Contemporary Suicide in Canada: Emergence of Youth Suicide

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Abstract

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Any sociological understanding of suicide is firmly rooted in the social objectivity of the phenomenon itself. Standing in sharp contrast with the dominant medical paradigm, what sociology seeks is the historical personality of suicide as it mirrors our lived reality. The first task is to accurately describe the parameters of the phenomenon in order to highlight what form it actually takes in society. Having made explicit and justified this approach, this thesis reviews, in a second step, the academic discussion on age, gender and suicide, since these practical features are central in qualifying contemporary suicide. Finally, through a careful examination of gender and age specific suicide rates and age specific suicide sex ratios, the defining characteristics of our shared contemporary suicide regime are underscored. First, the data presented clearly supports the increasing sex differential in completed suicides in Canada. Second, the data presented underscores the changes which characterize the age distribution of suicide in Canada since the 1950's which simultaneously involves an increase of suicide rates in the younger age categories and a decrease of suicide rates in the later age categories. Thirdly, the data presented highlights the synchronicity of the spread of the phenomenon of youth suicide across the Canadian provinces. Finally, the data presented illuminates a recognizable cohort effect within the wider phenomenon of the coming into being of youth suicide. This thesis does

not set out to interpret the transformations which characterize our contemporary suicide regime, but instead seeks to underscore the precise modalities of these changes.

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INTRODUCTION

Over the course of the second half of the last century, suicide has taken on a new shape in most western societies, and would seem to coincide with profound and important social changes in the institutions which regulate and integrate our lives. Most of the support for social change having a significant influence on suicide rates comes from the study of native populations undergoing significant cultural alteration: male youth in Micronesia (Rubenstein, 1983), Inuit (Dufour, 1994; Thorslund, 1990), Aboriginals in Australia (Clayer and Czechowicz, 1991) and First Nations in Canada (Mignone and O'Neil, 2005; Chandler et al, 1998,2003). However, for the purposes of this thesis, a better example exists: the appearance of a new suicide regime in Canada marked by the unprecedented emergence of youth suicide. The defining features which make up this new suicide regime; an increase in youth suicide accompanied by a decrease in the older age groups and an increasing sex differential between male and female rates are clearly reported in both the literature and the popular media reports. However, despite recent efforts to examine these features and to accurately describe the shape that suicide now takes in provinces such as Quebec (eg. Gagné and Dupont, 2007), the same has yet to be done for Canada as a whole.

As such, this is the general goal of this thesis. In the analysis which follows, age and gender specific suicide rates and age specific suicide rate sex ratios will be presented to underscore the shared characteristics of the contemporary suicide regime in Canada. The choice of the word 'shared' is purposeful, and we would

like to suggest that despite the often cited specificity of provinces like Quebec, with its markedly high suicide rates and wide sex differentials, what we observe in this province is actually the same traits which are common to the rest of Canada and incidentally to most western societies, but in a grossly exaggerated form.

The importance of this transformation in the shape of contemporary suicide is confirmed by three undeniable elements: first, the unprecedented emergence of youth suicide, a striking fact in itself; second, the shared social space in which these transformations are taking place; and third, the synchrony of their appearance across the western world. The proposition is as follows: the contemporary suicide regime, indisputably marked by the emergence of youth suicide, is only interpretable in relation to the past and as such to the wider societal transformations of the integrative and regulative institutions found in western society. As such, our sociological approach to suicide seeks to understand the greater causality to which suicide belongs, if only as a symptom of this shared reality.

The primary goal of this thesis is to underscore the changes in the Canadian suicide regime through the use of simple descriptive statistics in order to highlight its core feature: the emergence of youth suicide. This thesis does not seek to interpret the phenomenon of suicide, but rather to draw out its features in a recognizable way and thus, makes no claim to paint the complete picture.

However, it does seek to address some of the missing descriptive elements in the current literature. Primarily, this thesis will highlight the changes in both the age and gender distributions of suicide in Canada and the provinces since the 1950's in order to underscore the emergence of a contemporary suicide regime which is undeniably different than the past yet which still fully belongs to it; and more importantly, which remains a strictly contemporary phenomenon.

In the introduction to a special volume of *Recherches Sociographiques* entirely devoted to the sociological study of suicide, Dagenais (2007) reiterates the foundations of a contemporary sociology of suicide. First, he establishes that the starting point of all research on suicide must be given by its common meaning where the parameters of the phenomenon itself are established. Since Durkheim, sociology has used the most basic descriptive and comparative statistical techniques to establish the parameters of suicide. These simple techniques allow us to grasp the central core of the phenomenon in a way that tells us that suicide in our society looks this way rather than that way. The objective here is simple: we must seek to identify the particular physiognomy of suicide as it appears in our society; to paint its picture in a recognizable way which fully resembles our lived world. It is by drawing out the picture of this singularity that we deliver the object we wish to interpret, and as a result it clearly appears as a social phenomenon.

Borrowing from Weber, Dagenais (2007) suggests that what we seek via these simple descriptive and comparative statistics is the *historical character* of suicide, which requires us to draw attention to the ruptures and similarities with another singularity in the past from which it is different. In essence, our analytical perspective can best be described like this: contemporary suicide resembles suicide as observed and described by Durkheim (1897), Morselli (1882) and Masaryk (1881); it is similar in the sense that it accentuates a pattern which already belonged to modern industrial society, specifically the overmortality of men, yet it is different in the sense that the parameters which constitute the phenomenon are no longer the same. Where once suicide rates increased regularly with age, they now peak in the younger age groups and gradually decrease, to increase again slightly in very old age. The pattern is simply no longer the same, and as such a new suicide regime is born.

This thesis aims to identify the descriptive criteria which define contemporary suicide, and in the process to answer important questions about this new shared reality. If we are to make sense of our object, which in this case is suicide, we must be able to clearly describe the shape it had in the past, the shape it now has, and the elements which mark it as different. We must seek out the defining moment of that change, the moment when all the factors which define our suicide regime coalesce to mark a clean break from our past. By employing simple yet telling descriptive techniques, this thesis seeks to underscore the features of suicide, and highlight the changes in both the age and sex structure of suicide

deaths in Canada. Through this process, the features which make up contemporary suicide will show through.

It remains that today's advanced statistical techniques encourage us to statistically examine situations in which suicide is an outcome and make a list of factors which are most often associated with it. This notion of a risk factor is clearly rooted in psychiatry and suicidology whose primary concerns are direct suicide prevention and intervention. For better or worse, this has long been the dominant analytical framework and as such has guided most suicide research over the course of the last century. We do not wish to downplay or minimize the efforts of researchers who continue to seek out these factors and variables, however these factors tell us very little about suicide as a significant act which by its very existence reveals that it is rooted in the domain of action rather than behavior. It is from this point of view that all sociological research of suicide must begin.

If this exercise is to make any sense, a quick word must be said about methodology before moving forward. For sociologists, methodology has several different meanings. For some, it means questionnaires, interviews or the data collection tools of research. For others, such as Durkheim, it means much more than that: methodology is the assumptions and concepts which are used in constructing a theory (Selvin, 1958), and as such the point of view from which one attempts to apprehend his object of study. To be sure, what sociology must

seek out is the historical personality of the manifestation of this phenomenon in society, which clearly stands in direct contrast to the dominant medical paradigm and its associated psychological autopsy method. Through an examination of suicide rates and sex ratios of suicide rates, the sociological perspective allows us to draw out the picture of suicide as it actually shows itself in society instead of drawing up a list of associated factors. Moreover, in teasing out this picture we are of course implying a sort of relativization of these factors, variables and agents associated to it since it is implied in our perspective that they are all necessarily tributary to the structure of the society at large to which they belong (Gagné and Dupont, 2007). In general, sociology as a discipline agrees, the social objectivity of suicide as expressed through changes in the age, sex and geographical distribution of the act, must be interpreted across the backdrop of wider and more profound societal transformations. This is the only way we can make sense of our shared contemporary suicide regime.

Durkheim was able to show that suicide rates remained stable in time, and that any change in the social suicide rate was indicative of society undergoing deeper transformations at the level of the structures which integrate and regulate our lives in society. Clearly for Durkheim, the changes were most visible in the institutions through which we define who we are in society -marriage, the family, religion, economy, work- and the same must be true today. What suicide is telling us is that society is ill, that the loss of the integrative and regulative mechanisms

which structure our lives in society are crumbling, or at least restructuring themselves and this to the detriment of those of us who participate.

To be sure, Durkheim's intuition was correct. Debates can be held over the methods he employed or the lack of clarity of certain of his ideas, however his intuition is proved ultimately correct by the shape which suicide has now taken in the last 50 years. The flows and ebbs of suicide follow us as our society races forward. One must remember that Durkheim wrote *Le Suicide* (1897) just as Western society was entering a new phase of development, and as such his theory is firmly rooted in the interpretation of the institutions of his time. However, the profound changes that Durkheim pointed to have now run their course, and as such, his theory can now be verified. For example, the institutions of marriage, and by relation divorce, pivotal aspects of Durkheim's intuition, have certainly taken on a new meaning. The ease at which divorce is obtained today is certain to affect suicide rates, and similarly to Durkheim's original intuition, as divorce opportunity continues to increase so do male suicide rates. More will be said on this relation in a later section.

The statistics show that suicide rates in Canada remained stable until the second half of the twentieth century, but then something happened. There was a rumble in the age structure and it began to shift; suicide rates in the younger age groups started increasing, and rates in the older groups started declining. At the same time, the sex ratios of suicide rates began to widen, much to the detriment of

males. Men are clearly still overrepresented in suicide deaths in Canada. The province of Quebec, which at first glance may seem particular, is actually just a concentration of the same features observable in all of Canada and most of the West; it shows an amplification of common traits.

Plainly stated, the focus of this thesis is to define and describe the transformation of suicide as it presents itself in our society, and not to interpret it. Making use of official Canadian and provincial suicide statistics, the features of contemporary suicide as they present themselves in our everyday lives will be underscored and the results will permit the necessary comparison with the past. Some of the questions it seeks to address are: When did the transformation of the age structure happen, and what are the defining features of this transformation? How has the gender distribution of suicide in Canada changed, if at all? Did this change happen in all Canadian provinces around the same time, or are some provinces contributing more to the state of suicide in this country? Is the province of Quebec, marked by some of the highest youth suicide rates in the western world, really that particular? In the process of seeking out these answers, the facts which define our object of study will be clearly established.

CHAPTER 1: THE DISEASE PARADIGM OF SUICIDE

At present, many mental health professionals regard suicidal behavior as the result of irrational mental states, distorted perceptions, impaired judgment and extremes in mood induced by mental illness. As is made clear in the published research, there is considerable evidence of a link between certain mental disorders and suicidal behavior. The problem arises in seeing all suicides as irrational and in drawing a direct causal link between mental disorder and suicide. Mental disorder is not a sufficient cause of suicide, given the large number of mentally ill individuals who do not commit suicide; and inversely the large number of healthy individuals who go on to commit suicide. The idea that suicide could be for some individuals an intentional and rational response to adversity in their lived existence and not the result of a mental defect is still unacceptable to many. An awareness of this debate is important in reviewing the state of knowledge in the field.

Intentionality, motive and the rationality of suicide

The aspect of the intentionality of suicide is both elusive and difficult to define. Durkheim suggests that:

> Suicides do not form, as may be thought, a wholly distinct group, an isolated class of monstrous phenomenon unrelated to other forms of conduct, but rather is related to them by a continuous series of intermediate causes. They are merely an exaggerated form of common practices…they result from similar states of mind, since they also entail mortal risks known to the agent, and the prospect of these if no deterrent; the sole difference is a lesser chance of death.
> (Durkheim, 1897, 1951: 45)

Clearly, in line with Durkheim's insight, many behaviors could be said to fall within the broad spectrum of intentional risk or self harm: chronic substance abuse, habitual risk taking, willful self neglect or even non compliance with medical treatment just to name a few examples. The degree to which such behaviors share a common basis with suicide in cause and treatment is a matter of debate; and not one that I can address in the scope of this thesis. Nevertheless, it is clear that our own sociological perspective of suicide implies recognition of the self destructive and suicidal aspects of these behaviors, and consequently the intentional and rational character of suicide as a social act in itself.

However, from this perspective the question still remains: why has the element of intention long been considered a defining characteristic of suicide, yet is downplayed in other forms of conduct which are rooted in a similar state of mind and involve a somewhat equal mortal risk for the individual? How can these other clearly self-destructive behaviors be seen as somewhat less intentional and self conscious in nature when compared to suicide? This question of intention is directly linked to the debate over the rationality of suicide. On one hand, intention is a necessary condition for suicide to be regarded as rational and of course goal directed behavior is by definition intentional. On the other hand, rationality is not a necessary condition for intentionality (Blum and McHugh, 1971). The intention to die may sometimes be based on irrational factors or cognitive distortions, yet in many other instances it is not. Clearly, attitudes towards the rationality of

suicide have changed over time and there is an obvious connection between the designation of a suicide as rational and its level of social acceptability. For a more complete discussion of the changing social attitudes towards suicide, I would refer the reader to David Daube's (1971) excellent article *The Linguistics of Suicide* which relates the perceived rationality of suicide to its changing social definition. However, I still wish to partially engage with this debate through a closer look at the concept of motive and the related concept of risk factors.

