (fewer than 500 residents) more often report reasons such as the presence of contaminants and the need for better filtration processes and infrastructure (17 per cent).
- Reserve households served by piped water systems more often than others say that they prefer the taste of bottled water (24 per cent). Those served by wells and cisterns are more likely than other households to say they don't trust the water (27 to 28 per cent).

4. DRINKING WATER ADVISORIES

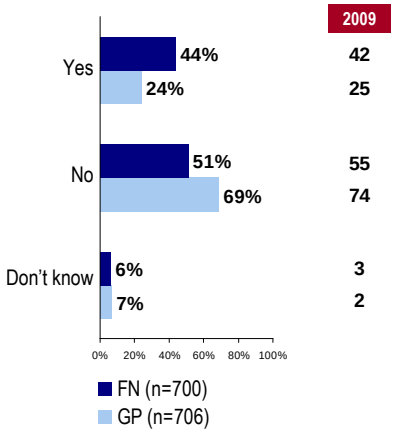
The following chapter explores the incidence and frequency of DWAs in respondent communities, as well as conditions of the advisories.

4.1 INCIDENCE AND INTENSITY OF ADVISORIES

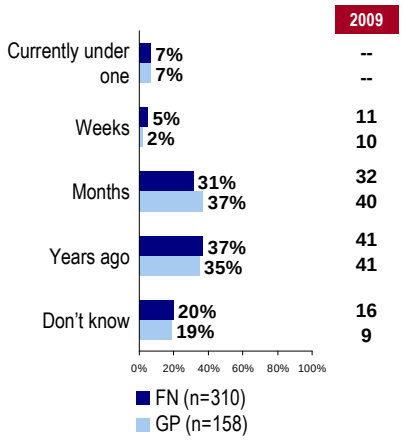
More than four in ten (44 per cent) First Nations people living on-reserve indicate that they have been or are currently under a Drinking or Boil Water Advisory. This is compared with 24 per cent of residents in other small communities in the general public. One in twenty (5 per cent) of residents on reserves reported a Drinking Water Advisory within the past few weeks. Three in ten (31 per cent) experienced their most recent DWA months ago, more than one-third (37 per cent) recall that the last DWA took place a year or more ago. In comparison, in terms of when the last DWA/BWA was experienced by the general public, this is rather similar to that which was experienced by those on-reserve although fewer within the general public were likely to have experienced a DWA/BWA within the last several weeks.

Drinking Water Advisories

"Has your reserve ever been or are you currently under a Drinking or Boil Water Advisory, as far as you know?"



"When was the last Drinking or Boil Water Advisory issued on your reserve?"



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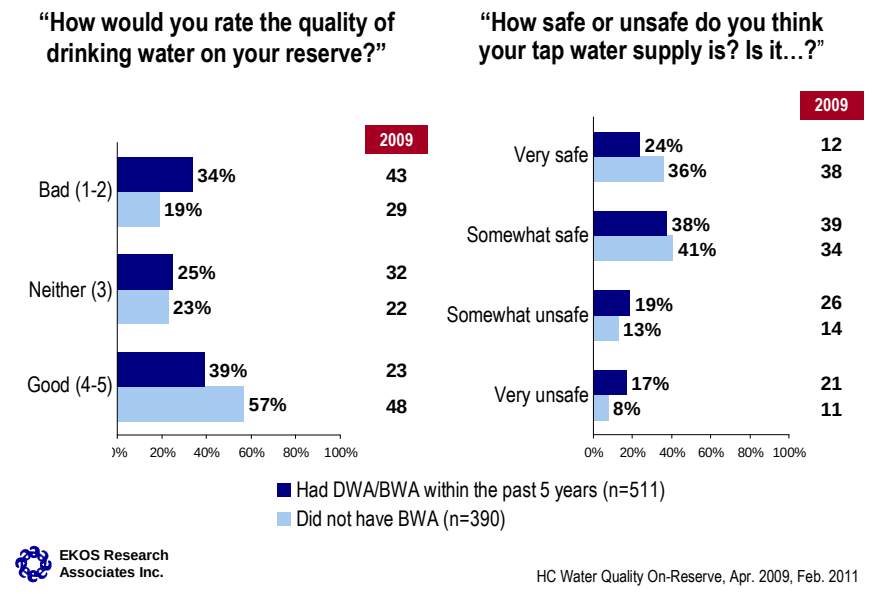
- As might be expected, residents on reserves that have had an advisory are typically less comfortable overall with the quality (59 per cent rate quality as bad), safety (64 per cent rate tap water as very unsafe) and deterioration (53 per cent view tap water as less safe compared to five years ago) of their water.
- Drinking Water Advisories are more recently reported in reserves located in Manitoba and Alberta. Reserves in the Atlantic region are the least likely to have reported a recent advisory (more often reporting in terms of years, rather than weeks or months since the last one).
- The smallest reserve have typically seen more recent advisories.
- Those in reserve households with a vulnerable person are more apt to say they have seen an advisory in the distant past, suggesting that although they are no more likely to have experienced one, they are more likely to remember it.

First Nations people living on-reserve who have not experienced a DWA/BWA within the last past few years provide a more positive rating of the quality and safety of their tap water supply compared to First Nations people living on-reserve who have been under a drinking water advisory within this timeframe. While more than half (57 per cent) of those who have not experienced a DWA/BWA rate their drinking water quality as good, less than four in ten (39 per cent) of First Nations reserve residents who have experienced a DWA/BWA feel the same. Similarly, more than three-quarters (77 per cent) of reserve residents who have not experienced a DWA/BWA perceive their tap water supply as somewhat or very safe, while only six in ten (62 per cent) of First Nations reserve residents who have experienced an advisory within the last eight months view their tap water supply this way.

Water Quality and Safety: Replicated



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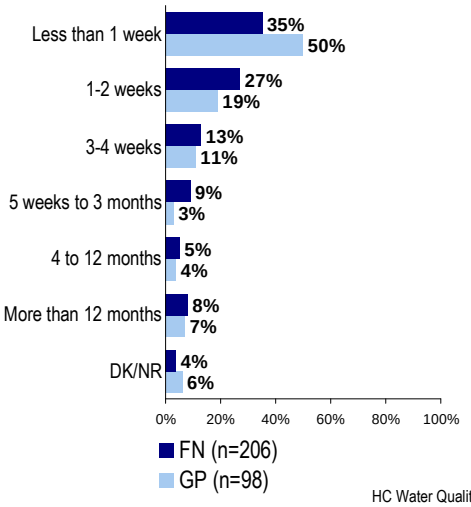
4.2 LENGTH OF DRINKING/BOIL WATER ADVISORY

First Nations residents were asked to estimate, to the best of their ability, the length of time that their last Drinking or Boil Water Advisory lasted. The majority of drinking or boil water advisories were less than two weeks in duration (two weeks or less). Six in ten reserve residents indicate that their most recent Drinking Water Advisory lasted either less than one week (35 per cent) or one to two weeks (27 per cent) in total. Roughly one-third (32 per cent) says that their Drinking Water Advisory lasted longer than two weeks.

Drinking or Boil Water Advisories were shorter in duration among general population Canadians in smaller communities. Nearly seven in ten (69 per cent) indicated that their Drinking or Boil Water Advisory lasted two weeks or less (compared with six in the First Nations). Notably, fully one-half (50 per cent) indicate that their Advisory lasted less than one week (compared to 35 per cent in on-reserve communities). That said, fairly similar and small proportions have experienced protracted DWA/BWAs, lasting four months or more (12 per cent of First Nations and 11 per cent of the general public).

Length of Drinking or Boil Water Advisory

"Thinking about the last time your reserve was under a Drinking or Boil Water Advisory, how long did it last (from what you remember)? Did it last…?"



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- First Nations residents in Quebec (77 per cent) were more likely than those in other regions to say that their most recent Advisory was less than one week in duration.
- The duration of Advisories is impacted by one's proximity to a major city centre. Over one-half of First Nations residents who lived less than 50 kilometres from a major city (54 per cent)

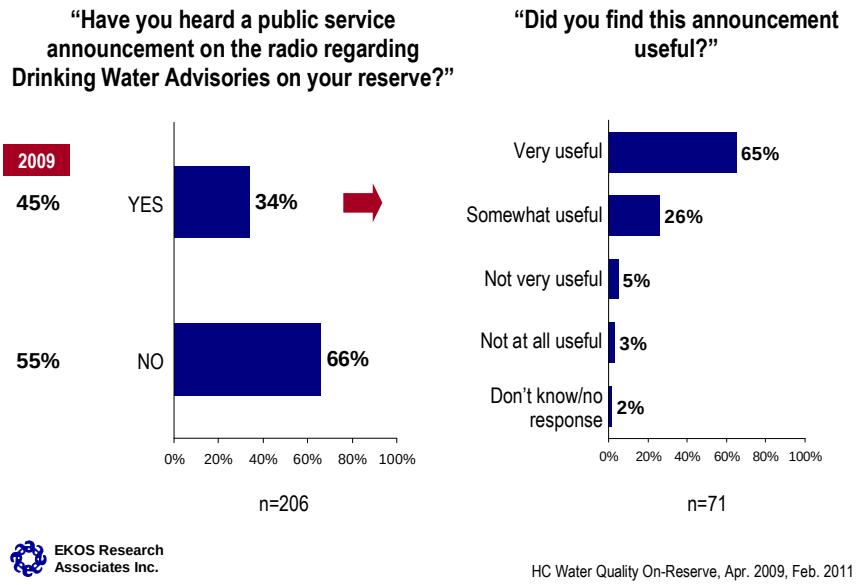
report that their most recent advisory lasted less than one week compared while less than one-quarter of those living further than 50 kilometres (23 per cent) indicate that their Advisory lasted less than a week.

- Views about water quality are likely fuelled by the length of the advisory. Reserve residents rating their water quality as good are more apt to report advisories of a week or less (53 per cent). The same pattern exists in terms of those judging their water to be safe (54 per cent). First Nations residents with water that is directly piped in are also more apt to report advisories that are the shortest in length (with 45 per cent saying their advisories were only a week or less in duration). Those indicating poor water quality were more prominent than others in reporting advisories of 12 months or more (14 per cent).

4.3 Communications of Drinking Water Advisories

One-third (34 per cent) of First Nations people on-reserve reported that they recall hearing a public service announcement about a DWA on the radio. Of those who had heard this announcement, more than four in ten (43 per cent) recalled being told to boil water before consuming it, 17 per cent recalled a water advisory generally, and one in six recalled that caution in water consumption was advised (14 per cent) or that the cause of the water problem/advisory was reported (13 per cent). Of those who heard the radio announcement, most (91 per cent) found the announcement useful.

Awareness of Public Service Announcement on DWA



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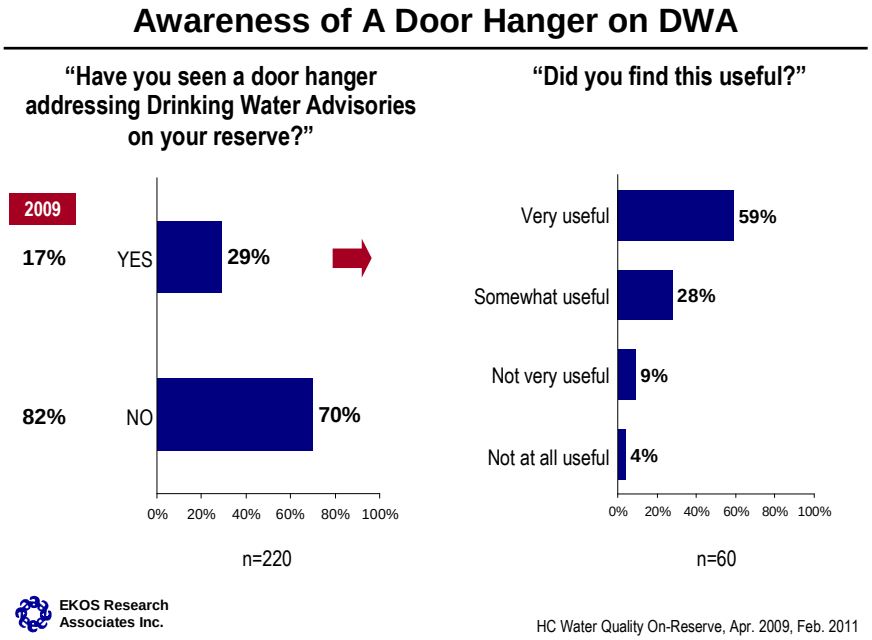
- Residents on reserve in Quebec (54 per cent) are more likely than those in any other region to have heard about the DWA on the radio. Residents in Alberta First Nations (20 per cent) were least likely to have heard about the DWA on the radio. Residents of larger communities are more apt to have heard the announcement (41 to 45 per cent in communities with more than 1,000 residents). Those closer to large urban centres are also more apt to have heard a Public Service Announcement (PSA) (40 per cent compared with those in more remote areas where only 26 per cent recall an announcement).
- Reserve households identified as having three to four residents, are more apt (45 per cent) to have heard the radio announcement. Respondents age 55 and older were also more likely to have heard the announcement (43 per cent).
- Reserve residents reporting their water as safer than it was five years ago are also more apt to have heard a PSA (43 per cent), suggesting that advertising may have had an impact n their comfort levels.

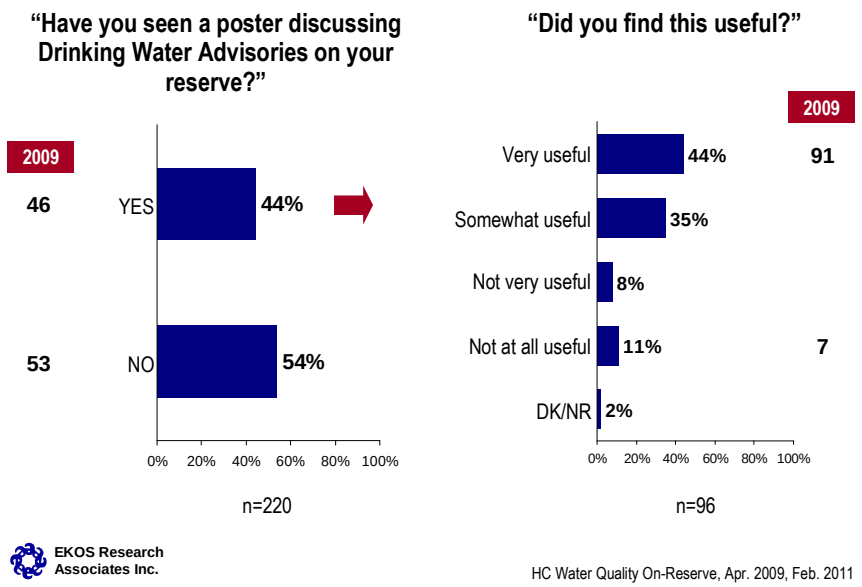
Three in ten First Nations respondents (29 per cent) have seen a door hanger addressing DWAs on their reserve. Most of those who recall the door hanger (87 per cent) found the information on the door hanger to be useful in the advisory and over half (56 per cent) recall the notification as having provided purification suggestions. There is only a nine per cent overlap of First Nations respondents reporting a DWA that said they saw both the door hanger and public service announcement. So, 25 per cent saw only the public service announcement, 20 per cent saw only the door hanger and nine per cent saw both. That is, collectively, 54 per cent of those reporting a DWA were reached through one of the two elements of the communications campaign.



- Reserve residents whose community has recently or are currently under a DWA are more apt (36 per cent) to have seen a door hanger addressing these issues.

Awareness of the poster discussing DWAs is mixed, with 44 per cent of First Nations on-reserve indicating that they have seen the poster. Of those First Nations respondents who have seen the poster, eight in ten (79 per cent) found it to be useful. Details recalled from the poster include the water advisory generally (25 per cent), exercising caution by boiling water (59 per cent), dates and times associated with the advisory (seven per cent), causes of the problem (five per cent), and measures taken to control or solve the problem (five per cent). The proportion of First Nations respondents experiencing a DWA that were reached by either the poster, the public service announcement or the door hanger is 69 per cent.