Blum and McHugh (1971) suggest that to treat motive as a cause (e.g. *what was a person's motive to commit suicide?*), is to commit a fallacy of presuming that suicide is an act which somehow describes some antecedent state of mind which preceded or caused it. In essence, motive is a rule which depicts the social character of the act itself. It is not that suicide as an act reports some antecedent depression but rather, it is only when the character of suicide is identified through the clarification of unstated circumstances that we can make this action socially recognizable as suicide (Blum and McHugh, 1971). To ask what the motive for a suicide is, is not to ask what the antecedent state of mind of the individual was, but rather it is to ask what the situation, context and knowledge are which render this event as socially possible.

Something can't be stated as a cause of an event if this something is involved or presupposed in the very description of the event itself (Blum and McHugh, 1971). From this point of view, if we are to say *he killed himself because he was*

depressed, what we are actually saying is that suicide is a way of doing depression. And clearly, it is not. We must recognize the act of suicide as an intelligible event of conduct and once and for all assign this behavior its identity as a social action.

For many years now and across disciplines, many suicide researchers have sought out correlations which relate suicide to a variety of economic, political, health and social variables. In essence what they seek is a series of factors which are statistically related to the act itself. However, without downplaying the important contributions of this work both in statistical method and innovation, it is clear from our perspective that this work is of limited value in understanding the social character of suicide in Western society since the correlations identified remain only indicators of the wider state of society. Gagné and Dupont (2007) go as far as to claim that their value is only heuristic and make sense only because contemporary society increasingly defines itself through numbers and rates. Clearly, variables such as divorce rates, birth rates, cohort size, alcoholism rates and even rates of psychopathology are necessarily only indicators of the state of the wider societal institutions and structures which govern our everyday lives. These rates do not exist in a vacuum. Naturally, it follows that any changes in these variables primarily reflect transformations in the wider social structures of our society. For example, the welfare rate, or the divorce rate are a perfect example of a selective reading of statistics which aggregate an infinite number of sub-processes so different that the resulting correlations which studies seek out

quickly become insignificant in the grander scheme of things. In addition, their insertion into any sort of explanation of suicide becomes problematic when the suggestion is that a change in one causes a change in the other.

Let's further examine this notion in action. A factor, as much as a cause, generally presupposes that the act with which we are concerned (in this case a suicide) does not possess an intentional character, since if there is intention then the notion of risk and cause must be attributed to the intentionality and not the act itself (Blum and McHugh, 1971). Obviously, it follows that any detour via intention would then bring one back to the reasons of the intentional act which is precisely what a mental health perspective of suicide seeks to avoid via direct action/intervention. As such, the advantage of this perspective is lost. Furthermore, since it is natural to assume that we don't purposefully succumb to mental illness, it thus becomes possible in this disease paradigm to characterize suicide in an epidemiological fashion through the sum of the risk factors which are associated to it effectively nullifying the reasons of the actor in the process. In the end, this disease-like etiology of suicide makes it possible to neglect the interpretation of the individual who commits suicide, for the profit of the cumulative action of risk factors which are themselves ordered by their statistical frequency (Gagné and Dupont, 2007). Clearly, no matter the precise factors employed to explain trends in suicide, they must of course reflect the precise shape which suicide actually takes in society.

Psychiatry, Suicidology and the psychological autopsy

It seems to us that if we continue to make suicide the effect of a disease or mental defect we are effectively ignoring the very nature of the act in which we are interested. According to the most recent World Health Organization (WHO) statistics, more than 95% of suicides are associated to mental illness. This statistic is certainly based on the predominant psychiatric certitude that in most cases of suicide it is a *disease of the mind* which incites the individual to make a cognitive mistake in believing that killing oneself is the answer (Gagné and Dupont, 2007). This type of reasoning is one that we must be careful to avoid since it replaces the action of an individual in society with the action of an associated factor. No science will ever establish that it is incorrect to view death as a possible solution. Even when specific neurotransmitter deficiencies or epigenetic modifications are identified as contributing to the risk of an individual to arrive at a contrary conclusion, we will still not have said anything about the distribution and transmission of suicide in the symbolic and normative space of society. Moreover, the certainty that suicide is a disease which pushes an individual to make an error in reasoning brings absolutely no contribution to our effort of understanding the variation of suicide rates across time since psychiatry and Suicidology remain content to attribute and liken the frequency and distribution of this act to the flow of a disease.

Clearly, the appearance of suicidology and related governmental prevention and intervention programs lend themselves to the further medicalisation of the

phenomenon of suicide. Suicide prevention has represented an important part of government mental health policy since the early 1980's. This perspective, which equates suicide with psychiatric disease, implies that reductions in the number of suicides can be interpreted as signaling improvements in mental health. Thus the imperative which underlies these prevention and intervention policies is that psychiatric morbidity needs to be detected and treated and that early intervention will reduce the incidence of suicide. Nevertheless, a paradox remains: the acknowledgement that a large number of completed suicides have had no contact with any form of mental health services prior to their death (Gavin and Rogers, 2006). Thus, these prevention policies simplify the relation between mental health and suicide and in the process underplay all other rationales for ending one's own life (Gavin and Rogers, 2006).

Interestingly, the emergence of state based intervention and prevention efforts coincide with the contemporary transformation of the suicide regime, thus with a number of important transformations which changed the very fabric of our society. In associating this phenomenon with psychological troubles and in the process identifying risk factors, suicidology offers up an interpretation of the phenomenon which satisfies both this new *prise en charge* of health by the state and effectively supports the increasing technocratization of the integrative and regulatory frameworks located in our societies (Gagne et Dupont, 2007).

Clearly, both the range of assumed causes and official categorizations of suicide is complex. Mental illness may not always be the antecedent correlate, let alone a cause of a suicide (for example those with a terminal illness, or those who for existential reasons decide to take their own life). However, as a research method, the psychological autopsy fits in and bolsters official policy presumptions about psychiatric morbidity. As such, the psychological autopsy is not really about categorizing deaths as suicide, but it is really about establishing the psychological state of the deceased prior to his suicide (Gavin and Rogers, 2006) and certainly implicitly suggests that the causes for an individual's suicide are always located in this antecedent psychological state.

In theory, the psychological autopsy should allow an exploration of a range of psychological and social factors which are associated to suicide. However in practice, psychiatric antecedents are given privileged status in this method to the detriment of other factors. The imperative to make a retroactive diagnosis drives this over emphasis on the link between mental illness and suicide. Consequently, the psychological autopsy has the tendency to exclude the consideration of other factors. In addition, psychological autopsies as a research method face a number of methodological challenges in the area of research design, identification of subjects and other sources of information, difficulties in approaching and interviewing relatives, and in the selection of valid and reliable outcome measures (Hawton et al, 1998; Werlang and Botega, 2003). Cavanaugh et al (2003) point out that while mental illness, identified retrospectively via the

psychological autopsy, may seem to be the variable most frequently associated with suicide, other variables such as sociological ones are for the most part insufficiently studied and sometimes even ignored in this frequently employed research method. As a result, their potential impact has so far not been sufficiently explored.

From a strictly sociological perspective, it is first and foremost the reality of the act itself that is of interest. This is clear in Durkheim's own work. What Durkheim was primarily concerned with showing in his study of suicide was that the causes of suicide were fundamentally social rather than purely psychological. It was the demonstration of the existence of social facts and the ability of the science of sociology to reveal their impacts that was really the fundamental concern for Durkheim. The study of suicide was only a means to an end, the end being to establish conclusively that such a seemingly individual act as suicide could both be studied and explained in sociological terms.

In this respect, a range of sociological research suggests that the concept of mental illness is not something that can be treated objectively and separated out from an individual's experience of the social reality of their everyday existence. This stands in sharp contrast to the preferred psychological autopsy method which always examines a suicide through the lens of psychiatric illness. Even where mental illness may be part of the profile of someone who has committed suicide, their psychiatric condition may not be the main precipitating factor.

Whereas the presumption of the relationship between mental illness and suicide in the psychological autopsy is predicated on an etiological role (mental illness directly related to the suicidal act), there are other aspects of being diagnosed with a mental health problem which may be implicated (Gavin and Rogers, 2006). In other words, one might find that those who have been diagnosed as having a mental illness have been subjected or exposed to a series of events and stigma which create anomie and in turn contribute to a suicidal trajectory. Psychological autopsy, at least as it is currently formulated, appears to reflect the kind of traditional realist ontology characteristic of Western medicine (Wulff, Pedersen and Rosenberg, 1990).

In his book *Suicide: Foucault, History and Truth*, Ian Marsh (2010) discusses at length the long-standing psychiatric dominance within suicide research. He suggests that it is only since the publication of Durkheim's *Le Suicide* (1897) that a theoretical challenge to the medical paradigm of suicide has become possible. More precisely, it was Durkheim's successful demonstration that regularities in the suicide rates of nations and cultures across time could best be explained by reference to social rather than individual forces which had the potential to destabilize the long standing medical model first established by the nineteenth century moral statisticians. Despite this recognition, Marsh (2010) also states that the idea of suicide as a social pathology was for the most part unable to convincingly challenge the basis of psychiatric practices. Rather, the effects of this new sociological perspective was to be felt more at the population and social

policy level where the statistical and social facts about suicide continue to guide policy makers today (e.g. United Nations; WHO; Canadian Suicide Taskforce). For the purposes of this thesis, Durkheim's challenge to psychiatric dominance is our obvious theoretical starting point.

CHAPTER 2: DURKHEIM'S THEORY OF SUICIDE

Since the publication of Durkheim's *Le Suicide* in 1897, which incidentally marks the emergence of sociology as an academic discipline in itself, researchers from across all fields have explored a number of theoretical and methodological approaches to examine the phenomenon of suicide in our society. While keeping with Durkheim's main theoretical elements most of these researchers have related changes in suicide rates to a number of social dimensions in order to underscore the root causes of suicide. In doing so, Durkheim's statistical instrument remains the benchmark tool in investigations seeking to explain variations in the social suicide rate.

Primarily, Durkheim's approach sought out the social causes of suicide rather than to reduce suicide merely to a question of individual sickness or abnormality. Durkheim's work is certainly formative of a definite sociological style of thought that stands in direct contrast with the dominant medical approaches to understanding suicide (Marsh, 2010). Durkheim explicitly rejects the work of Esquirol and other nineteenth century moral statisticians who suggest that suicide is rooted in individual pathological causes. Instead, Durkheim argues for the existence of a rather complex social etiology for such acts (Marsh, 2010).

As such, in Durkheim's sociology at least, we choose to first describe and establish the parameters of the phenomenon itself via simple statistical techniques. Using descriptive and comparative statistics, sociology seeks to

establish the social objectivity of suicide; to seek out why suicide, as a social phenomenon, takes on a particular shape rather than another one in our society. Via the analysis and interpretation of these descriptive statistics, the information gleaned is of the utmost importance since it allows sociology to draw out the picture of suicide in a recognizable way, in a way that mirrors our lived experience in society. By outlining the precise dimensions which suicide takes in society, we are seeking the historical personality of the phenomenon, its singularity, and in doing so these statistics tell us that suicide looks like this rather than like that and in the process we establish our object of study.

Specific to this thesis, what is most important is that Durkheim draws on a vast array of statistical data to show that there is a consistent pattern in suicide rates which remain so across time and which are specific to each society. He convincingly shows that the regularity of these patterns cannot be accounted for by non-social factors such as race, heredity, psychological disorder, climate or season, but rather can only be accounted for by variations in religious affiliation, marital status, employment and income, etc. What Durkheim wishes his reader to seize is that suicide, as an individual subjective act, is actually rooted in the larger social objectivity of the phenomenon as it exhibits itself across time in each society. His argument is simple: since suicide as an objective social fact is distributed in such a regular way across time for a specific society, it must necessarily imply that the larger regulative and integrative social structures in that society are the determinants of these *courants suicidaires*:

> Since, therefore, moral acts such as suicide are reproduced not merely with an equal but with a greater uniformity; we must likewise admit that they depend on forces external to individuals. Only since these forces must be of a moral order and since, except for individual men, there is no other moral order of existence in the world but society, they must be social. But whatever they are called, the important thing is to recognize their reality and conceive of them as a totality of forces which cause us to act from without… so truly are they things sui generis. (Durkheim, 1897, 1951:310)

Typology, Integration and Regulation

In its most simple formulation, Durkheim's theory of suicide suggests that the social suicide rate varies in function of two distinct yet related social states rooted in the wider societal institutions always located outside of the individual: on one hand social integration and on the other social regulation. As a consequence of identifying these two social states, Durkheim was able to propose his four ideal types and explain the variation of suicide rates among social environments rather than through the suicides of particular individuals. The goal of this section is twofold, first to offer a summary of Durkheim's typology and second to examine the way in which his theory remains valid today and how via its extension it can still enlighten our interpretation of the contemporary suicide regime which is of course different, yet remains an extension of the one he himself studied.

In his article, Bearman (1991) takes a purely structural interpretation of Durkheim's study to examine its two main tenets, integration and regulation. This is an effective perspective to highlight and account for Durkheim's fourfold ideal typology of suicide. His structural position is further justified by first underscoring the basic sociological insight which is implicit in Durkheim's work: that is the

recognition that underlying his categorical groups which vary in their relative contribution to the social suicide rate are structures of social relations. Thus, it follows that variations in these structures will yield variations in the suicide rate.

According to Bearman (1991), Durkheim's analysis was primarily motivated by his concern with the abnormality of the industrial west reflected in the regularity of the higher suicide rates in these developed societies. Particular to suicide, Durkheim hoped not only to make sense of the aggregate suicide rates in these nations, but also to decompose this rate into its constituent parts. He sought to identify the structural aspects of varying social positions occupied by individuals that subjected them as a category to varying *courants suicidaires*. In order to accomplish this, Durkheim's essential first step was to make explicit the relationship between individual social position and societal integration of groups by focusing on the duality of all tangible social structures. To be sure, duality is a necessary by-product of all human social relations, and according to Bearman (1991), social structures evidence a duality which encompasses both the groups and interpersonal networks in which individuals in society are embedded. In Durkheim's analysis of suicide, this duality is implicitly stated in the central idea that an individual's multiple group affiliations yield at the same moment both a structure of individual relations and a structure of group relations. Clearly, social structures are defined by the intersection of these two levels.

Now, let's relate this duality back to integration and regulation. Integration is the presence of social relations binding a person to others such that they are exposed by virtue of the relations to the normative demands of those to whom they are tied; in other words regulated by those norms. These two concepts are so intertwined, that outside of an ideal type, one can't make sense without the other (Bearman, 1991). In societal conditions where regulation has been decoupled from integration, Durkheim would refer to these contexts as pathological, and view them as deviations from the expected developmental trajectory of society.

A society is said to be integrated to the degree that its members possess a common conscience of shared beliefs, values, interact with one another and have a sense of devotion to common goals. For Durkheim, altruism implies a high level of integration. Altruistic societies, such as the army and primitive nations, have many suicides because they stress individual renunciation. At the other end of the integration scale lies egotism which exists when the common conscience is weak, interactions between members are limited and dedication is to self interests rather than to the collectivity. These groups also display high rates of suicide since in a condition of weak integration life derives no meaning and purpose from the collectivity and is much more readily surrendered. Egotistic suicide is the suicide of the modern world; it is the suicide of the highly individuated person with weak bonds to others across all of the spheres of social life, what Durkheim labels religious, conjugal, political and occupational society.

Durkheim defines egoism with respect to integration into a single society, but the ideal egoist is marginally integrated into all societies simultaneously (Bearman, 1991). The structural position of the egoist is one of low integration and, consequently, low normative regulation. Thus, in Durkheim's formulation, both high and low levels of integration cause high suicide rates.

As egotism and altruism are pure opposites, each condition a reflection of an individual's integration into the social order, anomie and fatalism are also pure opposites, a reflection of the extent to which an individual is regulated by society. Both anomie and fatalism must be associated to a unique structural position that can, similarly to egotism, be defined simultaneously by both parameters of social integration and regulation. Durkheim defines anomie as normlessness resulting from the absence of regulation. Implied is that anomic suicide is the suicide of an individual who is integrated into the social world, for otherwise he or she would be classified as an egotist (Bearman, 1991). The necessary condition for anomie is that individuals must be integrated into groups yet not be regulated by their normative demands. Clearly, since membership in groups entails exposure to norms that reside in the group, the anomic position seems contradictory. How is it possible that an individual integrated into a society remain without moral regulation?

Bearman (1991) believes the answer is implicit in Durkheim's treatment of anomie in Suicide, where he subtly shifts attention away from individual social

relations (which define integration) and turns instead to the structure of group relations in society. Durkheim argues that anomie is a condition experienced by persons living in societies in temporary disequilibrium and anomic social positions are seen as temporary products of crises that disrupt social life and which create anomie as a social condition.

Regulation and suicide have exactly the same relationship as integration and suicide. Either a high or low level of regulation causes many suicides. Durkheim assigns anomie to a state of low regulation and suggests that when society has but a weak control over the individual, *passions* remain unchecked and the individual is at an increased risk of suicide. On the other hand, a high degree of regulation also engenders suicide: "*when a state of fatalism prevails, social regulation is intense…futures are pitilessly blocked and passions violently choked by oppressive discipline*" (Durkheim's fatalistic footnote, 1897, 1951:276) as in the case of childless married women, very young husbands and slaves.

In essence, what Durkheim is suggesting is that each society is to some degree integrated and regulated at the same time. The very definitions offered by Durkheim imply that any society or group stands at some point on each dimension: they are not mutually exclusive but rather intimately linked. It is precisely the fact that suicide depends on these two distinct yet related social states that makes Durkheim's theory so insightful.

As such, Durkheim's general theory can be stated in two ways: the more integrated/regulated a society, group or social condition is, the lower its suicide rate; and inversely, the higher the level of anomie/egotism prevailing in a society or group, the higher the suicide rate. Incidentally, Merton himself claims that Durkheim's theory of suicide is among the few approximations to a scientific law that our discipline has found (Merton, 1976). However, it is also within this interrelatedness that many contemporary researchers misinterpret Durkheim in their efforts to extend his theory to account for our contemporary suicide regime. For example, some only consider social regulation and focus their analyses solely on anomic suicide (e.g. Powell, 1958), while others instead opt to conflate regulation to integration and as a consequence only consider egotistic suicide in their studies (e.g. Gibbs and Martin, 1958). Before proceeding, this last point deserves a few more remarks.

Gibbs and Martin (1958) sustain that the distinction between egotism and anomie is purely artificial and provide as proof their own analysis of conjugal anomie whereby the high suicide rate of the divorced is best explained by their social isolation which resembles that of the single and widowed. This conflation is even more fervently defended in Johnson's article *Durkheim's one cause of suicide* (1965) whose primary goal is to show that if Durkheim's theory is to be coherent in its formulation suicide must depend on only one variable where anomie becomes a constitutive element of egotism. Johnson (1965) first eliminates altruistic and fatalistic suicide, and then suggests that since Durkheim never

situates the social categories which he studies on both dimensions of anomie and egotism at the same time, there can only be one social state which is responsible for the social suicide rate.

But, this point of view is obviously a misreading of Durkheim's formal typology of suicide and is clearly untenable since through a more attentive reading of Durkheim it is apparent that he does in fact identify a common domain of application for the two social states: the family. As such it is legitimate to consider Durkheim's treatment of the effect of civil society on the propensity to suicide as the central and indisputable cohesive feature of his work (Besnard, 1973). It is from this point that we can begin to extend Durkheim's integration/regulation theory of suicide to account for the transformation of the suicide regime first observed by Durkheim into our contemporary suicide regime today. The appropriateness of this theoretical extension is easily identified in the following quote:

> So the social conditions on which the number of suicides depends are the only ones in terms of which it can vary; for they are the only variable conditions. This is why the number of suicides remains stable as long as society does not change. (Durkheim, 1897, 1951:321, emphasis mine)

Clearly, western society has suffered through a series of important social transformations in its regulating and integrating mechanisms which make it possible to extend Durkheim's theory today. Case in point: contemporary society is different than it was one hundred years ago. In a direct continuation of Durkheim's theory, it is our contention that the common contemporary suicide

regime in most western societies can best be understood through the concomitant transformation of the family and conjugal life as a mechanism of integration and regulation.

Durkheim identifies two types of suicide which are related yet conceptually distinct through their association with the family. The first, egotistic suicide depends on the way in which individuals are attached to society through the domestic integration afforded by the family, whereas anomic suicide depends instead on the way that society controls them through the regulation rooted in the conjugal bond. Certainly, both types are related since both are embedded in the fact that society is not sufficiently present for the individual, however it is precisely the sphere in which society is absent to the individual which makes them also independent of each other.

Durkheim first successfully underscores the importance of integration in constituting egotistic suicide and secondly underscores the role of regulation in constituting anomic suicide. This is the tie that binds Durkheim's theory and makes it clear that suicide, at least in his formulation, depends on both integration and regulation at the same time. Faithful to Durkheim's original intention, the family and by extension marriage constitutes both an integrative institution which protects from egotistic suicide, and a regulative institution which protects from anomic suicide.

In Durkheim's formulation, anomic suicide takes place when society is absent from the individual passions and leaves these passions without any limits or control. Following a spirited discussion of economic anomie, Durkheim then turns his attention to the family and marriage to further build a coherent theory since he believes that conjugal anomie is not only more pervasive than economic anomie, but its analysis can also serve to clarify the nature and functions of marriage itself. What is important to note right from the beginning is that similarly to his consideration of domestic anomie in egotistic suicide, Durkheim is not interested in explaining the high number of suicides among the divorced, which for him is a case in point, but rather he seeks to understand the influence of divorce opportunity on suicide among the married. One must agree with Besnard (1973), this is a most brilliant theoretical move, yet also one that is particularly prone to misunderstanding.

Clearly, both egotistic suicide and anomic suicide belong to Durkheim's formal typology of suicide and are both related to the other ideal types. However, since we have in mind to retrieve Durkheim's anomie/divorce argument to make sense of the features of contemporary suicide, the next section will mainly examine Durkheim's concept of conjugal anomie and its relation to divorce.

Suicide and divorce

Durkheim begins by first establishing the existence of the relationship between divorce and suicide and corroborates Bertillon's earlier observation that in all of

Europe the number of suicides varies concurrently with the number of divorces and separations. Via a comparison of suicides and divorces in both the provinces of Switzerland and in the departments of France, Durkheim shows that the correlation does exist and notes that the relation between the two phenomena is striking. However, since Durkheim's primary goal is to show that little can be explained by purely individual circumstances, he also takes the opportunity to refute Bertillon's principally organic explanation which implies that both suicide and divorce are rooted in individual psychopathic weaknesses. As such, Durkheim asserts that it is not in the organic nature of the subjects that we will find the explanation for the association between divorce and suicide, but rather in the intrinsic nature of divorce itself, and by extension, the effect of divorce opportunity on the institution of marriage. According to Durkheim, when a marriage is broken by the act of divorce, the propensity to suicide of the divorced must be associated with certain effects of marriage which continue to influence the former partners even after they have been legally separated. If divorcees have such a strong tendency to suicide, this is because they were already inclined to it when they were living together through the very fact of their common life. As such, the aggravation which increases a divorcee's tendency to suicide is not a consequence of divorce itself, but rather "*of the marriage which brings it to an end*" (Durkheim, 1897, 1951:266).

Once this proposition is accepted, it becomes possible for Durkheim to explain the relation between divorce and suicide. Durkheim reasons that among nations

where divorce is frequent, the particular fragile state of a marriage *that can be undone* must also be widespread. Wherever there are a large number of actual divorces there must also be a lot of families who are more or less close to divorce, thus it is normal for the two phenomena to vary in the same direction. Again, this position clearly suggests that what Durkheim is seeking when he introduces the factor of divorce in his analysis is not the direct relation between divorce and suicide, but rather the effect of the possibility of divorce in society on the relation between marriage and suicide. Thus, it is the very possibility of divorce by the way it affects marriage which drives one to suicide since it is evident that the mere option of divorce implies a weakening of the matrimonial rule (Besnard, 1973). To be sure, where divorce is common, marriage becomes *an enfeebled form of itself;* it is a lesser marriage and can therefore not produce its beneficial effects to the same extent. If the moral character of the obligation is no longer felt and if it no longer has any moral authority over the individual, marriage ceases to play any useful role. What matters here is not simply that the regulation offered by marriage exists, but it must be accepted in conscience as well for it to have any influence on suicide (Besnard, 1973).

How Durkheim arrives to this conclusion is probably the most challenging aspect of *Le Suicide*. Let's briefly revisit and sketch out Durkheim's reasoning since if we are to make sense of this argument, it is clear that Durkheim's empirical basis must first be understood. The data available to Durkheim clearly shows that the greater the frequency of divorce in a given society, the higher the coefficient of

preservation for wives will be, and inversely the lower will be the coefficient of preservation for husbands. As such, Durkheim is not working on suicide rates per se, but on ratios of suicide rates which measure the relative immunity carried by marriage for each category. These coefficients of preservation, as calculated by Durkheim, do not imply a general relationship between suicide and divorce, rather the coefficients highlight the influence of divorce opportunity on the regulative at integrative effect of marriage on suicide. Accordingly, and contrary to what Tiryakian (1981) suggests, the results do not imply in any way that wives commit suicide less frequently where divorce is frequent, and vice versa. It is the mere possibility of divorce which weakens the conjugal bond that has an impact on suicide rates; divorce modifies the effect of marriage on suicide, and just like the effect of marriage in egotistic suicide, it does so differently for each gender.

However, the question still remains for Durkheim whether the explanation could lie in the constitution of the family. Durkheim suggests a series of facts which help to refute this hypothesis. First, if divorce cannot be introduced without improving the woman's relative situation, then it cannot be connected with a bad state of domestic society since the same aggravation should occur for the wife and the husband given that the weakening of the family cannot have such opposite effects on each gender. Second, since the birth rate in countries where divorce is frequent remains consistently high, then there is every reason to believe that the cause of the association is not to be found in the family. Third, if the constitution of the family was to blame, wives would also be less well

protected in nations where divorce is common since they are affected as much as husbands by a poor state of domestic relations. Consequently, for Durkheim, it becomes irrefutable that the cause of the phenomenon must lie in the state of marriage and not in the constitution of the family (Besnard, 1973).