Awareness of A Poster Discussing DWA



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- Quebec First Nations residents as well as those living closer to an urban centre are less apt to have noticed a poster about DWAs (26 and 33 per cent respectively).
- Those in smaller sized reserve communities (with 500 to 1,000 residents) are most apt to say they have seen the poster (42 per cent).
- The poster was also more apt to be recalled by First Nations residents with a college level of education or higher (36 per cent) relative to those with less education.

5. VIEWS ON CHLORINE AND WATER QUALITY ISSUES

The following chapter described results regarding awareness and views about chlorine in drinking water, as well as behaviours regarding consumption as a result. Awareness and support for fluoridation is also examined.

5.1 AWARENESS REGARDING CHLORINE

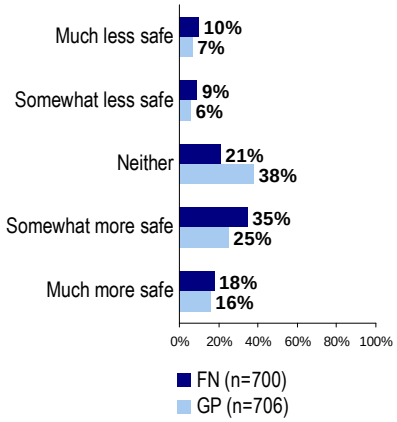
First Nations residents are more apt to believe that chlorine is present in their drinking water (67 per cent) than found among residents of other small communities in the general public (43 per cent), which may simply be a result of the incidence of different water systems in reserve communities versus other small communities in the general public. Among reserve residents served by piped water systems 77 per cent believe that chlorine is added to their drinking water. Similar proportions believe this to be the case among those drawing on water from cisterns (70 per cent). Among reserve residents who are on well-water 30 per cent believe that there is chlorine in their water supply.

Survey respondents were subsequently informed that chlorine is added to drinking water to reduce or eliminate bacteria and viruses and asked whether this makes them feel safe or unsafe. Over half of First Nations residents (53 per cent) say that knowing this makes them feel either somewhat (35 per cent) or much (18 per cent) more safe. This is slightly higher than the four in ten (41 per cent) in the general population say this makes them feel somewhat (25 per cent) or more (16 per cent) safe. A sizeable number of the general population in smaller communities say this information has no impact on their sense of safety (38 per cent) which is perhaps not surprising given that more were being newly informed of the potential presence of chlorine in their water.

First Nations residents who reported that chlorine is found in their drinking water, are considerably more comfortable with the safety of chlorinated water (59 per cent saying it's safe) compared with those that do not believe that their water is chlorinated (38 per cent).

Awareness Regarding Chlorine

"In fact, chlorine is added to drinking water to reduce or eliminate bacteria and viruses that may be found in water. Knowing this, how do you feel about chlorine being added to the water you drink? Would you say that it makes you feel…?"



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- Perceived safety of chlorine in water increases progressively among reserve residents with positive ratings of the water's quality, as does awareness of the presence of chlorine in water.
- First Nations residents in BC are less apt to say that chlorine makes them feel more safe, according to less than half (42 per cent) of BC survey respondents.
- Those living in smaller First Nation communities (under 500 residents) are less likely than average to say that knowing this information makes them feel more safe (42 per cent).
- Those with five or more people in a reserve household (60 per cent) are more likely than average to say that the information makes them feel more safe. Those with a vulnerable household member were less apt to know about chlorine in water (49 per cent).
- Reserve households reporting three or more DWAs are also more apt to know that there is chlorine in their drinking water (62 per cent).

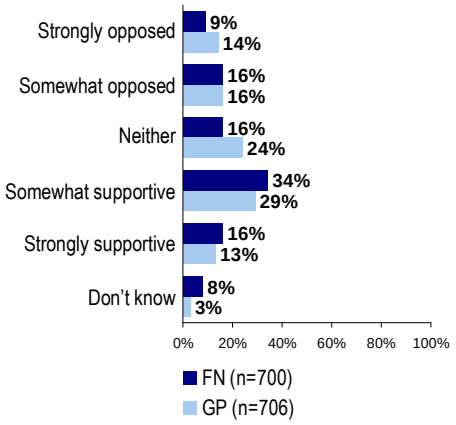
5.2 SUPPORT/OPPOSITION RE: CHLORINE

After being presented with the reason for chlorine's inclusion in the drinking water supply, First Nations residents were asked to rate their level of support or opposition to chlorine in the water. One-half of First Nations people on-reserve (50 per cent) says that they support chlorine being added to the drinking water, with 16 per cent saying they support it strongly. Compared with the results in the general population overall support among First Nations residents is marginally higher. Four in ten (42 per cent) in the general population say that they are either somewhat (29 per cent) or strongly (13 per cent) supportive of adding chlorine to the drinking water.

As with perceived safety it is First Nations residents that reported that they have chlorine in their drinking water who are much more likely to support its addition to water. Those who do not believe that their water currently is chlorinated are much less apt to support adding it to drinking water (39 per cent versus 55 per cent among those that believe their water is chlorinated, with 34 per cent opposing it).

Support/Opposition Re: Chlorine

"Knowing this, would you say that you are ... to chlorine being added to the water you drink?"



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- As with perceptions of safety, regionally, support for including chlorine in water in BC is much lower than all other First Nations regions in Canada. Just one-third (33 per cent) of First Nations residents in BC support chlorine while slightly more than a third (36 per cent) oppose it. There is also a slightly higher level of support from the smallest communities (41 per cent).
- Support in other First Nation regions is generally consistent with the average, although there is slightly higher support among First Nations in Saskatchewan (60 per cent).
- Interestingly, support is lower among First Nations respondents that provide negative ratings for the quality of their water (43 per cent) than those that rate it positively (52 per cent). The same is true of those believing their water to be safe (58 per cent supporting the adding of chlorine versus only 39 per cent of those thinking their water unsafe).
- It is interesting that reserve households with no children report the greatest opposition (30 per cent) while those with the youngest children (under two) are the most supportive (61 per cent supporting the addition of chlorine).

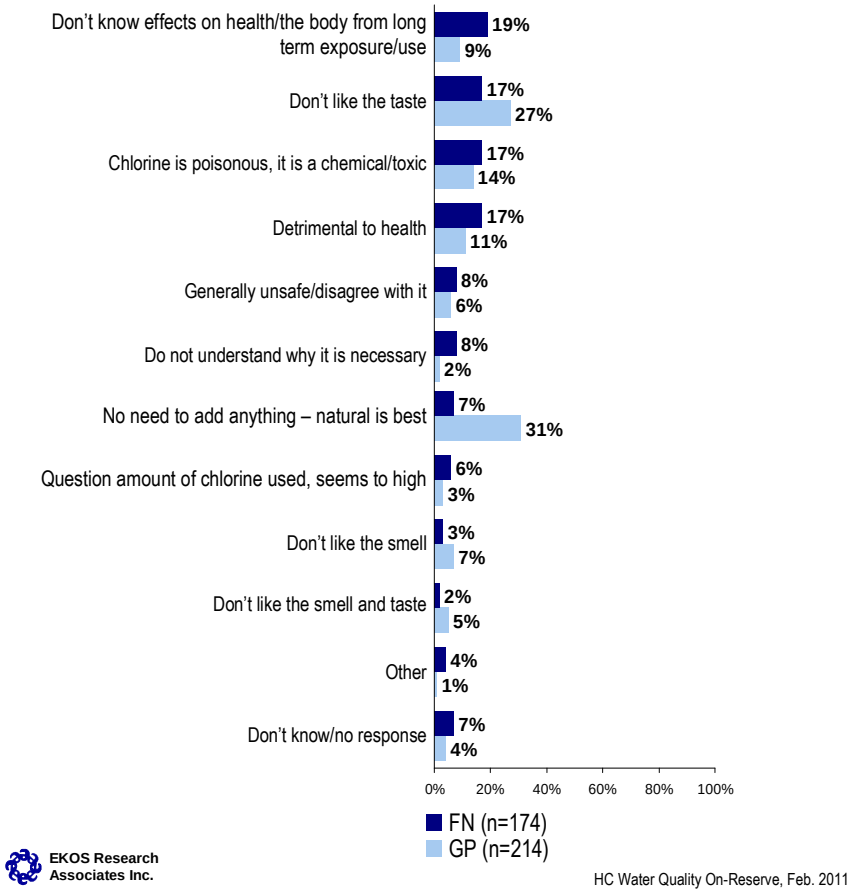
5.3 Reasons for Opposition to Chlorine

Those who indicated that they opposed the inclusion of chlorine in their drinking water were asked to indicate their reason why. Issues related to health concerns predominate among First Nations residents. Taken together, just over half of First Nations residents who oppose chlorine in their water cite a concern over chlorine's effect on health (53 per cent). Specifically, the concerns include the lack of knowledge of the effects of chlorine on health (19 per cent), the belief that it is detrimental to health (17 per cent) and that it is poisonous (17 per cent). A dislike of the taste of chlorine (17 per cent) also registers as a reason for opposition among those who oppose chlorine.

Health concerns are less pronounced among those in smaller communities in the general population. Those in this group are more likely to cite their belief that nothing needs to be added (31 per cent) or that they don't like the taste (27 per cent). Those in the general population also mention that chlorine is poisonous (14 per cent) and detrimental to health (11 per cent) though with a lower frequency than their First Nations counterparts.

Reasons for Opposition

"Why are you opposed to the idea of chlorine being added to your drinking water? Anything else?"



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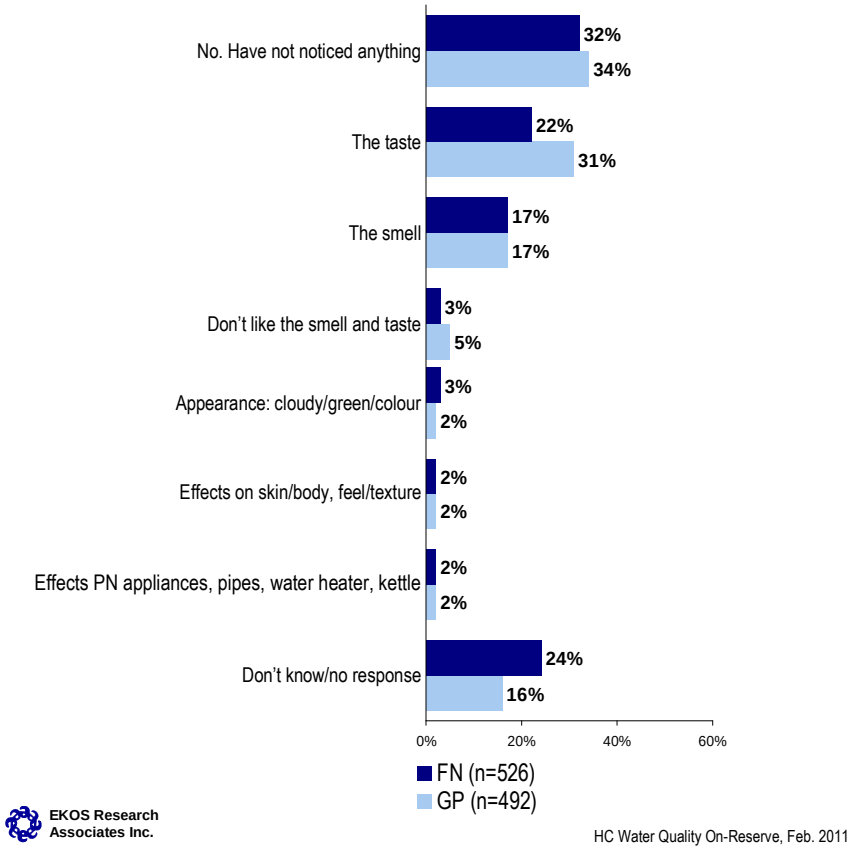
5.4 PROMPTED REASONS FOR DISLIKE

First Nations people living on-reserve were asked to identify if they noticed anything about tap water with chlorine that they didn't like. One-third (32 per cent) indicate that they did not notice anything. Those that did notice something were slightly more likely to notice the taste (22 per cent) than the smell (17 per cent). Very few mentioned both the taste *and* the smell (three per cent) as being problematic for them.

Those in the general population were more likely than their First Nations counterparts to note a dislike for the water's taste. General population respondents are nearly twice as likely to cite the taste of the water (31 per cent) than the smell (17 per cent) as something that was an issue for them. Still, one-third (34 per cent) did not notice anything about the water that they didn't like.

Prompted Reasons for Dislike

"Would you say that you have noticed anything that you don't like about tap water that has chlorine in it? Anything else?"



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- There is increased dislike for chlorine because of smell among the oldest age cohort of reserve residents; 55 and over (24 per cent). Those feeling less safe about their water also complain of the smell of chlorine in water (28 per cent).

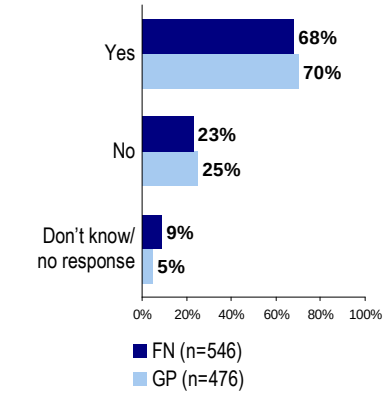
5.5 Awareness of Taste and Preferences Related to Chlorine

The majority of First Nations people living on-reserve do, in fact, say they notice a difference in the taste of water that has chlorine in it compared to water without the chemical. Just over two-thirds of residents on-reserve (68 per cent) notice the difference in taste. Less than one-quarter says they do not (23 per cent). The findings are nearly identical for those that live in a small community in the broader public. Seven in ten (70 per cent) say that they notice the taste.

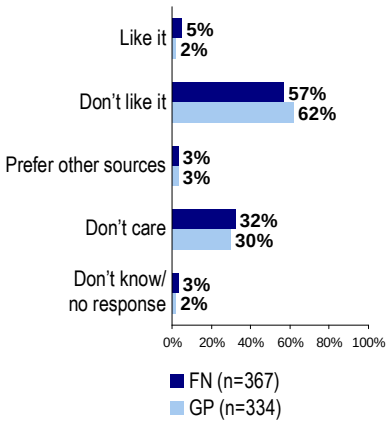
First Nations and general population residents also hold similar views in terms of their perceptions of the taste. Majorities in both the First Nations (57 per cent) and general population (62 per cent) do not like it while only a very small number in both groups says that they like it. Roughly three in ten for both groups are indifferent to the taste of the water.

Notice Taste of Chlorine

"Do you find that you notice a difference in the taste of water that has chlorine in it compared with water that does not?"



"Would you say that you like the taste, don't like the taste or don't care one way or the other about the taste of water with chlorine in it?"



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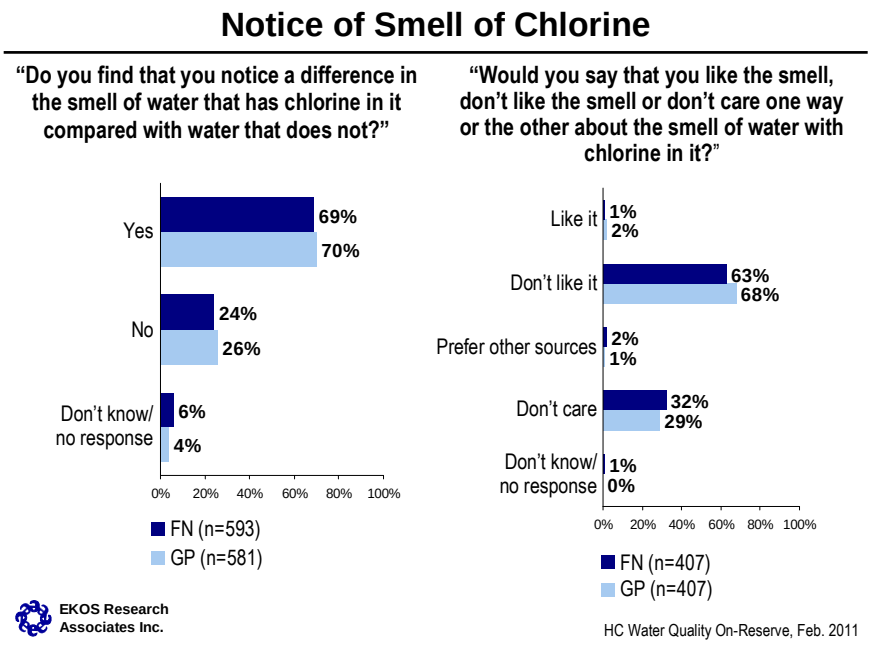
- Awareness of the difference in taste between chlorinated and non-chlorinated water is lower than average among First Nations residents living in Quebec (57 per cent) though consistent in all other regions. It is also higher among those in First Nation communities of less than 500 residents (77 per cent) and those with vulnerable family members (72 per cent). Awareness of the difference increases progressively with negative perceptions of water safety on-reserve.
- Awareness is also higher than average among those First Nations that rate the quality of their water negatively (76 per cent).
- Dislike for the taste of chlorinated water is considerably higher among First Nations women than men (64 vs. 46 per cent) and notably higher among First Nations residents in BC (68 per cent) than in other regions. It is lowest in Quebec (42 per cent).
- Those First Nations who feel their tap water is less safe than it was five years ago are more likely than those who feel it is safer to say they dislike the water (71 vs. 51 per cent).Similarly those believing their water to be very unsafe are more apt to say they don't like chlorine in water.
- Dislike of the water's taste is higher than average among those reserve residents with an individual well (76 per cent); those with water from other sources (piped directly, a cistern or another source) do not deviate significantly from the average.