Durkheim's coefficients clearly show that in countries where there is no divorce the wife is less protected than her husband. Once divorce is introduced, the husband is less protected than his wife, and moreover, her protection increases regularly as divorce increases. In societies where divorce is commonplace, it is the wife who gains from marriage, and the husband loses. Therefore, Durkheim can suggest the undeniable fact that "*marriage favors the wife in respect to suicide to the extent that divorce is more common, and vice versa*". (Durkheim, 1897, 1951:274) Thus, in societies where divorce is possible, the limits that marriage once set for men can no longer be as strong, since its regulatory effects can be more easily overturned. The regulation through marriage that once made husbands strongly protected against suicide is effectively reduced. Without a doubt, one cannot be strongly regulated by a bond that can be broken at any moment and it is inevitable that the husband's immunity to suicide will be less in societies where marriage is strongly affected by divorce. In these circumstances he is closer to the unmarried and loses the protection once offered by marriage. For women on the other hand, marriage only prevents her from changing her situation no matter how intolerable it is. The rule of marriage for a woman is thus an obstacle without any great advantage and as such divorce protects the wife

since in its possibility alone the wife's situation is no longer unchangeable; a legitimate escape for her becomes possible (Besnard, 1973). Hence, it is the state of conjugal anomie, a product of the mere possibility of divorce in society which explains the parallel development of divorce and suicide and not divorce itself. The increase of husband suicides in societies where divorce is common results from the *sui generis* moral constitution of society caused by the weakening of the matrimonial rule through divorce possibility which in turn produces the exceptional tendency to suicide for husbands (Durkheim, 1951; Besnard, 1973). This fine tuned explanation of conjugal anomie is the key to gaining a clearer understanding of Durkheim's intuition of the role of conjugal anomie on the social suicide rates.

The goal of the previous section was clear, it sought to highlight Durkheim's concept of conjugal anomie through a careful consideration of his treatment of divorce and its relation to the social suicide rate. In the process, the link between integration and regulation, and by default Durkheim's formal typology was again underscored. In order to further support this oft misunderstood component of Durkheim's theory, Besnard (1997) sets out to verify Durkheim's hypotheses of conjugal anomie using contemporary data and wishes to prove once and for all Durkheim's most brilliant insight.

The question remains for Besnard (1997), whether Durkheim's theory of marital regulation can still shed light on variations in contemporary suicide rates by

marital status. Besnard (1997) thinks so and believes that its application is highly

relevant; not only in support of Durkheim's initial intuitions, but more so given the

important changes that has suffered the institution of marriage since the

publication of Durkheim's study. As we know, the institution of marriage has

undergone significant changes in the last quarter century: the age at first

marriage increased (the reversal of a century long trend), the incidence of

divorce increased, the number of out of marriage births increased and the

number of non-marriage or common law relationships increased (Besnard,

1997). These changes provide interesting grounds for Besnard to test the

relevance of Durkheim's theory centered on the normative definition of conjugal

society.

Directly in line with Durkheim's original insight, Besnard (1997) sets out to

highlight the impact of events which form a passage from one state to another on

suicide rates, such as is the case of divorce and widowhood. Besnard (1997)

evaluates the impact of the event of divorce by examining the youngest

divorcees. During the 13 year period in question, the rate of suicide among

divorced men aged 20-24 was 53.4 and 55.8 for ages 25-29. The rates increase

up to age 50, and then regress from age 50 to 70. The suicide trend by age for

divorced men now displays more of a bi-modal tendency. He then considers the

differences between divorce and other marital statuses – a way of neutralizing

the general effect of age in order to bring out the specific effects of divorce and

shows that the ratio of the suicide rate for divorced men over married men, while

very high in the youngest age groups, decreases regularly with age. The ratio of the suicide rate of divorced men over single men is also at its highest among the 20-24 however this difference is reduced; in fact the position is reversed for men in their 60's and only reappears at age 80 and over. These observations strongly suggest that divorce as an event does increase the likelihood of suicide among husbands, but what about for wives? The change with age of the divorced vs. married female suicide rate ratio closely resembles that of men. The aggravating effect of divorce is weaker for women than men but this difference between the genders does not vary with age. This result once again suggests that divorce, as a change in status, does have an aggravating effect on suicide rates. If we look at the divorced vs. single women ratio of rates we see that divorced women from 25-70 hardly kill themselves more than single women in the same age span. Besnard (1997) is certain that Durkheim would suggest that domestic integration, or the presence of children, has come to compensate for the negative effect of divorce on women. This factor probably goes a long way towards explaining why still today, divorce aggravates men's situation more than women's since women are much more likely to have custody of their children following a divorce.

In sum, Durkheim's treatment of divorce and suicide make explicit the relation between integration and regulation and shows that the family is the tie that binds his theory into a cohesive whole. Furthermore, it is precisely this aspect of Durkheim's argument, the anomie/divorce relationship, which can be retrieved to further an interpretation of contemporary youth suicide.

CHAPTER 3: SUICIDE, GENDER AND AGE

This section will take a closer look at some of the theory which can help clarify the precise characteristics of our contemporary suicide regime as stated in the introduction. The discussion of gender and age which follows is one that must be made in order to show that both age and gender are not an artifact or product of mis-measurement; that they are in effect practical features of the physiognomy of our contemporary suicide regime and clearly relevant to its historical personality. To be sure, one cannot address the issue of suicide and its relation to gender and age without examining what researchers are actually saying when they talk about this relationship. As such, it can seem that despite my stated goal of drawing out the features of contemporary suicide in a recognizable way, I am falling into the realm of interpretation. However, it remains clear that these interpretations are the only means available to fully apprehend these practical features of contemporary suicide.

Suicide and Gender

More than a century ago, both Morselli (1882) and Durkheim (1897) made the observation that male suicide rates exceeded those of females in most European countries. This observation is important in itself; however the explanations suggested by Durkheim to explain this divergence in gender specific rates remain problematic and rooted in biological determinism (Sydie, 1987). His reliance on the *natural* division of labor between the sexes forms the basis of his explanation: females, according to Durkheim, have different organic and intellectual capacities

and moreover, these different interests are the result of natural factors for women and normative factors for men which predispose the sexes to different experiences and suicide risk. Clearly, these types of explanations are no longer tenable no matter how appropriate they may have been in Durkheim's time.

However feeble his attempt to explain the gender differences in suicide rates, Durkheim still managed to point to an important factor which differentiates the sexes; the different social experiences of males and females. Implied is that the mechanisms of integration and regulation must necessarily differ for males and females since there is still today a persistent and significant sex difference in the social suicide rate. Clearly, females reduced tendency to suicide in relation to males is not a product of their natural instincts, but rather because males and females have had different collective and integrative histories and have been regulated differently by culturally defined norms of gender appropriateness and identity.

This gender gap in suicide still persists today and is observable in almost every Western nation. For example, Canetto and Lester (1995) examined suicide rates in a large number of nations and reported that save for a few notable exceptions in China (He and Lester, 1997), India (Lester et al, 1999) and Papua New Guinea (Counts, 1980), male rates remain consistently higher than female suicide rates. Most of the studies concerned with the gender gap in suicide rates have focused on the more developed western nations, probably due to the fact that their vital

statistics are more reliable and clearly share a similar pattern in the male to female ratio of completed suicides (Cutright and Fernquist, 2001). Most quantitative studies on trends in the gender gap of suicide rates also usually examine these trends in a single population. For example, Steffensmeier (1984) examined gender specific suicide trends in caucasian Americans for the period 1960-1978. She shows that the ratio of male to female suicide rates narrowed in the 1960's and then widened in the 1970's. This trend has also been reported by McIntosh and Jewel (1987) and Austin, Bologna and Dodge (1992). In Australia, Hassan and Tan (1989) showed that the female rate increased from 1955 to the early 1960's and then declined, widening the ratio of male to female suicides.

The divergence of male and female suicide rates in Canada, starting in the early 1960's echoes the observations described above; however in the Canadian case it is clear that it is the increasing male suicide rate which maintains the high ratio since female rates remained quite stable during this entire period. Based on these and other studies, we can see that the gender gap in most western societies follows a similar pattern: an increase of male suicide rates through the 1960's and its dramatic rise in the 1970's which in some cases is coupled with a decrease or stability of female rates resulting in a widening gulf between male and female suicide rates. This is clearly a pivotal point in the transformation of the western suicide regime, despite appearing at different times in different western nations. However, as evidenced, the trend is relatively the same everywhere.

The gender paradox

Canetto and Sakinofsky (1998) have called this puzzling fact in the epidemiology of suicide the gender paradox of suicide. Their theory of the gender paradox is comprised of two distinct yet related arms: non-fatal suicidal behavior and actual suicide mortality. According to the authors, the gender paradox in suicidal behavior is a real phenomenon and not a mere artifact of data collection, and is a more culture bound phenomenon than has been traditionally assumed; whereby cultural expectations about gender and suicidal behavior strongly determine its existence. They suggest two possible fields of action where this paradox operates: first in the divergent expectations of gendered suicidal behavior and second in the interpretations of those charged with determining whether a particular behavior is suicidal. As this thesis is not concerned with ideation or attempted suicide, but rather with completed fatal suicides, I will only briefly sketch out the first arm and then focus on the second arm which attempts to explain the sex differential in completed suicides.

In most western countries, females are certainly overrepresented among those who report suicidal ideation (Canetto and Lester, 1995; Canetto 1997) and also tend to surpass males in rates of non fatal suicidal behavior including attempted suicide, deliberate self harm and parasuicide. Both the clinical literature and a number of community based surveys support this assertion. However, Canetto and Sakinofski (1998) do identify a few exceptions in certain localities or ethnic minority groups but this fact remains universally true in most western societies.

The authors speculate that the gender related meaning of non fatal suicidal behaviors, that is the association between non fatal suicide and femininity, may be the cause for this differential where males are less likely to report previous non fatal suicidal behavior. Canetto (1997) suggests that men's non-fatal suicidal behavior is thus subject to underreporting due to the cultural attitudes about masculinity and suicide whereby these types of behaviors are considered unmasculine. A number of studies support this line of reasoning. Rich et al (1992) showed that males are more concerned than females about social disproval concerning their suicidal thoughts and behavior and studies in the United States have suggested that males are particularly critical and uncomfortable around suicidal persons, particularly if that person is another male (Canetto, 1998; Mishara, 1982). At the same time, the association of non fatal suicidal behavior and femininity must also play a role in maintaining the gender differential in female rates of non-fatal suicidal behavior. This association may actually inhibit such behavior in males more than in females: distressed males may refrain from engaging in nonfatal suicidal behavior because of the stigma associated to it. On the other hand, for distressed women, the view of nonfatal suicidal behavior as feminine may facilitate the adoption of such behavior.

Furthermore, in assessing non fatal suicidality in males it is very likely that this cultural attitude also influences researchers and clinicians who may be less tuned in to recognize suicidal inclinations in males (Canetto and Sakinofski, 1998). In sum, what Canetto and Sakinofski (1998) are suggesting is that rates of

non-fatal suicidal behaviors in males may be underestimated due to the combined effects of underreporting on the part of suicidal males because of fear of social stigma, as well as underreporting by clinicians and researchers who miss suicidal clues in males.

In terms of fatal suicides, the prevalence of male suicide mortality clearly surpasses that of females in most Western countries. This is Canetto and Sakinofski's (1998) second arm of the gender paradox of suicide, which for all intents and purposes is more relevant in the scope of this thesis. To illustrate this point, I have reproduced a table from their article. Fig. 1 illustrates the relationship between male and female suicide rates in 32 countries that reported to the World Health Organization (WHO) in 1992. Since this relationship obviously varies with age, the authors have selected the 15 to 24 year age category for the purpose of their illustration. The first fact which emerges from this table is that no clear geographical pattern for the suicide sex ratio is evident, since the countries vary widely in their male and female suicide rates. However, a number of western countries with relatively high male suicide rates are among those showing a M:F ratio in excess of 4; namely Finland, New Zealand, Canada, Norway and Austria. The data also indicates that in all but 4 of the 32 countries, male suicide rates are at least double those of females, which is consistent with findings from other epidemiological reviews (eg. Diekstra, 1993).

TABLE 2
Suicide Rates (per 100,000) and Ranked Male:
Female Rate Ratios in Populations Ages 15–24

Country	Male	Female	Ratio	Rank
Mauritius[a]	17.1	17.9	1.0	1
Hong Kong[b]	7.1	6.3	1.1	2
Singapore[a]	12.0	9.5	1.3	3
Japan[a]	11.0	6.2	1.8	4
Argentina[b]	7.4	3.7	2.0	5
Israel[b]	6.8	2.8	2.4	6
Netherlands[a]	8.5	3.5	2.4	7
Hungary[a]	21.9	8.9	2.5	8
Portugal[a]	7.3	2.9	2.5	9
Sweden[b]	17.7	7.1	2.5	10
Costa Rica[b]	8.1	2.9	2.7	11
Denmark[a]	15.5	5.4	2.9	12
Uruguay[a]	10.3	3.6	2.9	13
Venezuela[c]	9.2	2.8	3.3	14
Belgium[c]	16.2	4.8	3.4	15
France[a]	14.9	4.4	3.4	16
Italy[b]	5.0	1.5	3.5	17
W. Germany[a]	16.1	4.6	3.5	18
Switzerland[a]	27.3	7.7	3.6	19
Chile[b]	9.7	2.7	3.6	20
Mexico[a]	4.8	1.3	3.8	21
Austria[a]	27.9	7.3	3.9	22
Greece[a]	4.8	1.2	3.9	23
Spain[b]	7.1	1.8	4.0	24
New Zealand[b]	29.5	7.1	4.1	25
Norway[a]	23.7	5.3	4.5	26
Australia[c]	23.2	5.0	4.6	27
Ireland[a]	13.2	2.8	4.7	28
Finland[b]	40.1	8.3	4.8	29
United Kingdom[a]	10.9	2.2	4.9	30
United States[b]	21.7	4.3	5.1	31
Canada[a]	26.1	5.0	5.2	32

Note. Data are from countries reporting to the World Health Organization. 1992. Rates are averaged over 5 years.
[a]1986–1990; [b]1985–1989; [c]1984–1988.

Figure 1: Suicide Rates and Ranked Male:Female Rate Ratios, Age 15-24, various Western countries (source: Canetto and Sakinofski, 1998)

Clearly, this table leads the authors to question whether the male predominance among those who die of suicide is real or an artifact of data collection practices. Based on the WHO data, they believe that the gender gap in suicide mortality is real, at least in countries where the gender suicide ratios are high. It does seem highly unlikely that underreporting would be of sufficient magnitude to reduce the high gender suicide mortality gaps such as those found in Canada or Finland

however, the authors do acknowledge the possibility that women's suicide may be subject to misclassification more than men's suicide due to the cultural attitudes about femininity and suicide (Canetto 1992, 1993, 1997). Previous studies have shown that in the United States killing oneself is considered less acceptable and a less powerful act in females than in males (Canetto, 1997); women who kill themselves are often viewed as less well adjusted than men who kill themselves independent of the precipitating event (Lewis and Shepeard, 1992); and that relatives may have more compelling reasons to hide a woman's suicide than a man's (Douglas, 1967). These gendered preconceptions are bound to influence the collection of official statistics whereby these cultural attitudes about suicide could affect coroners who may be reluctant to classify a female death as suicide. However, the magnitude of this misclassification is certainly not enough to account for the important sex differential in suicide mortality.

Operating at the same time, the association of suicide and masculinity may play a role in increasing the gender gap in rates of fatal suicidal behavior. Such associations may in fact discourage suicide in females; females may be more reluctant to kill themselves because of the taboo against female suicidal death. Inversely, the cultural belief that killing oneself is masculine, may serve as a facilitating factor for males (Canetto and Sakinofski, 1998).

Another factor suggested by the authors, which may exaggerate the lower rates of suicide mortality in females compared to males, is that females tend to use less immediately lethal methods. Many studies support the suggestion that the less immediately lethal methods of suicide preferred by women, such as self-poisoning, are more likely to be misclassified as an accident (Canetto and Lester, 1995). According to Mosciki (1994), the gender paradox in suicide could thus be viewed as an artifact of the different rates of survival from suicidal acts due to males and females employing different methods. For example, men tend to employ more lethal means such as firearms and hanging, whereas females tend to opt for more passive methods such as overdose and cutting. According to this explanation, the differential arises due to the differential rescue potential of various methods rather than a true reflection of gender differences in suicide prevalence.

Another explanation suggested by Moscicki (1994) is recall bias theory. In this formulation, the paradox may be an artifact of gender differences in self-reporting. Since women give more accurate accounts of their health history than men, it is assumed that they are also more willing to self-report their suicidal behavior. Perceptions of the gender meanings of different deviant behaviors could be one of the reasons why males admit engaging in antisocial behavior or drug use and yet deny their non fatal suicidal behavior. In the United States, antisocial behavior and illegal drug use are perceived as masculine, while nonfatal suicidal behavior is viewed as feminine (Canetto, 1991). Thus a very

unique and more serious stigma is attached to male nonfatal suicidal behavior, a stigma which may lead to selective recall in males. This theory does not fully account for the gender paradox of suicide since it addresses only the high rates of female nonfatal suicidal behavior but does not deal with the high rates of male suicide mortality.

The last and more satisfactory explanation explored to account for the sex differential in fatal suicide rates in Canetto and Sakinofski's (1998) article is the cultural scripts theory. This theory attempts to clarify the gender paradox in the epidemiology of suicidal behavior through the gendered narratives of the suicidal behaviors themselves. The suggestion is that individuals will tend to adopt the self-destructive behaviors that are congruent with the gender scripts available to them in their own cultures, and as such cultural scripts can account for why in some localities women and men use different methods and why the mortality rate from the same method may vary by gender. In addition, the cultural scripts theory can address the gender differences in recall and reporting behaviors. For example, cultural scripts can explain males' reluctance to report on certain mental disorders and not others, thus explaining the gender differences in psychopathology recorded in western cultures such as why depression is more common among women while alcohol abuse is more common among men. It can also account for the fact that gender patterns of psychopathology observed in recent decades in western countries are not replicated in developing or non western countries (Canetto and Sakinofski, 1998).

The cultural scripts theory of the gender paradox is of course indirectly supported by several simple observations about our contemporary suicide regime. First, females continue to be overrepresented among those who engage in non fatal acts of suicide behavior, while males continue to represent the majority of those who die by suicide. Second, the gender paradox is most pronounced among adolescents and young adults where the belief that attempting suicide is feminine and killing oneself is masculine have been most consistently documented. At the same time, exceptions to the gender paradox have been observed among some ethnic minorities which supports the hypothesis that the gender paradox is dependent on culture specific narratives. Third, there is evidence that identification with or adoption of behaviors considered feminine is associated with increased risk for non fatal suicidal behaviors. For example, Harry (1993) found that males who were perceived as acting feminine during childhood were more likely to be suicidal during adulthood than girls who were perceived as masculine. Similarly, in a study of gay and bisexual youth, Remafedi and colleges (1991) observed that adolescents who scored high on a measure of conventional femininity were likely to have a history of non fatal suicidal behavior. In sum, the cultural scripts theory holds the most explanatory potential of all theories of the gender paradox (Canetto and Sakinofski, 1998).

Clearly, as suggested by Canetto and Sakinofski (2008) the gender paradox of suicidal behavior is a real phenomenon and not an artifact of data collection. What is important to remember is that the gender paradox is intimately bound to

the cultural expectations about both gender and suicide and operates at the level of those who engage in these behaviors as much as in those who record them.

In sum, the evidence suggests that the gender paradox may be more prominent in localities or cultural communities where different suicidal behaviors are expected from males and females: "*these divergent expectations may affect the choices of both men and women, once suicide becomes a possibility*" (Canetto and Sakinofski, 1998:19); as well as in the interpretations of those who are charged with determining whether a particular behavior is suicidal. Cultural expectations about gender and suicidal behavior function as scripts to which individuals refer to as a model for their own suicidal behaviors and to help them make sense of suicidal behaviors in others. Clearly, the cultural scripts theory is the one that best accounts for the available data in countries like Canada and the United States, where much of the relevant research has been performed (Canetto and Sakinofski, 1998).

With this cultural script theory in mind, let's go back to Durkheim and his two main tenets of regulation and integration and explore a few ways in which they could potentially affect the sex differential in suicide rates. In contemporary society men have two basic integration and regulation institutions, namely occupation and family. Many studies have shown that when either is disrupted, through divorce or unemployment for example, men are at risk of experiencing anomie, and thus following Durkheim's reasoning are at an increased risk of

committing suicide. In an important Danish study conducted by Qin et al (2000), occupational factors were found to be particularly important factor for males, and yet another study supports this assertion by showing that an increase in occupational instability is one of the most important factors underlying the increase in young male suicide (Hawton, 1998). In terms of occupational regulation, it has been suggested that men seldom interact on the personal level with co-workers because they tend to view everything in their world in terms of competition and as such, their self-definition is intimately tied to their occupation, power and success. Krull and Trovato (1994) suggest that it is the normative order of contemporary society which promotes separation, autonomy and individuation in men, which then creates anomie as their social condition.

Clearly, one of the strongest ties to the collectivity for men is found in the family. The suggestion is that a man's relationship to his family, and more importantly to his wife, not only regulates his behavior but also ensures his emotional well-being. If his marriage is dissolved, men have no other recourse for meaningful relationships or support outside of the family and are thus more prone to commit suicide. To be sure, Durkheim evidenced this fact by showing that married men have lower suicide rates compared to single men, and when experiencing a divorce their suicide rates far exceed those of all other groups.

Others suggest that the basic social function of men and their role as fathers has been rendered more obscure by the transformations of family and conjugal life.

First expressed by a new fragile masculine identity, the obscure roles of *men* and *father* accentuate the severity of the crisis of entering adulthood for men (Gagne and Dupont, 2007). From the fall of marriage quickly replaced by common law unions, to the emergence of masculinities which for some is considered a sort of male revenge ideology, the symptoms of this passage into nothingness and the weakening of the image of *man* and *father* are clearly located in the dislocation of family and its associated identities. The negation of a paternal or provider destiny for men effectively removes the family as the primary integrative and regulative mechanism in contemporary society. It is this uncertain trajectory which delays the passage into adulthood for males (Dagenais, 2007; Gagne and Dupont, 2007).

On the other hand, the criticism levied against the traditional family model where the mother is locked into domestic life, coupled with movements of political and economic emancipation accompanied this societal transformation by giving it an attainable and realistic vision for the future, at least for women (Gagne and Dupont, 2007). Historically, women have always been strongly integrated in domestic life and child-rearing which is a realm of connective features. Normatively, society expects that women cultivate friendships with other mothers and that they develop strong connections to domestic and religious life; thus women have been more protected in this sense from excessive individualism and suicide (Krull and Trovato, 1994; Durkheim, 1897, 1951). However, the contemporary situation is slightly different. Just like men, women are becoming

increasingly individualistic as evidenced by an increase labor force participation (Hassan and Tan, 1989; Kushner, 1985; Cummings, Lazer and Chisolm, 1975), a retreat from traditional forms of marriage and child-rearing and high rates of divorce. These are all clear indications of this trend (Trovato, 1988; Goldsheider and Waite, 1986; Stack and Danigelis, 1985).

Plainly stated, the asymmetrical distribution of gender specific suicide rates is a by-product of the specific manner in which the transformation of the family and its associated gender identities affected each gender. The more society made the regulation of gender identities and the passage into adulthood dependant on the family, the more the decline of this institution was translated by a differential level of anomie between men and women, and as such a differential suicide experience.

Despite these recent trends, the diminishing or stable suicide rate among females in most Western societies seems to indicate that women have found new sources of integration that are beyond the domestic sphere and which maintain their level of individualism and risk to anomie at a level lower than males. Although, it seems that many studies in this domain reflect a bias in the construction of the private and public realities of men and women in social life. Krull and Trovato (1994) cite a number of studies based on the suggestion that the women's movement of the 1960's and 70's would lead to an eventual convergence of women's and men's pathological behaviors, more specifically

suicide rates, due to the increasing masculinization of women's emancipated lifestyles. However, these studies remain for the most part unsubstantiated. Instead, empirical evidence seems to suggest that as women move away from traditional roles, and as society adjusts itself to this new reality, suicide risk not only declines for women but also for men (Trovato and Vos, 1992).

Another issue is that factors which may be specifically associated with female rates are for the most part ignored in the literature. According to Huchcroft and Tanney (1988), this neglect of female suicides may be partly explained by the fact that since female rates are considerably lower than male rates, random fluctuations are greater in female rates and thus trends are harder to discern and much less obvious than in males. A second possibility for the relatively poor attention to female suicide rates may be a failure to identify the factors which are associated with female rates and not male rates. Often cited in the literature, Maris (1971) suggests that female suicidal behaviors are more a response to interpersonal, internal and affective issues such as relationship dissatisfaction; while male suicidal behavior is more a response to external and instrumental factors. Naturally, if one agrees with such reasoning, then it is clear that the identification of associated risk factors will be different for males than for females. For example, measures such as GDP and unemployment fail to correlate with female rates but remain important predictor variables for male suicides (Hutchcroft and Tanney, 1988). Also, the factors relating specifically to female suicide rates may actually elude straight-forward data collection methods. A third

possibility suggested by Huchcroft and Tanney (1988) is that epidemiology has traditionally emphasized risk factors rather than protective factors, consequently groups with a high incidence such as male suicides have been studied more than those with low incidence.

In a review of the literature, Verbrugge (1985) claims that sex differences in health and mortality are more the outcome of differential risks acquired from roles, stress, lifestyles and preventative health practices than the result of biology. Clearly in this sense, unveiling the links between gendered role occupancy, identity and health will be the key to revealing the differences related to gender and will of course require a more precise understanding of the different psychosocial factors specific to each sex which are contained in states such as unemployment and marriage.

Suicide and Age

Let's now turn our attention to the relationship between suicide and age. Clearly, the most spectacular transformation which has affected the suicide regime in most of western society since the turn of the last century is the drastic change in the age distribution of suicide rates. As evidenced by more than 150 years of suicide statistics, the tendency for suicide rates to increase with age had remained for the most part a universal fact. First highlighted by Durkheim, the proportion of suicides in the older age groups compared to youth increased in a quasi-linear fashion. However, as early as the 1950's and 1960's, a drastic

transformation started to occur which would shake this *universal fact* at its core, and as such, would suggest a clean break from the past. Most western societies, with but a few exceptions saw the birth of a worrisome trend: namely the appearance of youth suicide which by the early 1970's quickly overtook the rates in the later age groups.

But, we are getting ahead of ourselves here. If we are to make sense of this important transformation of the suicide regime, we must first take a look at the past and consider the explanations which were suggested to explain the linear increase of suicide rates with age. First, a quick word on Durkheim's treatment of age and its relation to suicide must be made. Durkheim never considered age as a variable in itself, and this despite the fact that the relationship between age and suicide was of a more important amplitude that the relationship of suicide according to marital status, religion or urbanization. Instead, Durkheim treated age as a control variable which enabled him to successfully highlight the effects of the other variables he selected in a pure state.