5.6 Awareness of Smell and Preferences Related to Chlorine

As with the question on awareness of the taste of chlorine, a majority of First Nations people living on-reserve notice a difference in the smell of water that has chlorine in it compared to water that does not. Nearly seven in ten (69 per cent) notice the difference in smell. Roughly one-quarter do not (24 per cent). The findings are again nearly identical for those that live in a small community not on-reserve. Seven in ten (70 per cent) say that they notice the taste while roughly a quarter does not (26 per cent).

First Nations and general population residents also hold similar views in terms of their perceptions of the smell. Majorities in both the First Nations (63 per cent) and general population (68 per cent) do not like it while only a very small number in both groups says that they do. Nearly one-third of First nations residents are indifferent compared to roughly three in ten (29 per cent) in small communities in the general population.



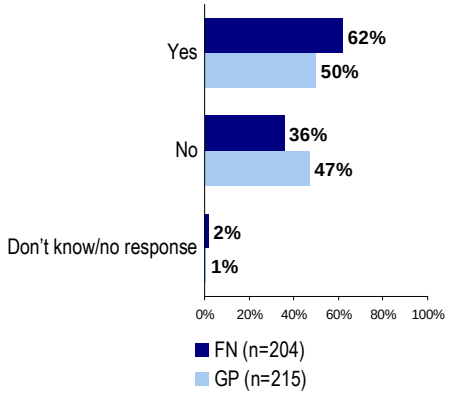
- As with the question on awareness of taste differences, awareness of the difference in smell is lower than average among First Nations in Quebec (56 per cent) though consistent in all other regions.
- Awareness of the difference in smell is higher among those reserve residents who rate their water negatively (80 per cent) than positively (64 per cent).
- Dislike for the smell of chlorinated water is higher among First Nations women than men (68 vs. 57 per cent) and notably higher in BC (77 per cent) than in other regions. Dislike is also higher among those that provide negative ratings for the quality of their water than those that rate it positively (71 vs. 58 per cent).

5.7 Different Sources of Water

First Nations residents that reported a dislike of the taste of chlorinated water were asked to indicate whether they had ever looked for a different source of water that did not have chlorine in it due to their dislike of the taste. A majority (62 per cent) has looked into alternate sources of water. Residents in the broader population of small communities are less likely to have sought out alternate sources of water due to taste. One half (50 per cent) says they have looked into other sources while a nearly equal number has not (47 per cent).

Looked for Different Source (I)

"Have you ever looked for a different source of water that did not have chlorine in it because you don't like the taste of water with chlorine in it?"



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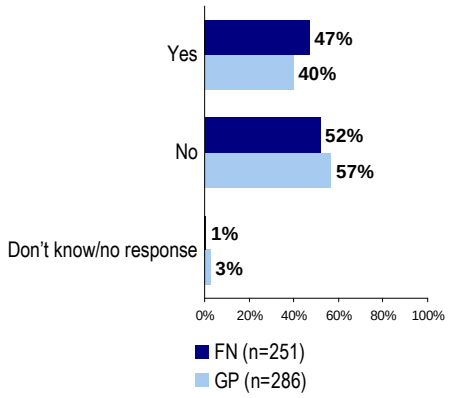
- First Nations residents living in Saskatchewan are more apt to say they have looked for other sources (80 per cent). Reserve households with a vulnerable person in the home were more likely than those who do not to have sought out an alternate source of water because of the taste (68 vs. 54 per cent).
- Those in smaller reserve households (one or two residents) are less likely to have sought out alternate sources of water (50 per cent) than those with three or more household members (70 per cent).
- First Nations residents that provide negative ratings for their water quality are much more likely than those providing positive ratings to have looked for a different source because of smell (79 vs. 50 per cent).

First Nations residents are less likely to have sought out alternate sources of water due to its smell than due to its taste. Still, just under half of First Nations residents (47 per cent) says they have sought out an alternate source because of their water's smell; just over half (52 per cent) have not. Residents of the general public are less likely to have sought out alternate source of water for reasons of smell. Four in ten members of the general public (40 per cent) say they looked for a different, non-chlorinated source of water because of its smell while just under six in ten (57 per cent) have not.

Looked for Different Source (II)

"Have you ever looked for a different source of water that did not have chlorine in it because you don't like the smell of water with chlorine in it?"



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- First Nations men (56 per cent) are more likely than women (42 per cent) to have sought out alternate, non-chlorinated water sources due to smell.
- Those First Nations who feel that the water is currently less safe than it was five years ago are much more likely than those who think it is safer to have sought out alternate water sources due to smell (59 vs. 39 per cent).
- First Nations residents that provide negative ratings for their water quality are nearly twice as likely as those providing positive ratings to have looked for a different source because of smell (62 vs. 34 per cent).

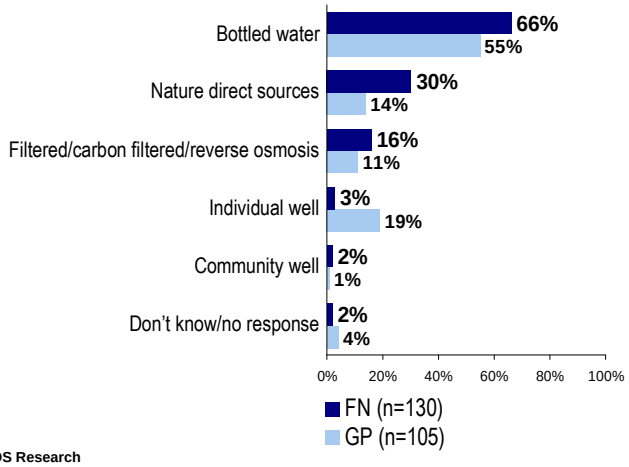
5.8 ALTERNATE SOURCES OF WATER

Bottled water clearly dominates as the main alternate source of water among those First Nations residents that have sought it out. This holds true for reserve residents who sought out an alternate water source due to both taste (66 per cent) and smell (61 per cent). Natural sources (such as rivers and lakes) are also mentioned as a key alternate source of water among First Nations who do not like the taste (30 per cent) or the smell (26 per cent). Slightly smaller numbers use filtered water due to dislike of the taste (16 per cent) and smell (11 per cent).

While general population residents are also most likely to use bottled water, it is a less prominent source than it is among First Nations residents. Just over half of the general public (55 per cent among reserve residents who don't like the taste, 52 per cent among those who don't like the smell) use bottled water as an alternative source. Those in non-First Nations smaller communities are much more likely to cite the use of well water due to dislike of the taste (19 per cent) or smell (18 per cent) than their First Nations counterparts. The general public is are also much less likely to cite natural sources (14 per cent among those who don't like the taste, 11 per cent among those who don't like the smell).

Alternative Sources: Taste

"What was the alternative source you used for this water that did not have chlorine in it?"



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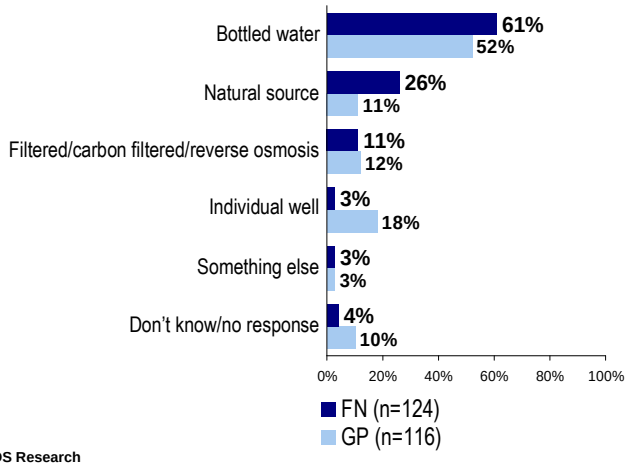
Alternative Sources: Smell

"What was the alternative source you used for this water that did not have chlorine in it?"



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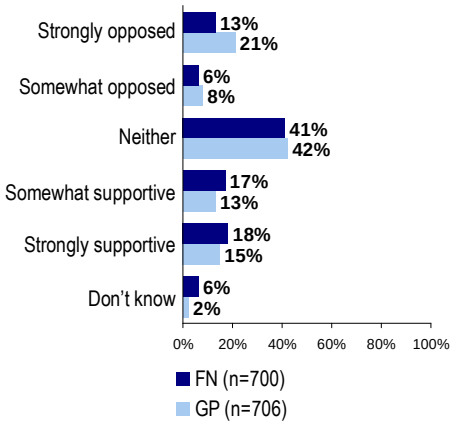
5.9 SUPPORT/OPPOSITION OF FLUORIDE

After a brief explanation of fluoride and the reason for including it in drinking water, First Nations residents were asked abut their level of support or opposed to this treatment of drinking water. Four in ten residents on-reserve (41 per cent) neither supports nor opposes its inclusion. Among those that do hold an opinion, the balance leans positively. Just over one-third of those living on-reserve (34 per cent) support its inclusion in the drinking water either somewhat (17 per cent) or strongly (18 per cent); under two in ten (19 per cent) oppose it.

The views of general population Canadians in small communities are similar to First Nations in that a plurality (42 per cent) does not hold a strong opinion on the matter. That said, members of the general population who do hold an opinion are much more split on the issue. Nearly equal numbers of the general public say they either support (28 per cent, 15 per cent strongly) or oppose (29 per cent, 21 per cent strongly) the inclusion of fluoride in the water supply. On balance First Nations are marginally more positive of fluoridation than residents of other small communities across the country.

Support/Opposition re: Fluoride

"Fluoride is found naturally in soil, fresh and salt water and in a variety of foods. The amount of fluoride found naturally in water is sometimes increased in drinking water to increase the protection of teeth from decay. How supportive or opposed would you say you are to the idea of adding fluoride to drinking water?"



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- Support for the inclusion of fluoride is higher among those reserve residents who rate their water quality positively than those who rate it negatively (41 vs. 27 per cent). Opposition is stronger among those judging their water to be very unsafe (compared with those believing their water to be safe).
- Residents of reserves in the Atlantic region and individuals with a college-level of education are more likely than their counterparts to oppose fluoridation (28 and 23 per cent respectively).

5.10 Reasons for Opposing/ Supporting Fluoride

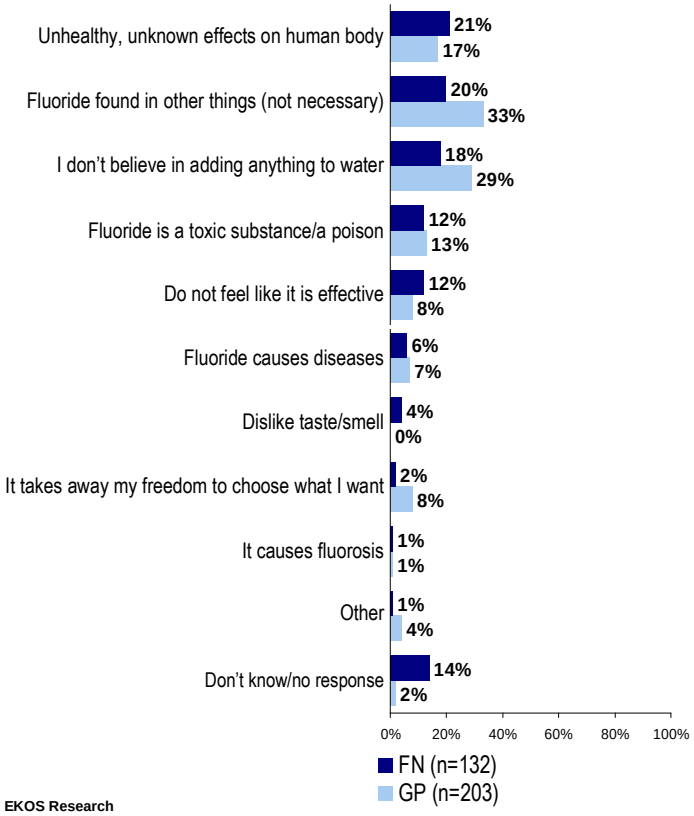
Respondents who either supported or opposed the inclusion of fluoride were asked to indicate why this was the case.

First Nations residents most often cite fears of the effect on their health (21 per cent) or the belief that it is fluoride is naturally available in other sources and therefore does not need to be added to drinking water (20 per cent). A slightly smaller number of reserve residents believe that nothing should be added to water whatsoever (18 per cent). All other reasons for opposition were cited by 12 per cent or fewer.

The perceptions of general population respondents who opposed fluoride were similar to their First Nations counterparts. That said, the belief that fluoride can be found in other sources, and therefore it is not necessary to add it to drinking water, is more prominent in the general public (33 per cent). Also, the belief that nothing needs to be added to the water is more prominent among the general population as reasons for opposing fluoride (29 per cent).

Reasons for Opposition

"Why are you opposed to the idea of adding fluoride to drinking water?"



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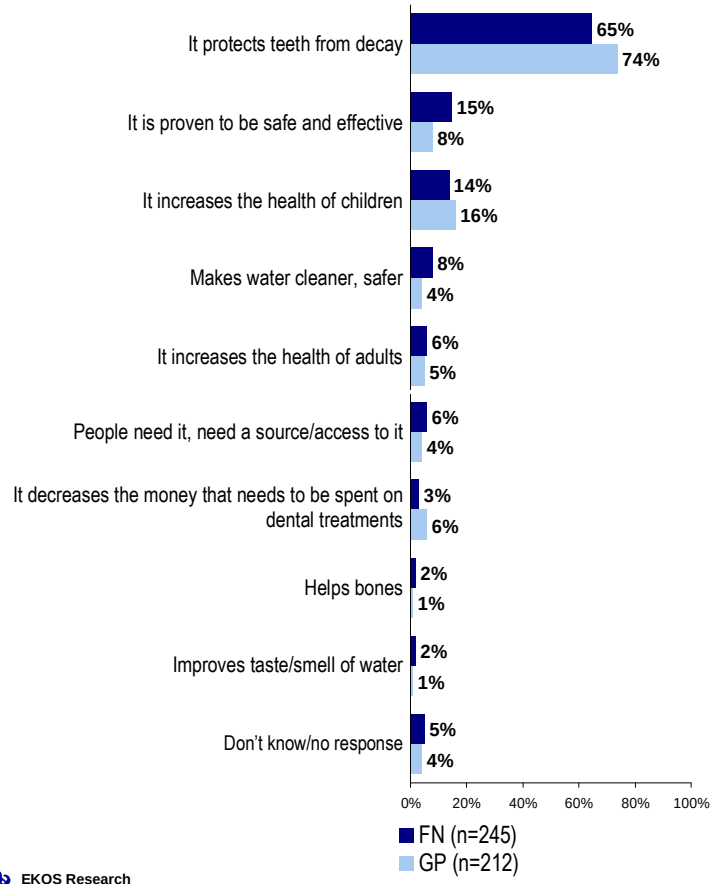
Fluoride's ability to protect teeth from decay clearly resonates with both First Nations and general population as a reason for supporting its inclusion in drinking water. Majorities of First Nations (65 per cent) and general population Canadians (74 per cent) indicate that the protection it provides against tooth decay is the top reason for their supporting its inclusion in the water supply.

Reasons for Support

"Why are you supportive of the idea of adding fluoride to drinking water?"



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6. PROFILE OF RECENT DWA/ BWA RESERVE RESIDENTS

Following is a brief snapshot of the First Nations residents who recently experienced a DWA or BWA. The results suggest some differences among residents who have experienced an advisory in the past four weeks, while other results suggest that a DWA/BWA in the previous year generates different views.

- Reserve residents who perceive the quality of drinking water in their community as bad and the safety of their tap water supply as very unsafe are more often found in communities where they have experience three or more advisories in the past five years, currently or recently have experienced a DWA or have reported DWA's lasting more than a few weeks.
- First Nations reserve residents who believe their current tap water would be safer to drink if their community had improved and/or updated filtration, treatment procedures, and infrastructure are more prominent in communities where there have been more advisories, more recent advisories and advisories lasting more than a few weeks.
- Residents feeling less safe than five years ago are more prominent in First Nations communities where there have been more advisories, more recent advisories and advisories lasting a month or more.
- First Nations residents of reserves with a DWA lasting a longer duration are less apt to use tap water and more apt to use bottled water for all applications (particularly cooking), as are those experiencing many advisories, as well as those currently or recently under an advisory in their community.
- Residents of reserves that are currently or have recently been under a DWA are more apt to say they don't trust their water and use bottled water instead.
- Those reserve residents with piped in water are more apt to describe DWAs lasting less than one week.
- Reserve residents whose community has experienced a DWA in the past few months are more apt to have seen the poster discussing DWA on their reserve. Residents experiencing fewer and shorter DWAs are marginally less apt to recall the poster.

Table 6.1: Profile of Reserve Residents According to Last Drinking or Boil Water Advisory Issued

	Number of times community was under a Drinking Water Advisory		Timeframe of the DWA/BWA				Duration of the DWA/BWA			
	1-2	3+	Current/ Recent	Last Few Months	< 8 Months	Longer	1 Week	1-2 Weeks	3-4 Weeks	1 Month
On a scale from 1, very bad to 5, very good with 3 meaning neither good nor bad, how would you rate the quality of drinking water in your community?										
Unweighted Total:	*158*	*239*	*75*	*74*	*100*	*183*	*140*	*98*	*50*	*98*
Bad (1 2)	23%	42%	52%	34%	35%	31%	26%	30%	46%	49%
Good (4 5)	49%	32%	23%	36%	39%	43%	53%	29%	22%	30%
How safe or unsafe do you think your tap water supply is? Is it...										
Unweighted Total:	*158*	*239*	*75*	*74*	*100*	*183*	*140*	*98*	*50*	*98*
Very safe	32%	16%	5%	23%	20%	31%	34%	22%	12%	13%
Very unsafe	10%	22%	29%	23%	13%	14%	7%	16%	28%	28%
What would make you feel (even) safer about your tap water quality?										
Unweighted Total:	*157*	*235*	*73*	*73*	*99*	*182*	*139*	*97*	*50*	*95*
Water filtration/treatment, utilities infrastructure	22%	38%	40%	40%	28%	28%	31%	28%	46%	37%
Would you consider your tap water to be more or less safe to drink than five years ago? Is it...										
Unweighted Total:	*158*	*239*	*75*	*74*	*100*	*183*	*140*	*98*	*50*	*98*
Less Safe (1 2)	19%	29%	33%	20%	25%	23%	18%	20%	26%	40%
Do you use your tap water for any of the following...										
Unweighted Total:	*158*	*239*	*75*	*74*	*100*	*183*	*140*	*98*	*50*	*98*
Drinking	65%	56%	47%	64%	54%	63%	71%	55%	56%	48%
Cooking	90%	77%	69%	82%	84%	85%	92%	79%	74%	73%
Brushing teeth	89%	86%	80%	84%	89%	90%	94%	90%	82%	79%
Washing food	91%	81%	68%	82%	86%	87%	93%	77%	80%	71%
Food preparation where you are mixing with water	68%	57%	44%	66%	60%	66%	75%	58%	56%	46%
Coffee or tea preparation	81%	64%	53%	74%	68%	78%	80%	67%	64%	62%
None of the above	4%	7%	12%	11%	6%	3%	4%	5%	14%	11%

	Number of times community was under a Drinking Water Advisory		Timeframe of the DWA/BWA				Duration of the DWA/BWA			
	1-2	3+	Current/ Recent	Last Few Months	< 8 Months	Longer	1 Week	1-2 Weeks	3-4 Weeks	1 Month
Do you use your bottled water for any of the following...										
Unweighted Total:	*112*	*180*	*63*	*47*	*75*	*131*	*96*	*71*	*40*	*75*
Drinking	88%	96%	94%	89%	92%	94%	94%	92%	95%	89%
Cooking	41%	56%	63%	51%	44%	45%	34%	58%	48%	60%
Brushing teeth	29%	44%	46%	34%	44%	36%	27%	39%	48%	53%
Washing food	26%	48%	57%	43%	36%	33%	27%	44%	35%	57%
Food preparation where you are mixing with water	48%	63%	67%	62%	53%	55%	44%	63%	63%	72%
Coffee or tea preparation	51%	62%	71%	51%	59%	54%	44%	62%	63%	68%
Why is it that you use bottled water instead of tap water?										
Unweighted Total:	*106*	*177*	*63*	*45*	*73*	*124*	*95*	*68*	*38*	*73*
Don't trust my tap water	22%	27%	38%	20%	29%	20%	18%	28%	32%	32%
What is the main source of your household tap water? Is it...										
Unweighted Total:	*158*	*239*	*75*	*74*	*100*	*183*	*140*	*98*	*50*	*98*
Piped directly to the home	55%	60%	52%	68%	65%	56%	71%	61%	40%	61%
Have you seen a poster discussing Drinking Water Advisories in your community?										
Unweighted Total:	*106*	*217*	*75*	*72*	*99*	*135*	*140*	*96*	*49*	*97*
Yes	47%	50%	60%	60%	54%	39%	42%	54%	53%	57%

APPENDIX A
FIRST NATIONS SURVEY INSTRUMENT

INTRO

Hello, my name is … and I work for Ekos Research Associates. We are conducting a survey for the Government of Canada to obtain the views of Canadians living in smaller, rural communities on important health related issues. The survey will take about 15 minutes, and does not involve sales of any kind. Your participation is voluntary and will not affect any services you might receive from the Government of Canada, but it is appreciated as it helps the government to design and deliver better services for all Canadians. The survey is registered with the National Survey Registration System and all of your answers will remain completely confidential.

Can I ask if you are at least 18 years old and a regular resident of this household?

Yes May I begin?	1	
No	2	

INTRO2

If… INTRO.EQ.2

Is there someone at home now that I could speak to who is 18 years of age or older and a regular resident of this household?

Yes Ask to speak to that person and repeat intro	1	->INTRO
Person not available arrange callback	2	->INTRO
No, there's nobody else REFUSAL	3	->THNK2

PRIV [0,0]

This call may be recorded for quality control or training purposes.

SEX

Record gender of respondent

Do not ask

Male	1	
Female	2	

LANGI

Record language of correspondence

Do not ask

English	1	
French	2	

Q30

Do you consider yourself to be an Aboriginal person?

Yes	1	
No -> Thank & terminate; code as IG	2	->THNK2

Q31

If... Q30.EQ.1

Do you live on a reserve for at least 6 months of the year?

Yes 1
No -> Thank & terminate; code as IG ..... 2 ->THNK2

CONF1

Before I start the interview, I'd like to confirm the first three digits of your postal code to help us determine the province and size of community that you live in. What I have listed for your postal code is &&APOSTC.

Yes this is correct 1
No this is not correct 2

CONF2

If... CONF1.EQ.2

Can you provide me with the first 3 digits of your postal code.

first 3 digits of the postal code-> ACONF2; S3 L1 C3 1
Don't know 8
Refuse 9

SCR1

As far as you know, how many people live on your reserve?

Less than 500 1
501 to 1000 2
1001 to 5000 3
More than 5000 4

Q18ALT

If... 1.EQ.0

Is your reserve currently under a Drinking or Boil Water Advisory, or has your reserve been under a drinking or boil water advisory in the past 12 months, as far as you know?

Note to interviewers: If they live on a larger reserve (e.g., 5,000 or more residents) you may need to ask if they have been under one in their own area of the reserve

Yes 1
No 2
Don't know 8
Refuse 9

Q1

On a scale from 1, very bad to 5, very good with 3 meaning neither good nor bad, how would you rate the quality of drinking water on your reserve?

1 Very bad	1	
2	2	
3 Neither good nor bad	3	
4	4	
5 Very good	5	
Don't know	8	
Refuse	9	

Q2

How safe or unsafe do you think your tap water supply is? Is it...

Read list

Very safe	1	
Somewhat safe	2	
Somewhat unsafe	3	
Very unsafe	4	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q3 [1,15]

If... Q2.EQ.3,4

Why do you consider your tap water supply to be unsafe?

Do not read list; Check all that apply; prompt for more than one answer if there is one

Your community is currently under a drinking/boil water advisory	1	
Your community has been under a drinking/boil water advisory in the past	2	
You have heard water on your reserve is unsafe	3	
Appearance	4	
Taste	5	
Odour	6	
There is always talk of bad water quality these days in small communities and communities, so assume it's bad in my community as well (NOTE: to interviewer not related to respondent's community specifically)	7	
I don't have any confidence in the people responsible for the water supply in my community	8	
Other (specify)-> AQ3; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
OUTDATED/UNSAFE TREATMENT PROCEDURES/FACILITIES, UTILITIES INFRASTRUCTURE, UNTREATED (EG. OLD PIPES/WELLS, UNSAFE/OLD FILTRATION FACILITIES)	9	I
PRESENCE OF CHEMICALS (EG. USE OF CHLORINE, HARMFUL ELEMENTS, ADDING CHEMICALS)	10	I
PRESENCE OF POLLUTANTS, MINERAL CONTENT (EG. IRON, LIMESTONE, BACTERIA/FECES, ARSENIC, AGRICULTURAL/INDUSTRIAL POLLUTION/SPILLS)	11	I
UNSAFE/DO NOT TRUST SOURCE OF WATER (EG. WELL WATER, SURFACE WATER, LAKE, RIVER)	12	I

TEST RESULTS, GENERAL	13	I
ILLNESSES, CONNECTED TO/BLAMED ON WATER (EG. STOMACH PROBLEMS, RASHES, SERIOUS ILLNESS, IN COMMUNITY/IMMEDIATE FAMILY)	14	I
FLOODING, OVERLAND RUNOFF, SPRING RUN OFF, WATER IS HIGH	15	I
OTHER	97	I

Q4 [1,10]

If... Q3.EQ.3

Where did you hear that the water supply on your reserve is unsafe?

Do not read; Prompt for as many answers as apply

Television	1	
Radio	2	
Local newspaper	3	
Community/Band/Township council	4	
Government of Canada	5	
Health Canada (specifically)	6	
Word of Mouth (family or friends)	7	
Other (specify)-> AQ4; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
OTHER	97	I

P5

P5 = (($Q2==1||$Q2==2)?1:2)

even	1
2	2

Q5 [1,10]

What would make you feel &P5 safer about your tap water quality?

Do not read

More frequent water quality testing	1	
Better procedures for water quality testing	2	
More information available on water quality	3	
Better information available on water quality	4	
Fewer/no boil water advisories	5	
Knowing why water is under a Water/Boil Advisory when it's announced	6	
Fewer chemicals in the water	7	
Better smell/appearance of the water/TASTE	8	
Other (specify)-> AQ5; C350 L2 C75	77	B
Nothing already feel water is safe, don't need anything else	97	BX
Don't know	98	BX
Refuse	99	BX
WATER FILTRATION/TREATMENT, UTILITIES INFRASTRUCTURE (EG. REGULAR UPKEEP/CLEANING, NEWER/BETTER/ACCESS TO TREATMENT INFRASTRUCTURE/FACILITIES, PIPES, IMPROVED TREATMENT/PURIFICATION, INCLUDES IN HOME, INVESTMENTS IN WATER TREATMENT, REVERSE OSMOSIS)	9	I
TRANSPARENCY/INFORMATION ON TESTING/TREATMENT (EG. PROCEDURES/MEASURES TAKEN, REPORTING)	10	I

LESS CONTAMINANTS/MINERALS IN WATER (EG. AGRICULTURAL, RUN-OFF, HARD WATER/IRON)	11	I
DIFFERENT WATER SOURCE (EG. RELOCATED TREATMENT FACILITY/PROXIMITY TO POLLUTANTS, LOCAL SOURCES)	12	I
MORE CHEMICALS USED IN WATER TREATMENT (EG. CHLORINE, MORE FREQUENTLY)	13	I
CONTAINS FLUORIDE	14	I
BETTER REGULATION/MANAGEMENT, MORE TRAINED/QUALIFIED STAFF, BETTER PLANNING, KNOWLEDGE/EXPERTISE, INCLUDES ISSUES WITH WHO REGULATES IT/SHOULD BE HANDLED LOCALLY	15	I
AVAILABILITY/ACCESS TO POTABLE WATER, ACCESS TO WATER, ACCESS TO PROPER WATER, IF THEY WERE ABLE TO DRINK IT	16	I
OTHER	96	I

Q8 [1,4]

Please indicate which of the following would make you feel safer about your tap water quality.

Read list and select all that apply

Interviewer note: read full list as 'yes'/'no'. You must get a 'yes'/'no' response to each choice option

More information available about the quality of tap water in my community	1	
More information about water quality testing procedures, frequency of testing in my community, and about acceptable levels in tap water	2	
A telephone number or website that I can go to, to be able to check for myself on the current quality of tap water in my community	3	
More information on what to do in case of a drinking water advisory	4	
(do not read) None of the above	7	BX
(do not read) Don't know	8	BX
(do not read) Refuse	9	BX

Q8B

Is there anything else that would make you feel safer about your tap water? What would that be?

Yes (specify)-> AQ8B; C250 L2 C125	77	
No	78	
Don't know	98	BX
Refuse	99	BX
IMPROVED FILTRATION/TREATMENT, ACCESS TO TRWATMENT, UPDATE INFRASTRUCTURE/SYSTEM, TECHNOLOGICALLY ADVANCE SYSTEMS	1	I
INCREASED/IMPROVE TESTING, MORE FREQUENT/REGULAR, ACCESS TO TESTING	2	I
EFFORTS TO ERRADICATE WATER OF POLLUTANTS, STRICTER/MORE REGULATION OF INDUSTRY/AGRICULTURE/ENVIRONMENTAL CONTAMINANTS, MORE CONTROL OF RUN OFF/FLOOD WATER	3	I
ACCESS TO INFORMATION, MORE INFORMATION AVAILABLE ON WATER QUALITY/TESTING E.G: RESULTS, TRANSPARENCY, TIMELY WARNINGS/ADVISORIES OF TESTING AND RESULTS	4	I

MORE INFORMATION ON WHAT THEY ARE PUTTING IN IT (RISKS/AMOUNTS), PROCEDURES, WHERE THE WATER COMES FROM AND WHAT PROCESS DOES IT GO THROUGH	5	I
OUR WATER IS FAIRLY SAFE, COMFORTABLE WITH IT	6	I
ACCESS TO A DIFFERENT SOURCE OF WATER , OR A BETTER SOURCE, ADDITIONAL SOURCES, EMERGENCY SOURCES	7	I
NO/LESS CHLORINE ADDED, OR OTHER CHEMICALS	8	I
LESS/NO MINERAL DEPOSITS	9	I
MORE EFFICIENT/KNOWLEDGEABLE REGULATION, QUALIFIED/TRAINED INDIVIDUALS IN MANAGEMENT/TESTING, IMPROVE THE WAY THE SYSTEM IS BEING RUN	10	I
OTHER	97	I
JUST ACCESS TO CLEAN WATER/SAFE WATER MEASURES DONE TO MAKE IT SAFE, CLEAN THE WATER	11	I

Q9

Would you consider your tap water to be more or less safe to drink than five years ago? Is it…

Read list

Much less safe	1	
Somewhat less safe	2	
No change	3	
Somewhat safer	4	
Much safer	5	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q10 [1,10]

If… Q9.EQ.1,2

Why do you consider your tap water to be less safe to drink than 5 years ago?