At first glance, this omission could be seen as a weakness in Durkheim's analysis however Baudelot and Establet (2006) see it differently. They claim that this omission is more fruitful than harmful in supporting a sociological understanding of suicide since it lays the foundations for a better and more nuanced understanding of the social character of the phenomenon itself. In Durkheim's time, the risk of killing oneself increased with the amount of time one

spent "in society". As such, for Durkheim and those that followed after him, the causes of suicide will not be found in nature or biology, but in social life and its cumulative/long-term effects on the individual:

> Comment des lors attribuer à l'hérédité une tendance qui n'apparaît que chez l'adulte et qui, a partir de ce moment, prends toujours plus de force a mesure que l'homme avance dans l'existence. [Durkheim in Baudelot and Establet, 2006: 135]

In their own interpretation of the changing age structure of suicide, Baudelot and Establet (2006) suggest that growing old prior to the turn of the 20th century can be equated to a form of social death where the old suffered the accumulation of a lifetime of factors intimately related to an increase in suicide risk. Clearly, this increase of suicide risk with age must be put in the context of what it meant to grow old, or the material conditions of growing older at this time. Rooted in the Durkheimian regulation/integration paradigm, it seems clear that as one grew older, one experienced a general weakening of the bonds which tied one to the wider integrating mechanisms of society such as the family and industry. Moreover, these links were further eroded by poverty since no system of pension or material support was in place when one transitioned out of working life (Baudelot and Establet, 2006). Logically, this explanation supports one of the most persistent and robust facts about suicide established by more than a century of statistical inquiry into the phenomenon.

Since Durkheim's time and with the advent of more sophisticated tools of analysis, we are now much more sensitive to the effects of age and generation in

our sociological inquiries, and both are particularly significant when examining social suicide rates. The most interesting effect, at least in specific relation to this thesis, is the rise of youth suicide rates which skyrocketed in the early 1970's in most western societies. If one is to take a quick glance at the available statistics, one may simply notice this increase in the younger age groups, but this is misleading. What is actually happening is a double movement where the increase in youth suicide is mirrored by a decrease of suicide in the older age groups (Baudelot and Establet, 2006). This observation is of the utmost importance since obviously, one phenomenon cannot be analyzed without considering the other. Baudelot and Establet (2006) point to the fact that this clearly suggests that contemporary suicide fully belongs to our past, in the sense that suicide rates between old and young continue to dig a trench which separates on one side those which accumulate the major attributes of social power and on the other, those which carry the majority of its burdens. This is simply a reversal of a phenomenon which held firmly for more than a century.

Similarly, Gagné and Dupont (2007) suggest that the same societal transformations which can help explain the decrease of suicide in the later age categories can in the opposite direction explain the increase in youth suicide. In effect, it is in the transformation of the family, which was for Durkheim the central institution of society, that this explanation can be found. Over the course of the 20th century, family has now become an individual pursuit rather than the *frame*

of social life. The family is now the result of individual choices rather than the manifestation of a collective norm or a social destiny.

In the context of this thesis, what makes this observation particularly instructive is the fact that the deregulation of the age related suicide regime is noticeable in most western societies, around the same time and in the same general direction. Beginning in the middle of the second half of the twentieth century, youth suicide quickly overtakes suicide in the older age groups, however, the pace and scope of the changes in each society varies and is unique to the specific context of each nation. Clearly, it is in these unique contexts that all interpretations must be made. As suggested by Baudelot and Establet (2006), these important changes in the age characteristics of the suicide regime over the last part of the twentieth century necessarily bring us to reflect upon the common experience and impact of the spectacular changes in institutions like the family which occurred in most western societies at this time, and which continue to have an impact today.

For example, in the United States, the inversion of the age trend of suicide takes on an a spectacular form: there is an uniformization of suicide rates across age groups. As shown by Cutler et al (2000), a comparison of suicide rates in the United States of 1950 and 1990 indicate that during the second half of the twentieth century the rates of the 15-24 triple while adult and old age suicide rates decrease just as significantly. In less than forty years, the age distribution of suicide rates in the United States has effectively pivoted, to become almost

horizontal, on an axis centered on the consistent suicide rate of the 35-44. In France, and incidentally in most European countries, the movement is in the same direction: youth suicide increases while at the same time, suicide in the older age groups decreases. However, the movement is not as dramatic as in the United States, rather than approaching uniformization, the suicide curve becomes bi-modal (Baudelot and Establet, 2006). The similarities of these transformations underscore the common spread of the phenomenon across Western society and accordingly confirm one of the facts of contemporary suicide on which rests this thesis.

Youth suicide

In order to account for the emergence of youth suicide, Bearman (1991) directly applies Durkheim's theory of integration and regulation and exposes the situation of contemporary youth. As such, he is able to suggest a plausible explanation for the increase of suicide in the younger age categories and is of particular interest considering the rapid increase of suicide rates in these age groups. According to Bearman (1991), today's youth spend substantial time and energy in social worlds which are far removed from the adults who have supposed moral authority over them in contrast to the youth of the 19th century. To be sure, the youth of today live for many years in a sort of liminal state between two worlds which may or may not intersect: the family and the peer group. Clearly, youth are integrated in both and therefore are, as suggested by Durkheim, subjected to the normative demands and regulation of both. But the social worlds of the family

and the peer group are frequently independent of each other and the norms governing action that each of them exerts on youth are often experienced as contradictory (Bearman, 1991). Many youth find it difficult to reconcile the conflicting normative demands entailed by this dual membership and according to Bearman (1991), this normative dissonance is Durkheim's anomie in action.

Clearly, youth in our contemporary societies are embedded in worlds with conflicting expectations and values and as a result are cast into an anomic social position. Similarly to the decoupling of family life for males, this normative dissonance for youth is a product of the decoupling of the worlds of peers and family. While youth are integrated into a society, the group to group network of family and peers remain segregated and it is the separation of these two worlds that generates for each the conflicting norms and values to which the individual is subject (Bearman, 1991). What he is alluding to throughout his argument, is that the position of youth in society is characterised by a high level of integration coupled with low regulation; he is an individual who is anomic yet is integrated into groups. If people belong to many groups, then the normative influence of each group to which they belong is lessened. Anomie is in this sense, insufficient individuation in a context of social heterogeneity (Bearman, 1991), and the youth of today is especially likely to occupy such a position relative to others.

It is clear that the norms governing action are shared by individuals who occupy the same social circles. It follows that any individual who bridges multiple social

worlds is as a consequence exposed to conflicting norms. The youth occupying this contradictory position is thus subject to the conflicting norms associated with each world since he is tightly integrated into two social worlds that are decoupled at the level of integration. For Bearman (1991) it is clear that individuals who are highly integrated into two social worlds, such that their group to group network is segregated, are certainly more likely to feel dissonance that those whose personal networks span multiple groups that are interwoven. Thus in this context, normative dissonance yields normlessness and an absence of regulation despite integration (Bearman, 1991).

Now let's relate this back to Durkheim. For him, the ideal typical development of human societies lies along the diagonal from mechanical to organic society. Each ideal has its characteristic form of suicide. In both, the twin dimensions of social structure, integration and regulation, walk hand in hand since they are simultaneous. But, when integration and regulation are decoupled, such as is the case for youth today, this path of societal development may be interrupted and pathological forms will appear. These abnormal contexts are evidence of a decoupling of the group and individual levels of society. At the individual's level, this decoupling is experienced as anomie or fatalism.

For Bearman (1991), the anomic social condition is marked by the asymmetry between individuation (low) and social heterogeneity (high) where individuals occupying this social position are integrated but only marginally regulated. On the

other extreme, individuals occupying a fatalistic position are confronted with massive regulation in a context of individual isolation. In sum, individuals may be integrated yet still subject to dissonance and normlessness since the groups that they belong to are disjointed. Likewise, individuals may be subject to constraint despite the fact that they are not integrated. Both asymmetries arise from this duality, a measurable aspect of all social structure (Bearman, 1991).

Explanations for the increase in youth suicide rates have long been sought since the phenomenon first appeared across western society as early as the 1960's. Three approaches have consistently been used and should be addressed. First, cohort effect studies which seek to highlight differences between individuals born in different years [e.g. Solomon and Hellon, 1980; Murphy and Wetzel, 1980; Holinger et al, 1988]. These authors report correlations between the increase of youth suicide and the increased competition for social positions like jobs and educational access. Easterlin's cohort hypothesis suggests that the size of the cohort may also have an impact on the behavior of its own cohort as well as the behavior of other cohorts (Lester, 1994). However, in a review of the literature, Stockard and O'Brien (2002) have convincingly shown that there is no discernable youth cohort effect in the United States if more recent data is examined. Therefore, it is likely that we can dismiss any youth cohort explanation for Canada's increasing youth suicide rate; however these effects are worth exploring nonetheless since there is possibly a cohort effect within wider social phenomena. Second, age effect studies which seek out stable differences

between two or more ages in reference to a specific behavior have produced no clearly interpretable results. And lastly, period effect studies which seek to define the transient changes in disease rates within a specific set of years [for example Wetzel et al, 1987; Diekstra, 1989] have suggested that these period effects may be altering the suicide rate in youth. In a broader context, these period effects must of course be located in a number of important societal transformations and as such we agree. Period effects most definitely impact suicide rates, however without placing them on the backdrop of the wider social transformations in which these periods are rooted; they are of no interpretive value.

As previously mentioned, it is clear that the most spectacular trend revealed by the statistical study of suicide is the reversal of suicide rates between the generations. The quasi-linear increase of suicide rates with age gave way starting in the mid-70's to reach a gradual uniformization of suicide rates which effectively combines both an increase in youth suicide rates and a decrease of suicide in the older age groups. Again, as before, the social objectivity of this contemporary phenomenon must first be underscored. Absent in most of the twentieth century, youth suicide appears in both genders starting in the 1960's, but is marked by a significant male overmortality. Furthermore, the widest spread between male and female rates is found in the early 20's, the age of traditional autonomy and marriage, and lastly the phenomenon is more marked in peripheral regions which are still haunted by the old industrial structures of society (Dagenais, 2007). Clearly, this phenomenon does not lend itself to

interpretation like a mental disorder does to diagnosis, but rather it is a problem rooted in society which we should seek to understand: *"contemporary suicide looks more like a recognizable social group than a serotonin deficit"* (Dagenais, 2007:341).

This increase in youth suicide can and must be translated into a crisis in the construction of self which is itself intimately related to the transformations in society. Dagenais (2007) considers the ways in which we can attempt to understand how the social objectivity of the phenomenon of youth suicide could have been produced (as found in a series of individual acts), since it is these precise acts which produce it in the first place. His article suggests a proposition whose aim is to unify two approaches which are most often opposed in order to fill in the gap between the collective and individual dimensions of suicide. This approach is clearly situated in an extension of Durkheim's work. Based on a series of field interviews in Abitibi with families, friends, teachers and acquaintances of youth who have taken their own life, Dagenais' (2007) approach aims principally to bridge the gap between the individual act and the social objectivity which it produces in the end. His choice of Abitibi is not haphazard. This region shows an amplification of the traits of suicide found in Quebec, in much the same way that Quebec seems to be a concentrate of the traits of contemporary suicide in Canada and most of the western world.

In sum, the previous sections have explored some of the theory which can help to understand the characteristics of our new shared contemporary suicide regime whose core feature is clearly the emergence of youth suicide. This feature is further characterized by a continued widening of the differential between male and female suicide rates and a drastic change in the age structure which reverses a long standing universal fact of suicide. Furthermore, it has been shown that these changes happened much at the same time across most Western societies including here in Canada. This literature, however plentiful, fails in one important respect: no one has actually taken the time to concretely describe these transformations as they are reflected in actual suicide rates and sex ratios in Canada as a whole, despite recent efforts in provinces like Quebec (e.g. Gagne and Dupont, 2007, St-Laurent and Bouchard, 2004). This will of course be the focus of the remainder of this thesis.

CHAPTER 4: DATA AND METHODS

All data for this thesis was retrieved from official Statistics Canada publications, namely the official Report of the National Taskforce on Suicide in Canada, first published in 1987, then updated in 1994. All data post 1985 was sourced from the subsequent updates of the official Report and other Statistics Canada publications. These publications contain the age and sex specific suicide mortality data for all Canadian provinces and territories. All rates are expressed as the number of suicides per 100 000 population in the specified age and sex group. In order to avoid any errors in transcription, the data was electronically copied, transposed and pasted into a Microsoft Excel spreadsheet.

First, five year floating averages were calculated to minimize any extreme year to year fluctuations in the suicide rates due to small changes in suicide counts. This becomes an important challenge in provinces characterized by small populations such as the Atlantic Provinces or the northern territories. However, this simple averaging procedure does allow the clear underscoring of the general trends which present themselves in each province.

Second, sex ratios were calculated. Using the five year floating average rates, the sex differential in the suicide rate was calculated by dividing the male suicide rate by the female suicide rate. The resulting ratio indicates the proportional excess of the male suicide rate over the female suicide rate for each province, year and age group. However, such a measure is obviously sensitive to the size

of the denominator, and as such is undefined when the female suicide rate equals 0, and tends towards infinity as the female rate approaches 0.

From these results, a series of tables and graphs were produced to facilitate comparison across age, gender and geographies (see appendices for the complete data).

Let me permit myself to anticipate 2 important criticisms which will obviously be raised regarding my treatment and use of data in this thesis. First there is the question of the validity and reliability of the available suicide statistics and second the differential age pyramids in each of the provinces under consideration.

Validity and reliability of official suicide statistics

It is clear that the question of the reliability and validity of suicide mortality data must be addressed in all research which makes use of official suicide statistics since a great deal of research has drawn upon official suicide mortality statistics compiled and published by governments. The Taskforce Report (1994) suggests that official databases on suicide have several valuable characteristics: they have been collected over a long period of time; are coded according to a common international system; and are often available in a computer-readable form (Taskforce, 1994). However, the accuracy of such data has been the subject of study and controversy for decades.