Do not read; take as many as apply; prompt for multiple answers

You get less information about drinking water quality on your reserve than you used to	1	
Your trust in drinking water treatment has gone down	2	
You do not feel well enough informed on water testing procedures on your reserve	3	
You have more information now about how water quality is tested/taken care of on your reserve	4	
There is more talk in the media these days about poor water quality	5	
Someone told you that the tap water on the community is poor	6	
Other (specify)-> AQ10; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
INCREASED CONTAMINATION (EG. MORE POLLUTION, CHEMICALS PRESENT/USED CLOSE TO WATER SOURCE, BACTERIA, AGRICULTURAL RUN-OFF, INDUSTRIAL POLLUTION)	7	I
APPEARANCE, SMELL, TASTE HAS WORSENED	8	I
DISTRUST WATER SOURCE (EG. CHANGED, WAS SPRING/WELL WATER, WAS LOCAL SOURCE IS NOW URBAN)	9	I

WATER TREATMENT/UTILITIES INFRASTRUCTURE HAS WORSENED (EG. OUTDATED/DETERIORATED PIPES) ..... 10 I
POPULATION INCREASE, GENERAL ..... 11 I
ILLNESS CONNECTED TO/BLAMED ON WATER (EG. STOMACH ACHES, ITCHINESS/SORES) ..... 12 I
WATER HAS CHANGED/WATER QUALITY WORSENED, GENERAL (EG. CANNOT DRINK WATER, REASONS UNSPECIFIED) ..... 13 I
FLOODING, OVERLAND RUNOFF, SPRING RUN OFF, WATER IS HIGH ..... 14 I
OTHER ..... 97 I

Q11 [1,10]

If... Q10.EQ.6

Where did you hear that the tap water is poor?

Do not read; prompt for as many answers as apply

Television 1
Radio 2
Local newspaper 3
Community/Band/Township council 4
Government of Canada 5
Health Canada (specifically) 6
Word of Mouth (family or friends) 7
Internet 8
Other (specify)-> AQ11; C350 L2 C75 ..... 77 B
Do not recall ..... 97 BX
Don't know ..... 98 BX
Refuse ..... 99 BX

Q12 [1,10]

If... Q9.EQ.4,5

Why do you consider your current tap water to be safer to drink than 5 years ago?

Read list; take all that apply and prompt for more multiple answers

You receive more information about drinking water quality on your reserve than you used to 1
There is more of a focus these days on the need for good water quality 2
Your trust level in drinking water treatment has increased 3
You feel better informed about water testing procedures on your reserve 4
Someone told you that the tap water on the community is good 5
(do not read) Other (specify)-> AQ12; C350 L2 C75 ..... 77 B
(do not read) None of the above ..... 97 BX
(do not read) Don't know ..... 98 BX
(do not read) Refuse ..... 99 BX
INCREASED/IMPROVED TESTING, MONITORING, REGULATION ..... 6 I
IMPROVED/UPDATED FILTRATION/TREATMENT PROCEDURES/INFRASTRUCTURE, IMPROVED UTILITIES INFRASTRUCTURE (EG. UPDATED FILTRATION/TREATMENT, IMPROVED STAFF, NEW FACILITIES, BETTER WELLS/PIPES, CHANGES TO CHEMICALS USED) ..... 7 I
IMPROVED APPEARANCE, TASTE, ODOUR ..... 8 I
CHANGES TO WATER SOURCE (EG. WELL INSTEAD OF RIVER, LOCAL SOURCES) ..... 9 I
OTHER ..... 96 I

Q131 [1,6]

Do you use your tap water for any of the following…

Read list

Drinking	1	
Cooking	2	
Brushing teeth	3	
Washing food	4	
Food preparation where you are mixing with water, such as baby formula or jello	5	
Coffee or tea preparation	6	
(do not read) None of the above	7	BX
(do not read) Don't know	8	BX
(do not read) Refuse	9	BX

Q13P [0,0]

If… Q131.EQ.1-6

Is that filtered or unfiltered tap water in each of these cases…

Q13A

If… Q131.EQ.1

Drinking

Filtered	1
Unfiltered	2
Don't know	8
Refuse	9

Q13B

If… Q131.EQ.2

Cooking

Filtered	1
Unfiltered	2
Don't know	8
Refuse	9

Q13C

If… Q131.EQ.3

Brushing teeth

Filtered	1
Unfiltered	2
Don't know	8
Refuse	9

Q13D

If... Q131.EQ.4

Washing food

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13E

If... Q131.EQ.5

Food preparation where you are mixing with water, such as baby formula or jello

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13F

If... Q131.EQ.6

Coffee or tea preparation

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q14A

Do you ever use bottled water for anything in your household?

Note to interviewer: This refers to use inside the household. It does not include buying bottled water when outside the home. So, if they buy bottled water when away, but not at home – code answer as "NO")

Yes 1
No 2
Don't know 9

Q14 [1,6]

If... Q14A.EQ.1

Do you use your bottled water for any of the following...

Read list

Drinking 1
Cooking 2
Brushing teeth 3
Washing food 4
Food preparation where you are mixing with water, such as baby formula or jello 5
Coffee or tea preparation 6
(do not read) None of the above ..... 7 BX
(do not read) Don't know ..... 8 BX

(do not read) Refuse	9	BX

Q15 [1,10]

If... Q14.EQ.1-6

Why is it that you use bottled water instead of tap water?

Do not read; select all that apply; prompt for multiple answers

Don't trust my tap water, OR CURRENT SOURCE OF WATER (SOME TO NOT HAVE TAP WATER)	1	
My community is currently under a Drinking Water Advisory	2	
My community has been under Drinking Water Advisories in the past	3	
I prefer the taste/smell of bottled water, COLDER, BETTER IN FOOD PREPARATION	4	
I have a greater water supply with bottled water than tap water	5	
Bottled water is supposed to be better for you	6	
It looks better to be drinking bottled water it's a status symbol	7	
It was recommended by Health Canada	8	
Because it is more convenient/easier	9	
Other (specify)-> AQ15; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
APPEARANCE (EG. TAP WATER LEAVES SCUM, TINTED)	10	I
FILTRATION OF CONTAMINANTS, MINERAL CONTENT, BETTER FILTRATION (EG. LACK OF AGRICULTURAL/INDUSTRIAL POLLUTION, RUN-OFF, IRON, CHEMICALS/CHLORINE, UNSAFE MATERIALS USED IN PIPE CONSTRUCTION/ASBESTOS)	11	I
PREFER IT GENERALLY, HABIT	12	I
IT IS SAFER	13	I
MEDICAL REASONS/PURPOSES (E.G: ALLERGIES, BAD REACTIONS TO WATER, EXISTING ILLNESSES THAT ARE BETTER TREATED WITHOUT TAP WATER, NOTICING ILLNESS/DIAGNOSIS THAT MIGHT BE RELATED...)	14	I
WHEN THEY DO NOT HAVE WATER, WATER SHORTAGES/WARNINGS/ADVISORIES, DROUGHTS, POWER POUTAGES/FOR EMERGENCIES	15	I
LIMITED USE FOR WORK,TRIPS,CAMPING,FOR GUESTS, FOR BABY/CHILDREN, IN LUCHES/EXERCISE/USE BOTH	16	I
USE OF FLUORIDE	17	I
OTHER	97	I

Q16

What is the main source of your household tap water? Is it...

Read list

Piped directly to the home	1	
Individual well	2	
Cistern (water in a holding tank)	3	
(do not read) Community Well	4	B
(do not read) Water Pump	5	B
(do not read) No running water	9	B
NATURAL SOURCES (EG. SPRING, DUG-OUT POND, LAKE, RIVER)	10	I
(do not read) Something else (specify)-> AQ16; C350 L2 C75	77	B
(do not read) Don’t know	98	B

(do not read) Refuse.....99 B

Q17

Do you receive enough household tap water for all your domestic needs?

Yes.....1
No.....2
Don't know.....8
Refuse.....9

NQ20

If... 1.EQ.1

NQ19.NE.1

As far as you know, is chlorine added to your drinking water?

Yes.....1
No.....2
Don't know.....8
Refuse.....9

NQ21

In fact, chlorine is added to drinking water to reduce or eliminate bacteria and viruses that may be found in water. Knowing this, how do you feel about chlorine being added to the water you drink? Would you say that it makes you feel ...?

Read list

Much less safe.....1
Somewhat less safe.....2
Neither more or less safe.....3
Somewhat more safe.....4
Much more safe.....5
(do not read) Don't know.....8 B
(do not read) Refuse.....9 B

NQ22

Knowing this, would you say that you are ... to chlorine being added to the water you drink?

Read list

Strongly opposed.....1
Somewhat opposed.....2
Neither supportive nor opposed.....3
Somewhat supportive.....4
Much more supportive.....5
(do not read) Don't know.....8 B
(do not read) Refuse.....9 B

NQ23 [1,10]

If… NQ22.EQ.1-2

Why are you opposed to the idea of chlorine being added to your drinking water? Anything else?

Do not read; Note to interviewer: please be sure to use the codes provided if smell or taste is mentioned

Don't like the smell	1	
Don't like the taste	2	
Don't like the smell and taste	3	
Other (specify)-> ANQ23; C150 L2 C75	77	
Don't know effects on health/the body from long term exposure/use	4	
No need to add anything – natural is best	5	
Don't know	98	X
Refuse	99	X
DETRIMENTAL TO HEALTH. HEALTH ISSUES AS A RESUL OF CONSUMING CHLORINE (E.G: CARCINOGENIC, EFFECTS OF CHLORINE ON THE BODY, SIDE EFFECTS)	6	I
CHLORINE IS POISONOUS, IT IS A CHEMICAL/TOXIC, WOULD NOT CHOOSE TO DRINK POISON	7	I
AGRICULTURAL USE/CONCERNS E.G: USING IT FOR CARING FOR LIVESTOCK, USED ON CROPS WHICH IS NOT SAFE FOR FOOD CONSUMPTION, CONFLICTS WITH OTHER SPRAYS/CHEMICALS	8	I
GENERALLY UNSAFE, DISAGREE WITH IT, THERE ARE BETTER METHODS	9	I
QUESTION AMOUNT OF CHLORINE USED, SEEMS TOO HIGH	10	I
DO NOT UNDERSTAND WHY IT IS NECESSARY, HOW/WHY/WHAT DOES IT HELP	11	I
OTHER	97	I

NQ24 [1,10]

If… NQ22.EQ.3-9

Would you say that you have noticed anything that you don't like about tap water that has chlorine in it?

Anything else?

Do not read; Note to interviewer: please be sure to use the codes provided if smell or taste is mentioned

The smell	1	
The taste	2	
Don't like the smell and taste	3	
Other (specify)-> ANQ24; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
NO. HAVE NOT NOTICED ANYTHING	4	I
EFFECTS ON SKIN/BODY, FEEL/TEXTURE, ITCHY/DRY/IRRITATED SKIN OR EYES, STRIPS HAIR COLOUR	5	I
APPEARANCE; CLOUDY/GREEN/COLOUR, FLOATING BITS	6	I
EFFECTS PN APPLIANCES, PIPES, WATER HEATER, KETTLE, SINKS/TUBS	7	I
MINERALS, BUILD UP/DEPOSITS	8	I
CHLORINE IS TOXIC/POISON	9	I

CHLORINE CONTENT IS TOO HIGH .....10 I
OTHER .....97 I

NQ25

If... (NQ22.EQ.1-2.AND.NQ23.NE.2-3).OR.(NQ22.EQ.3-9.AND.NQ24.NE.2-3)

Do you find that you notice a difference in the taste of water that has chlorine in it compared with water that does not?

Yes 1
No 2
Don't know 8
Refuse 9

NQ26

If... NQ25.EQ.1

Would you say that you like the taste, don't like the taste or don't care one way or the other about the taste of water with chlorine in it?

Like it 1
Don't like it 2
Prefer other sources 4
Don't care 3
Don't know 8
Refuse 9

NQ27

If... NQ26.EQ.2

Have you ever looked for a different source of water that did not have chlorine in it because you don't like the taste of water with chlorine in it?

Yes 1
No 2
Don't know 8
Refuse 9

NQ28 [1,10]

If... NQ27.EQ.1

What was the alternative source you used for this water that did not have chlorine in it?

Do not read; prompt if necessary

Bottled water 1
Piped directly to the home 2
Individual well 3
Cistern (water in a holding tank) 4
Community Well 5
Water Pump 6
No running water 7
Something else (specify)-> ANQ28; C150 L2 C75 77

Don't know	98	X
Refuse	99	X
FILTERED, CARBON FILTERED, REVERSE OSMOSIS, BOLIED/DISTILLED, CONDUCTED OWN PROCESS	8	I
NATURAL DIRECT SOURCES (E.G: SPRINGS, LAKES/RIVER, RAIN, MELTED SNOW)	9	I
OTHER	97	I

NQ29

If... (NQ22.EQ.1-2.AND.NQ23.NE.1,3).OR.(NQ22.EQ.3-9.AND.NQ24.NE.1,3)

Do you find that you notice a difference in the smell of water that has chlorine in it compared with water that does not?

Yes	1
No	2
Don't know	8
Refuse	9

NQ30

If... NQ29.EQ.1

Would you say that you like the smell, don't like the smell or don't care one way or the other about the smell of water with chlorine in it?

Like it	1
Don't like it	2
Prefer other sources	4
Don't care	3
Don't know	8
Refuse	9

NQ31

If... NQ30.EQ.2

Have you ever looked for a different source of water that did not have chlorine in it because you don't like the smell of water with chlorine in it?

Yes	1
No	2
Don't know	8
Refuse	9

NQ32 [1,10]

If... NQ31.EQ.1

What was the alternative source you used for this water that did not have chlorine in it?

Do not read; prompt if necessary

Bottled water	1
Piped directly to the home	2
Individual well	3

Cistern (water in a holding tank)	4	
Community Well	5	
Water Pump	6	
No running water	7	
Natural source (e.g., mountain, spring)	8	
Something else (specify)-> ANQ32; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
FILTERED, CARBON FILTERED, REVERSE OSMOSIS	9	I
OTHER	97	I

NQ34

Fluoride is found naturally in soil, fresh and salt water and in a variety of foods. The amount of fluoride found naturally in water is sometimes increased in drinking water to increase the protection of teeth from decay. How supportive or opposed would you say you are to the idea of adding fluoride to drinking water? Please rate your answer on a scale where 1 means strongly opposed, 5 means strongly supportive and the midpoint 3 means neither.

1 Strongly opposed	1
2	2
3 Neither	3
4	4
5 Strongly supportive	5
Don't know	8
Refuse	9

NQ37 [1,10]

If... NQ34.EQ.1-2

Why are you opposed to the idea of adding fluoride to drinking water?

Do not read or prompt

Fluoride is a toxic substance/a poison	1	
I don't believe in adding anything to water – it should be left alone	2	
Fluoride causes diseases (like cancer, kidney disease, carries genetic risks)	3	
It takes away my freedom to choose what I want	4	
It causes fluorosis	5	
Other (specify)-> ANQ37; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
UNHEALTHY, UNKNOWN EFFECTS ON THE HUMAN BODY, POSSIBLE RISKS/HAZARDS (GENERAL MENTION)	6	I
NOT NECESSARY, THERE ARE OTHER SOURCES OF FLUORIDE NOW (E.g: TOOTHPASTE...)	7	I
DO NOT FEEL LIKE IT IS EFFECTIVE, THAT IT DOES ANYTHING BENEFICIAL FOR YOU	8	I
OTHER	97	I
DISLIKE TASTE/SMELL	9	I

NQ38 [1,10]

If... NQ34.EQ.4-5

Why are you supportive of the idea of adding fluoride to drinking water?

Do not read or prompt

It protects teeth from decay	1	
It increases the health of children	2	
It increases the health of adults	3	
It decreases the money that needs to be spent on dental treatments	4	
It is proven to be safe and effective, HEALTHY/GOOD FOR YOU, NO ILL EFFECTS	5	
Other (specify)-> ANQ38; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
MAKES WATER CLEANER/SAFER, CLEARS UP BACTERIA	6	I
PEOPLE NEED IT, NEED A SOURCE/ACCESS TO IT, NEED TO KNOW IMPORTANCE OF IT	7	I
HELPS BONES	8	I
OTHER	97	I
IMPROVES TASTE/SMELL OF WATER	9	I

Q18

Has your community ever been or are you currently under a Drinking or Boil Water Advisory, as far as you know?

Yes	1
No	2
Don't know	8
Refuse	9

Q20

If... Q18.EQ.1

How many times in the last five years has your community been under a Drinking Water Advisory?

enter number of times-> AQ20; N3.0 [0-900]	1
Have not lived here for 5 years	997
Don't know	998
Refuse	999

Q19A

If... Q18.EQ.1

When was the last Drinking or Boil Water Advisory issued on your reserve?

Currently under one	990	
enter number-> AQ19A; N2.0 [1-97]	90	N
weeks	1	
months	2	
years ago	3	
Don't know	998	

Refuse 999

Q19CL

If... Q18.EQ.1

Q19CL =

Have been under a drinking water advisory within the last 24 months 1
Else 2

NQ43

If... Q19CL.EQ.1

Thinking about the last time your community was under a Drinking or Boil Water Advisory, how long did it last (from what you remember)? Did it last ... ?

Read categories
Note to interviewers: Please round up to nearest next category as needed

Less than 1 week 1
1-2 weeks 2
3-4 weeks 3
5 weeks to 3 months 4
4 to 12 months 5
More than 12 months 6
(do not read) Don't know 8
(do not read) Refuse 9

Q32

If... Q19CL.EQ.1

Have you heard a public service announcement on the radio regarding Drinking Water Advisories on your reserve?

Yes	1	->Q21
No	2	->Q21
Don't know	8	->Q21
Refuse	9	->Q21

Q33A [1,3]

If... Q32.EQ.1

Can you provide additional details about what you might have heard?

Yes, please specify-> AQ33A; C150 L2 C75	77	
No	97	X
Don't know	98	X
Refuse	99	X
EXCERCISE CAUTION WITH WATER CONSUMPTION (EG. AVOID/REDUCE WATER CONSUMPTION)	1	I
BOIL WATER BEFORE CONSUMPTION (EG. FOR CERTAIN LENGTH OF TIME, IF IN CERTAIN AREA, BECAUSE WATER UNSAFE)	2	I
WATER ADVISORY, GENERALLY (EG. WATER UNSAFE GENERALLY, DELIVERED BY PUBLIC HEALTH REPRESENTATIVE)	3	I

RESPONSE TO PROBLEM/MEASURES TAKEN (EG. COMMUNITY SUPPLIED WITH BOTTLED WATER, WHERE TO COLLECT BOTTLED WATER, INFRASTRUCTURE REPAIR) ..... 4 I
CAUSE OF WATER PROBLEM/ADVISORY (EG. PIPES DETERIORATED/MECHANICAL FAILURE, ENVIRONMENTAL CAUSES/THAW) ..... 5 I

NQ33B

If... Q32.EQ.1

How useful did you find this announcement? Would you say ...

Read list

Very useful 1
Somewhat useful 2
Not very useful 3
Not at all useful 4
(do not read) Don't know ..... 8 B
(do not read) Refuse ..... 9 B

Q34

If... Q19CL.EQ.1

Have you seen a door hanger addressing Drinking Water Advisories on your reserve?

Yes 1
No 2
Don't know 8
Refuse 9

Q35A [1,3]

If... Q34.EQ.1

Can you provide additional details about what you might have seen?

Yes, please specify-> AQ35A; C150 L2 C75 77
No ..... 97 X
Don't know ..... 98 X
Refuse ..... 99 X
PURIFICATION SUGGESTIONS, BOIL WATER (EG. UNTIL FURTHER NOTICE, BECAUSE WATER UNSAFE) ..... 1 I
WATER ADVISORY GENERALLY (EG. RECEIVED NOTICE) ..... 2 I
CAUSE OF WATER PROBLEM/ADVISORY (EG. ENVIORNMENTAL CAUSES/FLOOD, TAP WATER INFRASTRUCTURE) ..... 3 I
RESPONSE TO PROBLEM/MEASURES TAKEN (EG. COMMUNITY SUPPLIED WITH BOTTLED WATER/WHERE TO COLLECT BOTTLED WATER) ..... 4 I

NQ35B2

If... Q34.EQ.1

How useful did you find this door hanger? Would you say ...

Read list

Very useful 1
Somewhat useful 2

Not very useful	3	
Not at all useful	4	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q36

If... Q19CL.EQ.1

Have you seen a poster discussing Drinking Water Advisories on your reserve?

Yes	1	
No	2	
Don't know	8	
Refuse	9	

Q37A [1,3]

If... Q36.EQ.1

Can you provide additional details about what you might have seen?

Yes, please specify-> AQ37A; C150 L2 C75	77	
No	97	X
Don't know	98	X
Refuse	99	X
EXCERCISE CAUTION WITH WATER CONSUMPTION, BOIL WATER (EG. AVOID DRINKING TAP WATER, FOR A CERTAIN LENGTH OF TIME, BECAUSE WATER UNSAFE)	1	I
WATER ADVISORY GENERALLY (EG. SIGN ITSELF/WHO RELEASED ADVISORY)	2	I
DATES/TIMES ASSOCIATED WITH ADVISORY (EG. WHEN TO AVOID/CONTINUE DRINKING TAP WATER, WHEN TESTING WOULD OCCUR)	3	I
MEASURES TAKEN TO CONTROL/SOLVE PROBLEM (EG. COMMUNITY SUPPLIED WITH BOTTLED WATER/WHERE TO COLLECT BOTTLED WATER, NEW TREATMENT PLANT)	4	I
CAUSE OF WATER PROBLEM/ADVISORY (EG. BACTERIAL GROWTH, CHEMICAL CONTAMINATION)	5	I

NQ37B

If... Q36.EQ.1

How useful did you find this poster? Would you say ...

Read list

Very useful	1	
Somewhat useful	2	
Not very useful	3	
Not at all useful	4	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q21

As far as you know, how far is your community from the closest major city (in kilometres)?

kilometres-> AQ21; N4.0 [1-9000] 1
Don't know 8
Refuse 9

Q22

In what year were you born?

Note: answer the full year, i.e. 1977 as "1977"

Year-> AQ22; N4.0 [1900-1994] 1
Refused 9999

Q23

What is the highest level of education that you have completed?

Grade school 1
High school 2
Some college/CEGEP 3
College/CEGEP 4
Some Technical/trade school 5
Completed technical/trade school 6
Some University 7
Undergraduate degree 8
Graduate degree (Masters, PhD, Med/Law) 9
Other (specify)-> AQ23; C75 L1 C75 77
Don't know 98
Refuse 99

Q24

How many people typically live in your household?

&SKP1

people-> AQ24; N2.0 [1-20] 1
Don't know 98
Refuse 99

Q25

How many of those who typically live in your household are children?

children-> AQ25; N2.0 [0-20] 1
Don't know 98
Refuse 99

CHK1

CHK1=(($AQ25>$AQ24)?1:2)

CHILDREN GREATER THAN # PEOPLE IN HOUSEHOLD 1
2 2

SKP1

If... CHK1.EQ.1

The number of children can not be greater than number of people in the household. Please correct your answer. ..... 1 ->Q24

SKP27

If... AQ25.EQ.0.OR.Q25.EQ.99

If no kids, skip to Q27[FR]S'il n'y a pas d'enfants, passer à Q27

1 ..... 1 ->Q27

Q26A

How many are under 2

The number of children = &&AQ25
&SKP2

children-> AQ26A; N2.0 [0-20] 1
Don't know 98
Refuse 99

Q26B

How many are 2-5

children-> AQ26B; N2.0 [0-20] 1
Don't know 98
Refuse 99

Q26C

How many are 6-11

children-> AQ26C; N2.0 [0-20] 1
Don't know 98
Refuse 99

Q26D

How many are 12 or older

children-> AQ26D; N2.0 [0-20] 1
Don't know 98
Refuse 99

CHK2

If... Q26A.NE.99.AND.Q26B.NE.99.AND.Q26C.NE.99.AND.Q26D.NE.99

CHK2=(((($AQ26A+$AQ26B+$AQ26C+$AQ26D)==$AQ25)?1:2)

1 1
OF CHILDREN MUST EQUAL # IN Q25 2

SKP2

If... CHK2.EQ.2

OF CHILDREN MUST EQUAL # IN Q25. Please correct your answer. ..... 1 ->Q26A

Q27

Is your house used as a daycare for children who do not live in your household?

Yes 1
No 2
Don't know 8
Refuse 9

Q28

How many people over the age of 64 live in your household?

&SKP3

people-> AQ28; N2.0 [0-20] 1
Don't know 98
Refuse 99

CHK3

CHK3=(($AQ28>$AQ24)?1:2)

OVER 64 GREATER THAN # IN HOUSEHOLD 1
2 2

SKP3

If... CHK3.EQ.1

The number of seniors can not be greater than number of people in the household. Please correct your answer. ..... 1 ->Q28

Q29

Excluding any young children or seniors over the age of 64, is there anyone living in your household who is vulnerable to illness?

Yes 1
No 2
Don't know 8
Refuse 9

QTHNK

That is all the questions that I have. Thank you for your time.

APPENDIX B
GENERAL POPULATION, SMALL COMMUNITIES SURVEY INSTRUMENT

INTRO

Hello, my name is … and I work for Ekos Research Associates. We are conducting a survey for the Government of Canada to obtain the views of Canadians living in smaller, rural communities on important health related issues. The survey will take about 15 minutes, and does not involve sales of any kind. Your participation is voluntary and will not affect any services you might receive from the Government of Canada, but it is appreciated as it helps the government to design and deliver better services for all Canadians. The survey is registered with the National Survey Registration System and all of your answers will remain completely confidential.

Can I ask if you are at least 18 years old and a regular resident of this household?

Yes May I begin?	1	
No	2	

INTRO2

If… INTRO.EQ.2

Is there someone at home now that I could speak to who is 18 years of age or older and a regular resident of this household?

Yes Ask to speak to that person and repeat intro	1	->INTRO
Person not available arrange callback	2	->INTRO
No, there's nobody else REFUSAL	3	->THNK2

PRIV [0,0]

This call may be recorded for quality control or training purposes.

SEX

Record gender of respondent

Do not ask

Male	1
Female	2

LANGI

Record language of correspondence

Do not ask

English	1
French	2

CONF1

Before I start the interview, I'd like to confirm the first three digits of your postal code to help us determine the province and size of community that you live in. What I have listed for your postal code is &&APOSTC.

Yes this is correct 1
No this is not correct 2

CONF2

If... CONF1.EQ.2

Can you provide me with the first 3 digits of your postal code.

first 3 digits of the postal code-> ACONF2; S3 L1 C3 1
Don't know 8
Refuse 9

SCR1

As far as you know, how many people live in your community?

Less than 500 1
501 to 1000 2
1001 to 5000 3
More than 5000 4

Q1

On a scale from 1, very bad to 5, very good with 3 meaning neither good nor bad, how would you rate the quality of drinking water in your community?

1 Very bad 1
2 2
3 Neither good nor bad 3
4 4
5 Very good 5
Don't know 8
Refuse 9

Q2

How safe or unsafe do you think your tap water supply is? Is it...

Read list

Very safe 1
Somewhat safe 2
Somewhat unsafe 3
Very unsafe 4
(do not read) Don't know ..... 8 B
(do not read) Refuse ..... 9 B

Q3 [1,15]

If... Q2.EQ.3,4

Why do you consider your tap water supply to be unsafe?

Do not read list; Check all that apply; prompt for more than one answer if there is one

Your community is currently under a drinking/boil water advisory	1	
Your community has been under a drinking/boil water advisory in the past	2	
You have heard water in your community is unsafe	3	
Appearance	4	
Taste	5	
Odour	6	
There is always talk of bad water quality these days in small communities and communities, so assume it's bad in my community as well (NOTE: to interviewer not related to respondent's community specifically)	7	
I don't have any confidence in the people responsible for the water supply in my community	8	
Other (specify)-> AQ3; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
OUTDATED/UNSAFE TREATMENT PROCEDURES/FACILITIES, UTILITIES INFRASTRUCTURE, UNTREATED (EG. OLD PIPES/WELLS, UNSAFE/OLD FILTRATION FACILITIES)	9	I
PRESENCE OF CHEMICALS (EG. USE OF CHLORINE, HARMFUL ELEMENTS, ADDING CHEMICALS)	10	I
PRESENCE OF POLLUTANTS, MINERAL CONTENT (EG. IRON, LIMESTONE, BACTERIA/FECES, ARSENIC, AGRICULTURAL/INDUSTRIAL POLLUTION/SPILLS)	11	I
UNSAFE/DO NOT TRUST SOURCE OF WATER (EG. WELL WATER, SURFACE WATER, LAKE, RIVER)	12	I
TEST RESULTS, GENERAL	13	I
ILLNESSES, CONNECTED TO/BLAMED ON WATER (EG. STOMACH PROBLEMS, RASHES, SERIOUS ILLNESS, IN COMMUNITY/IMMEDIATE FAMILY)	14	I
FLOODING, OVERLAND RUNOFF, SPRING RUN OFF, WATER IS HIGH	15	I
OTHER	97	I

Q4 [1,10]

If... Q3.EQ.3

Where did you hear that the water supply in your community is unsafe?

Do not read; Prompt for as many answers as apply

Television	1	
Radio	2	
Local newspaper	3	
Community/Band/Township council	4	
Government of Canada	5	
Health Canada (specifically)	6	
Word of Mouth (family or friends)	7	
Other (specify)-> AQ4; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
OTHER	97	I

P5

P5 = (($Q2==1||$Q2==2)?1:2)

even	1	
2	2	

Q5 [1,10]

What would make you feel &P5 safer about your tap water quality?

Do not read

More frequent water quality testing	1	
Better procedures for water quality testing	2	
More information available on water quality	3	
Better information available on water quality	4	
Fewer/no boil water advisories	5	
Knowing why water is under a Water/Boil Advisory when it's announced	6	
Fewer chemicals in the water	7	
Better smell/appearance of the water/TASTE	8	
Other (specify)-> AQ5; C350 L2 C75	77	B
Nothing already feel water is safe, don't need anything else	97	BX
Don't know	98	BX
Refuse	99	BX
WATER FILTRATION/TREATMENT, UTILITIES INFRASTRUCTURE (EG. REGULAR UPKEEP/CLEANING, NEWER/BETTER/ACCESS TO TREATMENT INFRASTRUCTURE/FACILITIES, PIPES, IMPROVED TREATMENT/PURIFICATION, INCLUDES IN HOME, INVESTMENTS IN WATER TREATMENT, REVERSE OSMOSIS)	9	I
TRANSPARENCY/INFORMATION ON TESTING/TREATMENT (EG. PROCEDURES/MEASURES TAKEN, REPORTING)	10	I
LESS CONTAMINANTS/MINERALS IN WATER (EG. AGRICULTURAL, RUN-OFF, HARD WATER/IRON)	11	I
DIFFERENT WATER SOURCE (EG. RELOCATED TREATMENT FACILITY/PROXIMITY TO POLLUTANTS, LOCAL SOURCES)	12	I
MORE CHEMICALS USED IN WATER TREATMENT (EG. CHLORINE, MORE FREQUENTLY)	13	I
CONTAINS FLUORIDE	14	I
BETTER REGULATION/MANAGEMENT, MORE TRAINED/QUALIFIED STAFF, BETTER PLANNING, KNOWLEDGE/EXPERTISE, INCLUDES ISSUES WITH WHO REGULATES IT/SHOULD BE HANDLED LOCALLY	15	I
AVAILABILITY/ACCESS TO POTABLE WATER, ACCESS TO WATER, ACCESS TO PROPER WATER, IF THEY WERE ABLE TO DRINK IT	16	I
OTHER	96	I

Q8 [1,4]

Please indicate which of the following would make you feel safer about your tap water quality.