Questions about the accuracy and interpretation of suicide data arise primarily because it is generally recognized that suicide tends to be under-reported in many jurisdictions. Research has provided evidence of this in Canada (Aldridge & St. John, 1991; Speechley & Stavraky, 1991; Malla & Hoenig, 1983) and other countries (Sainsbury and Jenkins, 1982; Brugha and Walsh, 1978; Liberakis and Hoenig, 1978; McCarthy and Walsh, 1975). Some would even argue that underreporting invalidates cross jurisdictional comparisons of suicide rates between provinces and countries (Atkinson et al., 1975; Nelson et al., 1978). Douglas (1967) goes as far as to claim that underreporting casts doubt on the usefulness of official statistics for suicide research altogether.

At the core of the problem is the lack and perhaps the unfeasibility of a *gold standard* against which to evaluate questionable certifications (O'Carroll, 1989). Evidence of possible or probable under-reporting is usually generated by retrospectively reassessing deaths in categories considered to be potential hiding places for suicide deaths, e.g. deaths certified as undetermined, deaths by drowning, poisoning or falling, or most commonly single-driver motor vehicle fatalities (Speechley & Stavraky, 1991). It has been suggested that under-reporting may occur inconsistently across regions, over time and vary according to the characteristics of the victim, the investigator and of the method employed (Speechley & Stavraky, 1991). However, different patterns of possible under-reporting have been identified by different researchers.

The potential under-declaration of completed suicides in the official counts is a fact that any researcher interested in making use of official suicide statistics must confront. It is clear that deaths by drowning, intoxications, falls and car accidents risk hiding completed suicides in their counts; however it remains highly unlikely that any suicides which escape this classification are frequent enough in number to have a significant impact on the data and calculated rates. To be sure, very few deaths are registered in the undetermined category. Most researchers rightfully maintain that under-reporting is not extensive enough to invalidate comparisons between jurisdictions, or to obscure real differences in rates (Mao et al., 1990; McCarthy and Walsh, 1975; Sainsbury and Barraclough, 1968).

In the province of Quebec, all suspicious deaths are given particular attention by the coroner's office and are subject to a full coroner's inquest. For example, St-Laurent and Bouchard (2004) identify (without reference) a joint study involving the Quebec Coroner's office and the Société de l'Assurance Automobile du Québec which analyzed a number of car accident fatalities which could potentially mask suicides. The results of this study convincingly show that the number of suicides potentially disguised as accidents were so small that the global suicide rate was in no way affected by this under-declaration. As such, we can generally state with a high level of confidence that data in this province as it relates to suicide is both reliable and valid.

Inconsistencies in reporting would of course impair the usefulness of suicide data more than even a large but consistent degree of under-reporting. These inconsistencies may be attributable to formal aspects of the death certification process (e.g. presence or absence of standard criteria); to the knowledge, attitudes or practices of the individuals responsible for certification; to the influence of social, cultural, religious and legal considerations; to various limitations in the systems for gathering, compiling and publishing suicide data; and to the ambiguous nature of some suicidal acts (Taskforce, 1994). O'Carroll's (1989) review of this issue concludes that, when official statistics

> are interpreted with a degree of caution and an understanding of the source and direction of biases likely to affect the published rates ...it seems unlikely that the major conclusions based on these statistics will be in error. (O'Carroll, 1989:14)

He cites as examples of such *major conclusions* the consistent finding that male suicide rates are higher than female rates; the finding that married persons commit suicide at a lower rate than single, widowed or divorced persons; and the dramatic rise of the suicide rate among 15-24-year-olds from 1950 to 1980, which "*could not possibly be explained merely by ...changes in attitude among those responsible for certification*" (O'Carroll, 1989:14). However, because of the extensive use of official statistics in research and policy development, O'Carroll (1989) still calls for significant and concertive efforts in order to improve the validity and reliability of the official certification procedures and criteria of suicide.

In another study, Speechley and Stavraky (1991) concluded that official Canadian suicide statistics at the national level are sufficiently accurate for most purposes in public health and epidemiology in spite of evidence of uneven under-reporting. Mao et al. (1990) examined the validity of interprovincial comparisons by considering possible misclassification of suicides as undetermined deaths and found that even if the ratio of undetermined deaths to suicides was higher in some provinces than in others it did not affect the ranking of provinces as reflected in the official statistics.

In sum, questions on the validity and reliability of official suicide statistics are an important issue which we must continue to address. However, as evidenced by a large number of studies, the problem is not as severe as some would have us think (e.g. Douglas, 1967). Moreover, these are the only sources of data we have available, thus we have no better alternatives. To be sure, the use of official suicide statistics in suicide research cannot be prevented however an awareness of the problem and a degree of caution in our interpretation of these figures is of course warranted.

Differential age pyramids and standardization

It is clear that in most published statistical series, the actual scales of the trends evidenced are often masked by the use of the statistical technique of age-standardization. When making comparisons across time, across age groups or across regions, the effects of the differentially structured age pyramids do

certainly insert a sort of bias which renders the comparison a bit difficult to make. Epidemiologists and demographers have long used standardization to try to cancel out the effects of differential age structures in order to compare on an equal basis the social suicide rate for specific countries, provinces, regions or groups. For example, a province which has a very high proportion of individuals over the age of 60 will likely also have an un-weighted suicide rate that is higher than another province where this age category occupies a different rank in its respective age pyramid (Taskforce, 1994). However, this does not necessarily mean that the first province has more suicides in this age group; it simply means that its population has more old people than the first, which admittedly are two different things.

As such, in order to cancel out this age effect due to differences in the age pyramid, suicide rates are often standardized and calculated as though the age distribution is the same across the board. The resulting pure difference between the provinces is measured by eliminating the differential ageing of their populations. Similarly, the standardization technique is also used on historical series within the same province where the reference population of one year is applied to all years in the series. This technique is of course legitimate and obviously allows rigorous comparisons between provinces or within groups. But it is only legitimate if the effect of age is constant in both time and space (Baudelot and Establet, 2006). Case in point, from Durkheim's time and well into the first half of the 20th century suicide rates increased linearly with age with the highest

suicide rates in the older age groups. It is just recently that this trend has changed, and as shown by the contemporary age distribution of suicide rates, young adults make up the bulk of suicides in Canada and incidentally in most western societies (Cutler, 2001; Baudelot and Establet, 2006).

Thus standardization techniques become deceptive in these cases since it eliminates the variable we are actually interested in studying. The transformations of the suicide regime imply a drastic change in the age distribution of suicide, even just a cursory look at the data makes this fact clear. As an example, we could liken this standardization to the use of a suicide rate where both males and females are included. In adopting rates such as these in our analyses, we are masking the gender differential of suicide, which in Canada and in most western societies has always been an undisputable fact: men kill themselves up to 4 times more often than women in Canada. A suicide rate which combines male and females suicides effectively renders this observation impossible; the same is true of age-standardization techniques.

In their own analyses, Baudelot and Establet (2006) take the argument against standardization even further by examining the changing suicide rates in the Netherlands between 1950 and 2000. Basing their estimates on the calculation of partial derivatives in order to isolate the respective effects of the ageing of the population and the changes in the suicide rate, they clearly show that in fact the increase of suicide rates over time as predicted are only partially attributed to the

ageing of the population in the Netherlands. It becomes clear that the social reasons for this increase have not been explained in this statistical model. As such, this standardization procedure becomes extremely reductive both conceptually and numerically (Baudelot and Establet, 2006). Moreover, they suggest that if we take the time to analyze the effects in terms of age, we are able to reach a much more instructive conclusion. In the Netherlands, less than half of the rise in male suicides is related to changes in the age pyramid. The remaining suicides result from the lower suicide rates in males aged 50 and over and a much greater increase in suicides in the younger age groups; and precisely the same is true for women (Baudelot and Establet, 2006).

In sum, the often used standardization technique does allow a rigorous comparison to be made on an equal footing, however by eliminating the variable in which we are most interested, which incidentally marks the main feature of the transformation of the contemporary suicide regime, we are eliminating the possibility of any sort of age related explanation and as such we hinder any possibility of understanding the differential effects of age on suicide.

I do not wish to minimize the validity of standardization nor the rigor that it lends to comparative analyses, however since we are obviously interested in age as a defining fact of the contemporary suicide regime, using standardized rates would prove to be useless.

CHAPTER 5: RESULTS

Before we proceed, let's first revisit the defining features of contemporary suicide as described in the literature and proposed in the introduction of this thesis. Contemporary suicide is marked by two important yet related movements: first, the continued widening of the sex differential in suicide rates, or more simply stated the continued overmortality of men, and second, the shift in the age structure of suicide rates now favoring the younger age categories. A third feature is also worth mentioning, that of the synchronicity of these movements across most Western societies, however, this has already been shown in a previous section. Instead, a comparison between some of the Canadian data will show that the same is true for Canada as a whole; the transformations are not limited to a few provinces and the general trends are the same everywhere, yet the precise timing of these transformations remains specific to each province.

The results and discussion section of this thesis will underscore the descriptive elements of these movements through two separate yet related series of graphs. First, age specific male suicide rates will be examined for a number of age groups in Quebec and Ontario, both placed against the backdrop of the statistics for Canada as a whole. Second, the age distribution of the suicide sex ratio will be examined following the same comparative scheme: Quebec and Ontario against the backdrop of the Canadian data. These two series of graphs will allow the characterization of the Canadian suicide regime, as it is exhibited in suicide rates, between 1950 and 2004.

As suggested in the introduction, the province of Quebec allows us to examine these trends in closer detail since it is clear that this province exhibits the same elements as the rest of the Canadian provinces but in an exaggerated manner. In the process, the comparison between Quebec and Ontario, placed against the backdrop of the data for Canada as a whole, will allow a critical viewpoint from which to lay bare the defining characteristics of our contemporary suicide regime.

First, a particularity of the proposed graphic analysis must be justified. As shown in Fig. 2, the suicide rate for men of all ages has since the 1950's been much higher (up to 4 times) than the suicide rate for women in Canada.
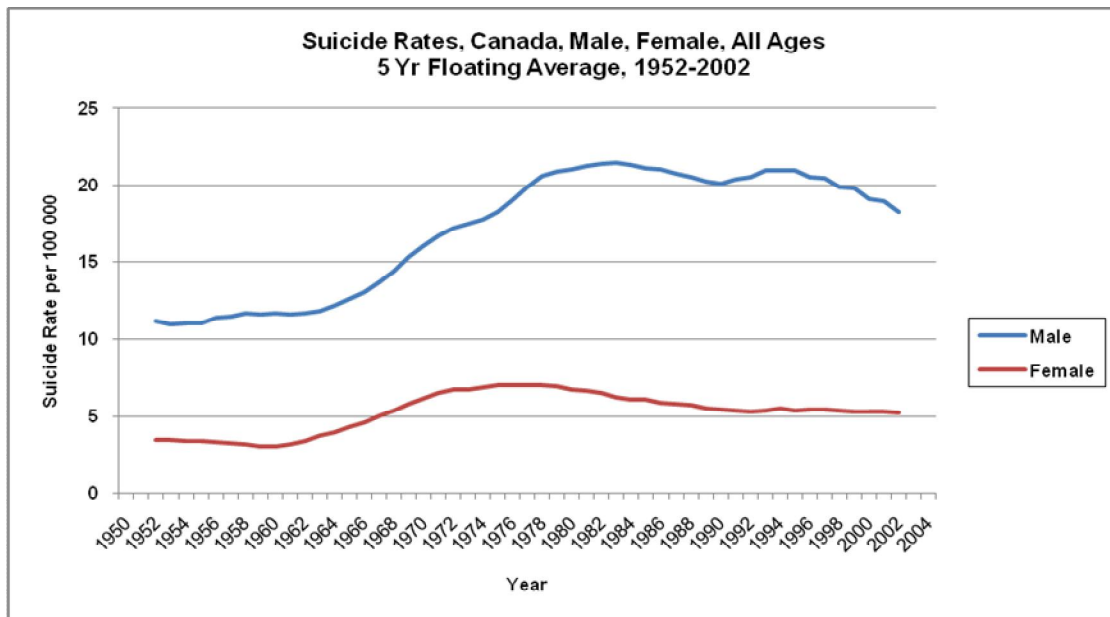
Figure 2: Male and Female Suicide Rates, Canada, All Ages, 5Yr Floating Average, 1952-2002.