Read list and select all that apply

Interviewer note: read full list as 'yes'/'no'. You must get a 'yes'/'no' response to each choice option

More information available about the quality of tap water in my community	1
More information about water quality testing procedures, frequency of testing in my community, and about acceptable levels in tap water	2

A telephone number or website that I can go to, to be able to check for myself on the current quality of tap water in my community	3	
More information on what to do in case of a drinking water advisory	4	
(do not read) None of the above	7	BX
(do not read) Don't know	8	BX
(do not read) Refuse	9	BX

Q8B

Is there anything else that would make you feel safer about your tap water? What would that be?

Yes (specify)-> AQ8B; C250 L2 C125	77	
No	78	
Don't know	98	BX
Refuse	99	BX
IMPROVED FILTRATION/TREATMENT, ACCESS TO TRWATMENT, UPDATE INFRASTRUCTURE/SYSTEM, TECHNOLOGICALLY ADVANCE SYSTEMS	1	I
INCREASED/IMPROVE TESTING, MORE FREQUENT/REGULAR, ACCESS TO TESTING	2	I
EFFORTS TO ERRADICATE WATER OF POLLUTANTS, STRICTER/MORE REGULATION OF INDUSTRY/AGRICULTURE/ENVIRONMENTAL CONTAMINANTS, MORE CONTROL OF RUN OFF/FLOOD WATER	3	I
ACCESS TO INFORMATION, MORE INFORMATION AVAILABLE ON WATER QUALITY/TESTING E.G: RESULTS, TRANSPARENCY, TIMELY WARNINGS/ADVISORIES OF TESTING AND RESULTS	4	I
MORE INFORMATION ON WHAT THEY ARE PUTTING IN IT (RISKS/AMOUNTS), PROCEDURES, WHERE THE WATER COMES FROM AND WHAT PROCESS DOES IT GO THROUGH	5	I
OUR WATER IS FAIRLY SAFE, COMFORTABLE WITH IT	6	I
ACCESS TO A DIFFERENT SOURCE OF WATER , OR A BETTER SOURCE, ADDITIONAL SOURCES, EMERGENCY SOURCES	7	I
NO/LESS CHLORINE ADDED, OR OTHER CHEMICALS	8	I
LESS/NO MINERAL DEPOSITS	9	I
MORE EFFICIENT/KNOWLEDGEABLE REGULATION, QUALIFIED/TRAINED INDIVIDUALS IN MANAGEMENT/TESTING, IMPROVE THE WAY THE SYSTEM IS BEING RUN	10	I
OTHER	97	I
JUST ACCESS TO CLEAN WATER/SAFE WATER MEASURES DONE TO MAKE IT SAFE, CLEAN THE WATER	11	I

Q9

Would you consider your tap water to be more or less safe to drink than five years ago? Is it…

Read list

Much less safe	1	
Somewhat less safe	2	
No change	3	
Somewhat safer	4	
Much safer	5	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q10 [1,10]

If... Q9.EQ.1,2

Why do you consider your tap water to be less safe to drink than 5 years ago?

Do not read; take as many as apply; prompt for multiple answers

You get less information about drinking water quality in your community than you used to	1	
Your trust in drinking water treatment has gone down	2	
You do not feel well enough informed on water testing procedures in your community	3	
You have more information now about how water quality is tested/taken care of in your community	4	
There is more talk in the media these days about poor water quality	5	
Someone told you that the tap water on the community is poor	6	
Other (specify)-> AQ10; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
INCREASED CONTAMINATION (EG. MORE POLLUTION, CHEMICALS PRESENT/USED CLOSE TO WATER SOURCE, BACTERIA, AGRICULTURAL RUN-OFF, INDUSTRIAL POLLUTION)	7	I
APPEARANCE, SMELL, TASTE HAS WORSENED	8	I
DISTRUST WATER SOURCE (EG. CHANGED, WAS SPRING/WELL WATER, WAS LOCAL SOURCE IS NOW URBAN)	9	I
WATER TREATMENT/UTILITIES INFRASTRUCTURE HAS WORSENED (EG. OUTDATED/DETERIORATED PIPES)	10	I
POPULATION INCREASE, GENERAL	11	I
ILLNESS CONNECTED TO/BLAMED ON WATER (EG. STOMACH ACHES, ITCHINESS/SORES)	12	I
WATER HAS CHANGED/WATER QUALITY WORSENED, GENERAL (EG. CANNOT DRINK WATER, REASONS UNSPECIFIED)	13	I
FLOODING, OVERLAND RUNOFF, SPRING RUN OFF, WATER IS HIGH	14	I
OTHER	97	I

Q11 [1,10]

If... Q10.EQ.6

Where did you hear that the tap water is poor?

Do not read; prompt for as many answers as apply

Television	1	
Radio	2	
Local newspaper	3	
Community/Band/Township council	4	
Government of Canada	5	
Health Canada (specifically)	6	
Word of Mouth (family or friends)	7	
Internet	8	
Other (specify)-> AQ11; C350 L2 C75	77	B
Do not recall	97	BX
Don't know	98	BX
Refuse	99	BX

Q12 [1,10]

If… Q9.EQ.4,5

Why do you consider your current tap water to be safer to drink than 5 years ago?

Read list; take all that apply and prompt for more multiple answers

You receive more information about drinking water quality in your community than you used to	1	
There is more of a focus these days on the need for good water quality	2	
Your trust level in drinking water treatment has increased	3	
You feel better informed about water testing procedures in your community	4	
Someone told you that the tap water on the community is good	5	
(do not read) Other (specify)-> AQ12; C350 L2 C75	77	B
(do not read) None of the above	97	BX
(do not read) Don't know	98	BX
(do not read) Refuse	99	BX
INCREASED/IMPROVED TESTING, MONITORING, REGULATION	6	I
IMPROVED/UPDATED FILTRATION/TREATMENT PROCEDURES/INFRASTRUCTURE, IMPROVED UTILITIES INFRASTRUCTURE (EG. UPDATED FILTRATION/TREATMENT, IMPROVED STAFF, NEW FACILITIES, BETTER WELLS/PIPES, CHANGES TO CHEMICALS USED)	7	I
IMPROVED APPEARANCE, TASTE, ODOUR	8	I
CHANGES TO WATER SOURCE (EG. WELL INSTEAD OF RIVER, LOCAL SOURCES)	9	I
OTHER	96	I

Q131 [1,6]

Do you use your tap water for any of the following…

Read list

Drinking	1	
Cooking	2	
Brushing teeth	3	
Washing food	4	
Food preparation where you are mixing with water, such as baby formula or jello	5	
Coffee or tea preparation	6	
(do not read) None of the above	7	BX
(do not read) Don't know	8	BX
(do not read) Refuse	9	BX

Q13P [0,0]

If… Q131.EQ.1-6

Is that filtered or unfiltered tap water in each of these cases…

Q13A

If... Q131.EQ.1

Drinking

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13B

If... Q131.EQ.2

Cooking

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13C

If... Q131.EQ.3

Brushing teeth

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13D

If... Q131.EQ.4

Washing food

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13E

If... Q131.EQ.5

Food preparation where you are mixing with water, such as baby formula or jello

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q13F

If... Q131.EQ.6

Coffee or tea preparation

Filtered 1
Unfiltered 2
Don't know 8
Refuse 9

Q14A

Do you ever use bottled water for anything in your household?

Note to interviewer: This refers to use inside the household. It does not include buying bottled water when outside the home. So, if they buy bottled water when away, but not at home – code answer as "NO")

Yes 1
No 2
Don't know 9

Q14 [1,6]

If... Q14A.EQ.1

Do you use your bottled water for any of the following...

Read list

Drinking 1
Cooking 2
Brushing teeth 3
Washing food 4
Food preparation where you are mixing with water, such as baby formula or jello 5
Coffee or tea preparation 6
(do not read) None of the above ..... 7 BX
(do not read) Don't know ..... 8 BX
(do not read) Refuse ..... 9 BX

Q15 [1,10]

If... Q14.EQ.1-6

Why is it that you use bottled water instead of tap water?

Do not read; select all that apply; prompt for multiple answers

Don't trust my tap water, OR CURRENT SOURCE OF WATER (SOME TO NOT HAVE TAP WATER) 1
My community is currently under a Drinking Water Advisory 2
My community has been under Drinking Water Advisories in the past 3
I prefer the taste/smell of bottled water, COLDER, BETTER IN FOOD PREPARATION 4
I have a greater water supply with bottled water than tap water 5
Bottled water is supposed to be better for you 6
It looks better to be drinking bottled water it's a status symbol 7
It was recommended by Health Canada 8

Because it is more convenient/easier	9	
Other (specify)-> AQ15; C350 L2 C75	77	B
Don't know	98	BX
Refuse	99	BX
APPEARANCE (EG. TAP WATER LEAVES SCUM, TINTED)	10	I
FILTRATION OF CONTAMINANTS, MINERAL CONTENT, BETTER FILTRATION (EG. LACK OF AGRICULTURAL/INDUSTRIAL POLLUTION, RUN-OFF, IRON, CHEMICALS/CHLORINE, UNSAFE MATERIALS USED IN PIPE CONSTRUCTION/ASBESTOS)	11	I
PREFER IT GENERALLY, HABIT	12	I
IT IS SAFER	13	I
MEDICAL REASONS/PURPOSES (E.G: ALLERGIES, BAD REACTIONS TO WATER, EXISTING ILLNESSES THAT ARE BETTER TREATED WITHOUT TAP WATER, NOTICING ILLNESS/DIAGNOSIS THAT MIGHT BE RELATED…)	14	I
WHEN THEY DO NOT HAVE WATER, WATER SHORTAGES/WARNINGS/ADVISORIES, DROUGHTS, POWER POUTAGES/FOR EMERGENCIES	15	I
LIMITED USE FOR WORK,TRIPS,CAMPING,FOR GUESTS, FOR BABY/CHILDREN, IN LUCHES/EXERCISE/USE BOTH	16	I
USE OF FLUORIDE	17	I
OTHER	97	I

Q16

What is the main source of your household tap water? Is it…

Read list

Piped directly to the home	1	
Individual well	2	
Cistern (water in a holding tank)	3	
(do not read) Community Well	4	B
(do not read) Water Pump	5	B
(do not read) No running water	9	B
NATURAL SOURCES (EG. SPRING, DUG-OUT POND, LAKE, RIVER)	10	I
(do not read) Something else (specify)-> AQ16; C350 L2 C75	77	B
(do not read) Don't know	98	B
(do not read) Refuse	99	B

Q17

Do you receive enough household tap water for all your domestic needs?

Yes	1
No	2
Don't know	8
Refuse	9

NQ20

If... 1.EQ.1

NQ19.NE.1

As far as you know, is chlorine added to your drinking water?

Yes 1
No 2
Don't know 8
Refuse 9

NQ21

In fact, chlorine is added to drinking water to reduce or eliminate bacteria and viruses that may be found in water. Knowing this, how do you feel about chlorine being added to the water you drink? Would you say that it makes you feel ...?

Read list

Much less safe 1
Somewhat less safe 2
Neither more or less safe 3
Somewhat more safe 4
Much more safe 5
(do not read) Don't know ..... 8 B
(do not read) Refuse ..... 9 B

NQ22

Knowing this, would you say that you are ... to chlorine being added to the water you drink?

Read list

Strongly opposed 1
Somewhat opposed 2
Neither supportive nor opposed 3
Somewhat supportive 4
Much more supportive 5
(do not read) Don't know ..... 8 B
(do not read) Refuse ..... 9 B

NQ23 [1,10]

If... NQ22.EQ.1-2

Why are you opposed to the idea of chlorine being added to your drinking water? Anything else?

Do not read; Note to interviewer: please be sure to use the codes provided if smell or taste is mentioned

Don't like the smell 1
Don't like the taste 2
Don't like the smell and taste 3
Other (specify)-> ANQ23; C150 L2 C75 77
Don't know effects on health/the body from long term exposure/use 4

No need to add anything – natural is best	5	
Don't know	98	X
Refuse	99	X
DETRIMENTAL TO HEALTH. HEALTH ISSUES AS A RESUL OF CONSUMING CHLORINE (E.G: CARCINOGENIC, EFFECTS OF CHLORINE ON THE BODY, SIDE EFFECTS)	6	I
CHLORINE IS POISONOUS, IT IS A CHEMICAL/TOXIC, WOULD NOT CHOOSE TO DRINK POISON	7	I
AGRICULTURAL USE/CONCERNS E.G: USING IT FOR CARING FOR LIVESTOCK, USED ON CROPS WHICH IS NOT SAFE FOR FOOD CONSUMPTION, CONFLICTS WITH OTHER SPRAYS/CHEMICALS	8	I
GENERALLY UNSAFE, DISAGREE WITH IT, THERE ARE BETTER METHODS	9	I
QUESTION AMOUNT OF CHLORINE USED, SEEMS TOO HIGH	10	I
DO NOT UNDERSTAND WHY IT IS NECESSARY, HOW/WHY/WHAT DOES IT HELP	11	I
OTHER	97	I

NQ24 [1,10]

If... NQ22.EQ.3-9

Would you say that you have noticed anything that you don't like about tap water that has chlorine in it?

Anything else?

Do not read; Note to interviewer: please be sure to use the codes provided if smell or taste is mentioned

The smell	1	
The taste	2	
Don't like the smell and taste	3	
Other (specify)-> ANQ24; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
NO. HAVE NOT NOTICED ANYTHING	4	I
EFFECTS ON SKIN/BODY, FEEL/TEXTURE, ITCHY/DRY/IRRITATED SKIN OR EYES, STRIPS HAIR COLOUR	5	I
APPEARANCE; CLOUDY/GREEN/COLOUR, FLOATING BITS	6	I
EFFECTS PN APPLIANCES, PIPES, WATER HEATER, KETTLE, SINKS/TUBS	7	I
MINERALS, BUILD UP/DEPOSITS	8	I
CHLORINE IS TOXIC/POISON	9	I
CHLORINE CONTENT IS TOO HIGH	10	I
OTHER	97	I

NQ25

If... (NQ22.EQ.1-2.AND.NQ23.NE.2-3).OR.(NQ22.EQ.3-9.AND.NQ24.NE.2-3)

Do you find that you notice a difference in the taste of water that has chlorine in it compared with water that does not?

Yes	1
No	2
Don't know	8
Refuse	9

NQ26

If… NQ25.EQ.1

Would you say that you like the taste, don't like the taste or don't care one way or the other about the taste of water with chlorine in it?

Like it	1
Don't like it	2
Prefer other sources	4
Don't care	3
Don't know	8
Refuse	9

NQ27

If… NQ26.EQ.2

Have you ever looked for a different source of water that did not have chlorine in it because you don't like the taste of water with chlorine in it?

Yes	1
No	2
Don't know	8
Refuse	9

NQ28 [1,10]

If… NQ27.EQ.1

What was the alternative source you used for this water that did not have chlorine in it?

Do not read; prompt if necessary

Bottled water	1	
Piped directly to the home	2	
Individual well	3	
Cistern (water in a holding tank)	4	
Community Well	5	
Water Pump	6	
No running water	7	
Something else (specify)-> ANQ28; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
FILTERED, CARBON FILTERED, REVERSE OSMOSIS, BOLIED/DISTILLED, CONDUCTED OWN PROCESS	8	I
NATURAL DIRECT SOURCES (E.G: SPRINGS, LAKES/RIVER, RAIN, MELTED SNOW)	9	I
OTHER	97	I

NQ29

If… (NQ22.EQ.1-2.AND.NQ23.NE.1,3).OR.(NQ22.EQ.3-9.AND.NQ24.NE.1,3)

Do you find that you notice a difference in the smell of water that has chlorine in it compared with water that does not?

Yes	1	
No	2	
Don't know	8	
Refuse	9	

NQ30

If… NQ29.EQ.1

Would you say that you like the smell, don't like the smell or don't care one way or the other about the smell of water with chlorine in it?

Like it	1	
Don't like it	2	
Prefer other sources	4	
Don't care	3	
Don't know	8	
Refuse	9	

NQ31

If… NQ30.EQ.2

Have you ever looked for a different source of water that did not have chlorine in it because you don't like the smell of water with chlorine in it?

Yes	1	
No	2	
Don't know	8	
Refuse	9	

NQ32 [1,10]

If… NQ31.EQ.1

What was the alternative source you used for this water that did not have chlorine in it?

Do not read; prompt if necessary

Bottled water	1	
Piped directly to the home	2	
Individual well	3	
Cistern (water in a holding tank)	4	
Community Well	5	
Water Pump	6	
No running water	7	
Natural source (e.g., mountain, spring)	8	
Something else (specify)-> ANQ32; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X

FILTERED, CARBON FILTERED, REVERSE OSMOSIS	9	I
OTHER	97	I

NQ34

Fluoride is found naturally in soil, fresh and salt water and in a variety of foods. The amount of fluoride found naturally in water is sometimes increased in drinking water to increase the protection of teeth from decay. How supportive or opposed would you say you are to the idea of adding fluoride to drinking water? Please rate your answer on a scale where 1 means strongly opposed, 5 means strongly supportive and the midpoint 3 means neither.

1 Strongly opposed	1
2	2
3 Neither	3
4	4
5 Strongly supportive	5
Don't know	8
Refuse	9

NQ37 [1,10]

If... NQ34.EQ.1-2

Why are you opposed to the idea of adding fluoride to drinking water?

Do not read or prompt

Fluoride is a toxic substance/a poison	1	
I don't believe in adding anything to water – it should be left alone	2	
Fluoride causes diseases (like cancer, kidney disease, carries genetic risks)	3	
It takes away my freedom to choose what I want	4	
It causes fluorosis	5	
Other (specify)-> ANQ37; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
UNHEALTHY, UNKNOWN EFFECTS ON THE HUMAN BODY, POSSIBLE RISKS/HAZARDS (GENERAL MENTION)	6	I
NOT NECESSARY, THERE ARE OTHER SOURCES OF FLUORIDE NOW (E.g: TOOTHPASTE...)	7	I
DO NOT FEEL LIKE IT IS EFFECTIVE, THAT IT DOES ANYTHING BENEFICIAL FOR YOU	8	I
OTHER	97	I
DISLIKE TASTE/SMELL	9	I

NQ38 [1,10]

If... NQ34.EQ.4-5

Why are you supportive of the idea of adding fluoride to drinking water?

Do not read or prompt

It protects teeth from decay	1
It increases the health of children	2
It increases the health of adults	3
It decreases the money that needs to be spent on dental treatments	4

It is proven to be safe and effective, HEALTHY/GOOD FOR YOU, NO ILL EFFECTS	5	
Other (specify)-> ANQ38; C150 L2 C75	77	
Don't know	98	X
Refuse	99	X
MAKES WATER CLEANER/SAFER, CLEARS UP BACTERIA	6	I
PEOPLE NEED IT, NEED A SOURCE/ACCESS TO IT, NEED TO KNOW IMPORTANCE OF IT	7	I
HELPS BONES	8	I
OTHER	97	I
IMPROVES TASTE/SMELL OF WATER	9	I

Q18

Has your community ever been or are you currently under a Drinking or Boil Water Advisory, as far as you know?

Yes	1
No	2
Don't know	8
Refuse	9

Q20

If... Q18.EQ.1

How many times in the last five years has your community been under a Drinking Water Advisory?

enter number of times-> AQ20; N3.0 [0-900]	1
Have not lived here for 5 years	997
Don't know	998
Refuse	999

Q19A

If... Q18.EQ.1

When was the last Drinking or Boil Water Advisory issued in your community?

Currently under one	990	
enter number-> AQ19A; N2.0 [1-97]	90	N
weeks	1	
months	2	
years ago	3	
Don't know	998	
Refuse	999	

Q19CL

If... Q18.EQ.1

Have been under a drinking water advisory within the last 24 months	1
Else	2

NQ43

If... Q19CL.EQ.1

Thinking about the last time your community was under a Drinking or Boil Water Advisory, how long did it last (from what you remember)? Did it last … ?

Read categories

Note to interviewers: Please round up to nearest next category as needed

Less than 1 week	1	
1-2 weeks	2	
3-4 weeks	3	
5 weeks to 3 months	4	
4 to 12 months	5	
More than 12 months	6	
(do not read) Don't know	8	
(do not read) Refuse	9	

Q32

If... Q19CL.EQ.1

Have you heard a public service announcement on the radio regarding Drinking Water Advisories in your community?

Yes	1	->Q21
No	2	->Q21
Don't know	8	->Q21
Refuse	9	->Q21

Q33A [1,3]

If... Q32.EQ.1

Can you provide additional details about what you might have heard?

Yes, please specify-> AQ33A; C150 L2 C75	77	
No	97	X
Don't know	98	X
Refuse	99	X
EXCERCISE CAUTION WITH WATER CONSUMPTION (EG. AVOID/REDUCE WATER CONSUMPTION)	1	I
BOIL WATER BEFORE CONSUMPTION (EG. FOR CERTAIN LENGTH OF TIME, IF IN CERTAIN AREA, BECAUSE WATER UNSAFE)	2	I
WATER ADVISORY, GENERALLY (EG. WATER UNSAFE GENERALLY, DELIVERED BY PUBLIC HEALTH REPRESENTATIVE)	3	I
RESPONSE TO PROBLEM/MEASURES TAKEN (EG. COMMUNITY SUPPLIED WITH BOTTLED WATER, WHERE TO COLLECT BOTTLED WATER, INFRASTRUCTURE REPAIR)	4	I
CAUSE OF WATER PROBLEM/ADVISORY (EG. PIPES DETERIORATED/MECHANICAL FAILURE, ENVIRONMENTAL CAUSES/THAW)	5	I

NQ33B

If... Q32.EQ.1

How useful did you find this announcement? Would you say ...

Read list

Very useful	1	
Somewhat useful	2	
Not very useful	3	
Not at all useful	4	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q34

If... Q19CL.EQ.1

Have you seen a door hanger addressing Drinking Water Advisories in your community?

Yes	1	
No	2	
Don't know	8	
Refuse	9	

Q35A [1,3]

If... Q34.EQ.1

Can you provide additional details about what you might have seen?

Yes, please specify-> AQ35A; C150 L2 C75	77	
No	97	X
Don't know	98	X
Refuse	99	X
PURIFICATION SUGGESTIONS, BOIL WATER (EG. UNTIL FURTHER NOTICE, BECAUSE WATER UNSAFE)	1	I
WATER ADVISORY GENERALLY (EG. RECEIVED NOTICE)	2	I
CAUSE OF WATER PROBLEM/ADVISORY (EG. ENVIORNMENTAL CAUSES/FLOOD, TAP WATER INFRASTRUCTURE)	3	I
RESPONSE TO PROBLEM/MEASURES TAKEN (EG. COMMUNITY SUPPLIED WITH BOTTLED WATER/WHERE TO COLLECT BOTTLED WATER)	4	I

NQ35B2

If... Q34.EQ.1

How useful did you find this door hanger? Would you say ...

Read list

Very useful	1	
Somewhat useful	2	
Not very useful	3	
Not at all useful	4	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q36

If... Q19CL.EQ.1

Have you seen a poster discussing Drinking Water Advisories in your community?

Yes	1	
No	2	
Don't know	8	
Refuse	9	

Q37A [1,3]

If... Q36.EQ.1

Can you provide additional details about what you might have seen?

Yes, please specify-> AQ37A; C150 L2 C75	77	
No	97	X
Don't know	98	X
Refuse	99	X
EXCERCISE CAUTION WITH WATER CONSUMPTION, BOIL WATER (EG. AVOID DRINKING TAP WATER, FOR A CERTAIN LENGTH OF TIME, BECAUSE WATER UNSAFE)	1	I
WATER ADVISORY GENERALLY (EG. SIGN ITSELF/WHO RELEASED ADVISORY)	2	I
DATES/TIMES ASSOCIATED WITH ADVISORY (EG. WHEN TO AVOID/CONTINUE DRINKING TAP WATER, WHEN TESTING WOULD OCCUR)	3	I
MEASURES TAKEN TO CONTROL/SOLVE PROBLEM (EG. COMMUNITY SUPPLIED WITH BOTTLED WATER/WHERE TO COLLECT BOTTLED WATER, NEW TREATMENT PLANT)	4	I
CAUSE OF WATER PROBLEM/ADVISORY (EG. BACTERIAL GROWTH, CHEMICAL CONTAMINATION)	5	I

NQ37B

If... Q36.EQ.1

How useful did you find this poster? Would you say ...

Read list

Very useful	1	
Somewhat useful	2	
Not very useful	3	
Not at all useful	4	
(do not read) Don't know	8	B
(do not read) Refuse	9	B

Q21

As far as you know, how far is your community from the closest major city (in kilometres)?

kilometres-> AQ21; N4.0 [1-9000]	1	
Don't know	8	
Refuse	9	

Q22

In what year were you born?

Note: answer the full year, i.e. 1977 as "1977"

Year-> AQ22; N4.0 [1900-1994] 1
Refused 9999

Q23

What is the highest level of education that you have completed?

Grade school 1
High school 2
Some college/CEGEP 3
College/CEGEP 4
Some Technical/trade school 5
Completed technical/trade school 6
Some University 7
Undergraduate degree 8
Graduate degree (Masters, PhD, Med/Law) 9
Other (specify)-> AQ23; C75 L1 C75 77
Don't know 98
Refuse 99

Q24

How many people typically live in your household?

&SKP1

people-> AQ24; N2.0 [1-20] 1
Don't know 98
Refuse 99

Q25

How many of those who typically live in your household are children?

children-> AQ25; N2.0 [0-20] 1
Don't know 98
Refuse 99

CHK1

CHK1=(($AQ25>$AQ24)?1:2)

CHILDREN GREATER THAN # PEOPLE IN HOUSEHOLD 1
2 2

SKP1

If... CHK1.EQ.1

The number of children can not be greater than number of people in the household. Please correct your answer. ..... 1 ->Q24

SKP27

If... AQ25.EQ.0.OR.Q25.EQ.99

If no kids, skip to Q27[FR]S'il n'y a pas d'enfants, passer à Q27

1 ..... 1 ->Q27

Q26A

How many are under 2

The number of children = &&AQ25
&SKP2

children-> AQ26A; N2.0 [0-20] 1
Don't know 98
Refuse 99

Q26B

How many are 2-5

children-> AQ26B; N2.0 [0-20] 1
Don't know 98
Refuse 99

Q26C

How many are 6-11

children-> AQ26C; N2.0 [0-20] 1
Don't know 98
Refuse 99

Q26D

How many are 12 or older

children-> AQ26D; N2.0 [0-20] 1
Don't know 98
Refuse 99

CHK2

If... Q26A.NE.99.AND.Q26B.NE.99.AND.Q26C.NE.99.AND.Q26D.NE.99

CHK2=(((($AQ26A+$AQ26B+$AQ26C+$AQ26D)==$AQ25)?1:2)

1 1
OF CHILDREN MUST EQUAL # IN Q25 2

SKP2

If... CHK2.EQ.2

OF CHILDREN MUST EQUAL # IN Q25. Please correct your answer. ..... 1 ->Q26A

Q27

Is your house used as a daycare for children who do not live in your household?

Yes 1
No 2
Don't know 8
Refuse 9

Q28

How many people over the age of 64 live in your household?

people-> AQ28; N2.0 [0-20] 1
Don't know 98
Refuse 99

CHK3

OVER 64 GREATER THAN # IN HOUSEHOLD 1
2 2

SKP3

If... CHK3.EQ.1

The number of seniors can not be greater than number of people in the household. Please correct your answer. ..... 1 ->Q28

Q29

Excluding any young children or seniors over the age of 64, is there anyone living in your household who is vulnerable to illness?

Yes 1
No 2
Don't know 8
Refuse 9

Q30

Do you consider yourself to be an Aboriginal person?

Yes 1
No 2

Q31

If... Q30.EQ.1

Do you live on a reserve for at least 6 months of the year?

Yes 1
No 2

QTHNK

That is all the questions that I have. Thank you for your time.

APPENDIX B
RESPONSE RATES

First Nations Sample			
	Final Disposition	**#**	**Totals**
Unused			4623
A Invalid numbers			6977
	BC - Blocked by Bell	68	
	BU - Business/Fax /Modem	927	
	DU - Duplicate Number	25	
	NF - Invalid Number	5957	
B Unresolved			15172
	AM - Callback in 2 hrs	10128	
	AP - Callback - Specific time/date	319	
	EV - Evening Call Request		
	FR - French Household	19	
	HO - Head Office - Unreachable 1-800#'s		
	Incomplete		
	NA - Callback in 12 hrs	4704	
	ON - Will go Online to Complete Survey		
	RH - Referred to Head Office		
	RT - Number Retired		
	SA - Soft AP - Date/Time Required		
	X - Exit without Dialing	2	
C Non-responding, unknown eligibility			
D Ineligible			6070
	IG - Ineligible	5859	
	LN - Language Barrier	194	
	QF - Quota Filled	17	
E Non-responding, eligible			9650
	IR - Incomplete Refusals	64	
	R2 - Final Refusal	66	
	RF - Refusal	9506	
	UN - Unavailable within Project Timeframe	14	
F Completed interviews			674
	Complete (plus 26 cases from BWA oversample)	674	
TOTALS		**38543**	**38543**

General Public			
	Call Disposition Table		
Unused			6084
A Invalid numbers			960
	BC - Blocked by Bell	21	
	BU - Business/Fax /Modem	145	
	DU - Duplicate Number	4	
	NF - Invalid Number	790	
B Unresolved			2075
	AM - Callback in 2 hrs	1686	
	AP - Callback - Specific time/date	66	
	EV - Evening Call Request		
	FR - French Household	5	
	HO - Head Office - Unreachable 1-800#'s		
	Incomplete		
	NA - Callback in 12 hrs	318	
	ON - Will go Online to Complete Survey		
	RH - Referred to Head Office		
	RT - Number Retired		
	SA - Soft AP - Date/Time Required		
	X - Exit without Dialing		
C Non-responding, unknown eligibility			
D Ineligible			31
	IG - Ineligible	9	
	LN - Language Barrier	11	
	QF - Quota Filled	11	
E Non-responding, eligible			2045
	IR - Incomplete Refusals	25	
	R2 - Final Refusal	690	
	RF2 - Refus 2 - Refusal 2nd attempt	142	
	RF3 - Refus 3 - Refusal 3rd attempt	148	
	RF - Refusal	1040	
	UN - Unavailable within Project Timeframe		
F Completed interviews			715
	Complete	715	
TOTALS		**5826**	**5826**

Drinking Water Advisory Oversample (First Nations)			
	Call Disposition Table		
Unused			0
A Invalid numbers			1666
	BC - Blocked by Bell	45	
	BU - Business/Fax /Modem	194	
	DU - Duplicate Number	21	
	NF - Invalid Number	1406	
B Unresolved			2185
	AM - Callback in 2 hrs	1741	
	AP - Callback - Specific time/date	116	
	EV - Evening Call Request		
	FR - French Household	5	
	HO - Head Office - Unreachable 1-800#'s		
	Incomplete		
	NA - Callback in 12 hrs	323	
	ON - Will go Online to Complete Survey		
	RH - Referred to Head Office		
	RT - Number Retired		
	SA - Soft AP - Date/Time Required		
	X - Exit without Dialing		
C Non-responding, unknown eligibility			
D Ineligible			1017
	IG - Ineligible	916	
	LN - Language Barrier	99	
	QF - Quota Filled	2	
E Non-responding, eligible			2383
	IR - Incomplete Refusals	18	
	R2 - Final Refusal	13	
	RF2 - Refus 2 - Refusal 2nd attempt	24	
	RF3 - Refus 3 - Refusal 3rd attempt		
	RF - Refusal	2321	
	UN - Unavailable within Project Timeframe	7	
F Completed interviews			227
	Complete	227	
TOTALS		**7478**	**7478**