Clearly, up until the late 1960's both curves remained generally parallel to each other, nonetheless the graph clearly shows a break with this long standing parallelism of evolution as early as the 1970's. The increasing gap between male

and female rates continues its increase well into the 1980's to seemingly stabilize in the 1990's, and then to reduce somewhat by the 2000's. Females suicide rates for the same time period show no clear increase or decrease of rates except a short lived climb to reach over 7.0 per 100 000 by the mid-70's, which incidentally decreases by the end of that decade to reach a stable suicide rate hovering around 5.0 per 100 000. This observation supports the first fact of contemporary suicide in Canada, that of the disproportional mortality of men by suicide. This is not a new fact of suicide, historically men have had much higher suicide rates than women, and this as far back a Durkheim's own observations.
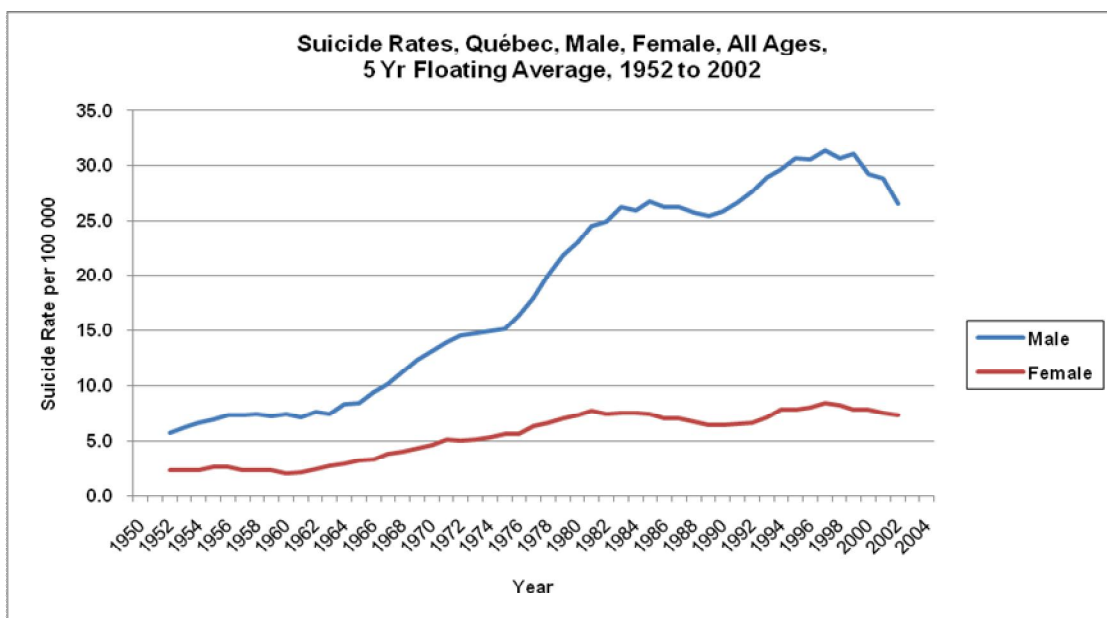
Figure 3: Male and Female Suicide Rates, Quebec, All Ages, 5 Year Floating Average, 1952-2002.

In Quebec, this disproportional increase in male rates is even more subtantial. As shown in Fig. 3, beginning in the early 1960's male suicide rates in Quebec increased at an incredible pace from just above 5.0 per 100 000 in the beginning of the 54 year period under examination to reach 3 subsequent and ever

increasing plateaus: more than 15.0 per 100 000 between 1972 and 1975, more than 25.0 per 100 000 between 1980 and 1990, and finally more than 30.0 per 100 000 between 1995 and 2000. On the other hand, female rates have varied very little in this province in the same 54 year period.

Clearly, Canadian males of all ages are disproportionately killing themselves compared to females, and in the province of Quebec this gender differential is even more pronounced. This in itself confirms the first fact of contemporary suicide. Consequently, female rates will no longer be considered in themselves for the remainder of these anayses, however they will be reflected in the use of sex ratios to underscore the proportional increase of male suicide compared to females.

Before examining each age category specifically, it is important to highlight the general trends of the age distribution of suicide rates in Canada since 1950. To illustrate this transformation, 10 year interval snapshots have been selected to roughly characterize the changes by decade. Fig. 4 evidences a rapid change in the age distribution of suicide rates. In the 1950's, suicides in the younger age categories were practically nonexistent. To be sure, suicide rates increased almost proportionately with age. The same can be said of the 1960's however the increase in young male suicide rates is already much more pronounced. By the 1970's the change is much more dramatic. We see a peak in the 20-24 age group with a rate in excess of 25 per 100 000, which then decreases to start

increasing again in the 30-34 and older age groups. One interesting feature of the age distribution of the 1970's is that rates in the 20-24 age group are almost equal to those in the 65-69 category. In less than 20 years, the suicide rates in youth went from 5 per 100 000 to well over 25 per 100 000. Similar increases in the younger age groups can be seen well into the 1990's, but by the 2000's the rates in all age categories have decreased substantially and have taken on a novel bi-modal shape.
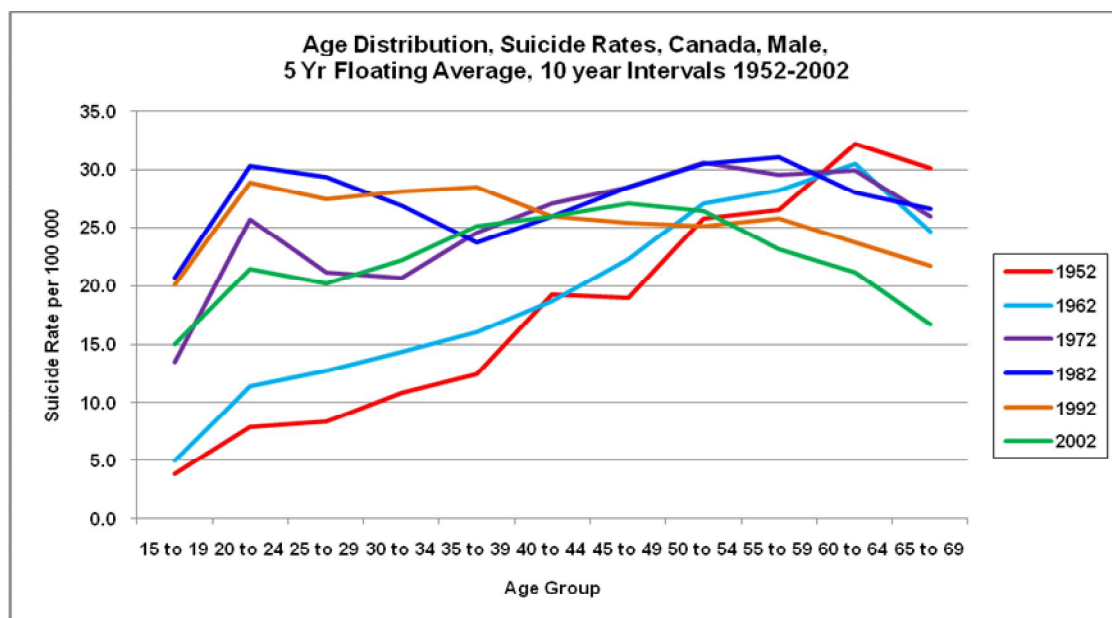
Figure 4: Age Distribution, Suicide Rates, Canada, Male, 5Yr Floating Average, 10 year Intervals, 1952-2002.

Similarly to the contemporary distribution of suicide rates by age in the United States highlighted by Cutler et al (2001), or in France as highlighted by Baudelot and Establet (2006), the age distribution of suicide rates for males across the lifespan in Canada has now become convex with higher rates in the middle age range, although rates in the younger age groups still surpass those in the later age groups. As shown in Fig. 5, suicide rates in 1950 increased monotonically

with age, with the highest rates located in the 60+ age groups. Inversely, by 1990, suicide rates peak in young adulthood then stabilize briefly to finally decrease quite regularly into the older age groups. Perhaps not as dramatic as in the United States, there still is by 1990 a general flattening of the distribution of suicide rates across age groups with a peak in young adulthood and a marked decrease as age increases. Clearly, this inversion of the long standing age distribution of suicide is a key defining feature of the contemporary suicide regime and highlights the transformation clearly marked by a double movement: an increase in youth suicide accompanied by a decrease in old age suicide.
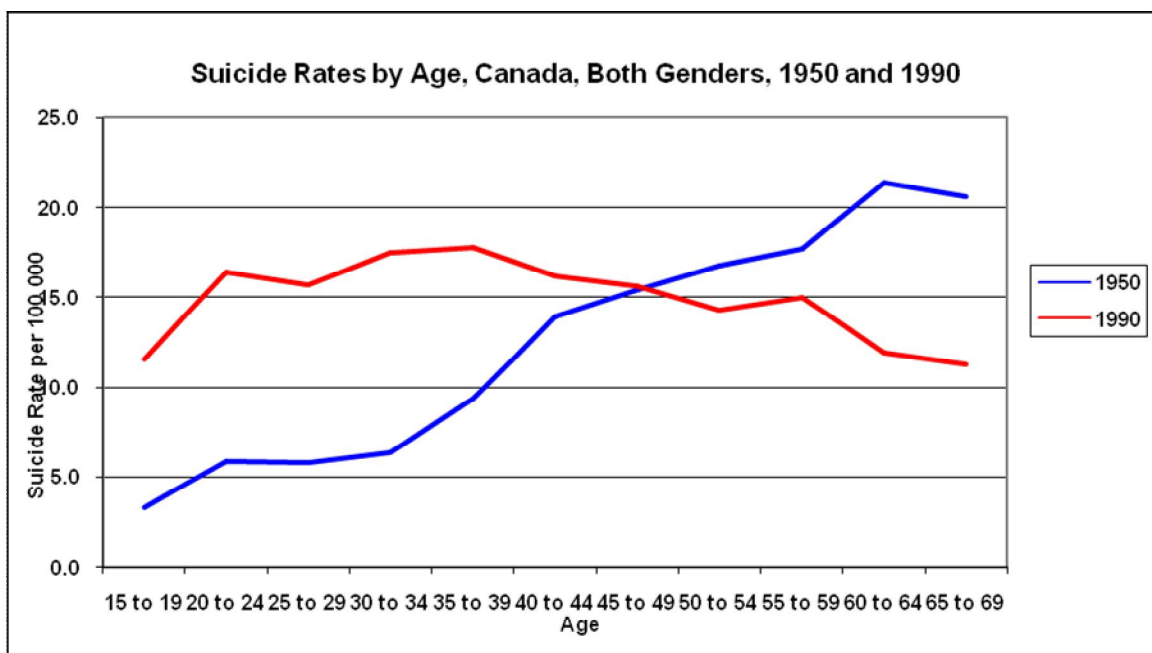
Figure 5: Suicide Rates by Age, Both Genders, Canada, 1950 and 1990.

All Ages category

Fig. 6 shows male suicide rates for the all ages category in Quebec, Ontario and Canada. In Ontario, the overall male suicide rate (range 12.4 to 19.4 per 100 000) begins higher than the Canadian average (range 11.0 to 19.0 per 100 000)

and remains so until 1977 when it starts decreasing and continues to do so for the remainder of the period. In contrast, the overall male suicide rate in Quebec (range 5.7 to 17.9 per 100 000) stays well below the Canadian average until 1978 (20.0 per 100 000) when it begins it vertiginous climb to finally reach over 30.0 per 100 000 between 1995 and 1999 (range 30.5 to 31.4 per 100 000). What is specifically interesting about Fig. 6 is that we plainly see that the reversal of the ranking of Ontario and Quebec centered in 1977-78 with male suicide rates in Ontario decreasing while the rates for males in Quebec climb.
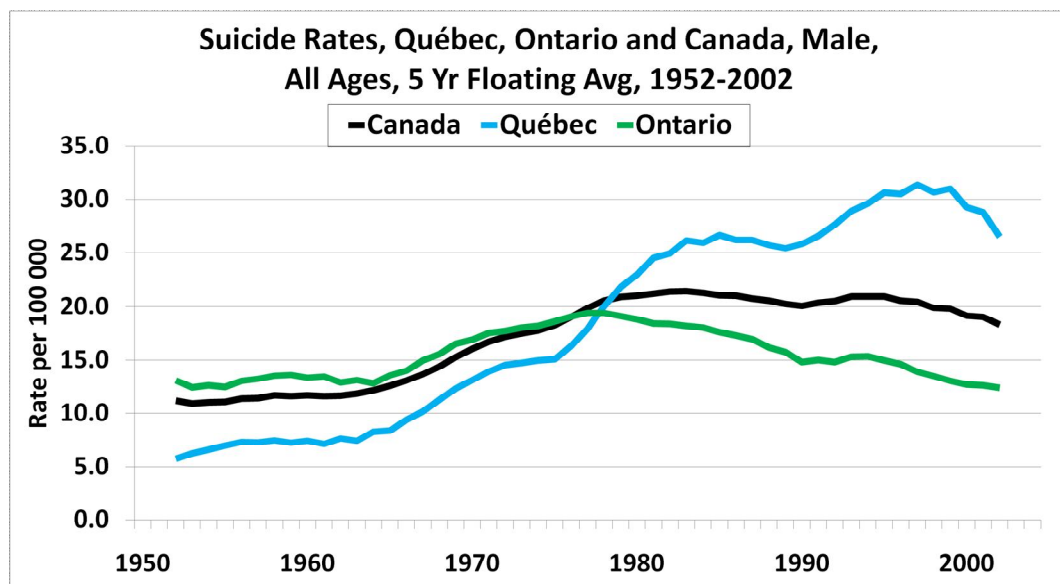
Figure 6: Male Suicide Rates, Quebec, Ontario and Canada, All Ages, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the all ages category, Fig. 7 shows that the Canadian average (range 3.2 to 3.8) is marked by a first general increase which peaks in 1960 with a sex ratio of 3.9 and is followed by a concave decrease between 1960 to again increase into the early 1990's, with the narrowest sex ratio of 2.6 remaining constant between 1969 and 1975. By 1992, the sex ratio for Canada in this age category has reached a similar value as

1960, just under 4.0. Ontario (range 2.2 to 3.8) follows the same trend as the Canadian average yet remains consistently below its values. Between 1950 and 1967, Quebec (range 2.5 to 3.6) also remains well below the Canadian average, but after 1967, the sex ratio follows the same increasing trend as Canada as a whole, and remains slightly higher (range 2.6 to 4.1) than the Canadian average (range 2.6 to 3.9) for the remainder of the period. By 1989, the sex ratio in Quebec is above 4.1 and remains so until 1993 to then decrease slightly for the remainder of the decade (range 3.6 to 3.9)
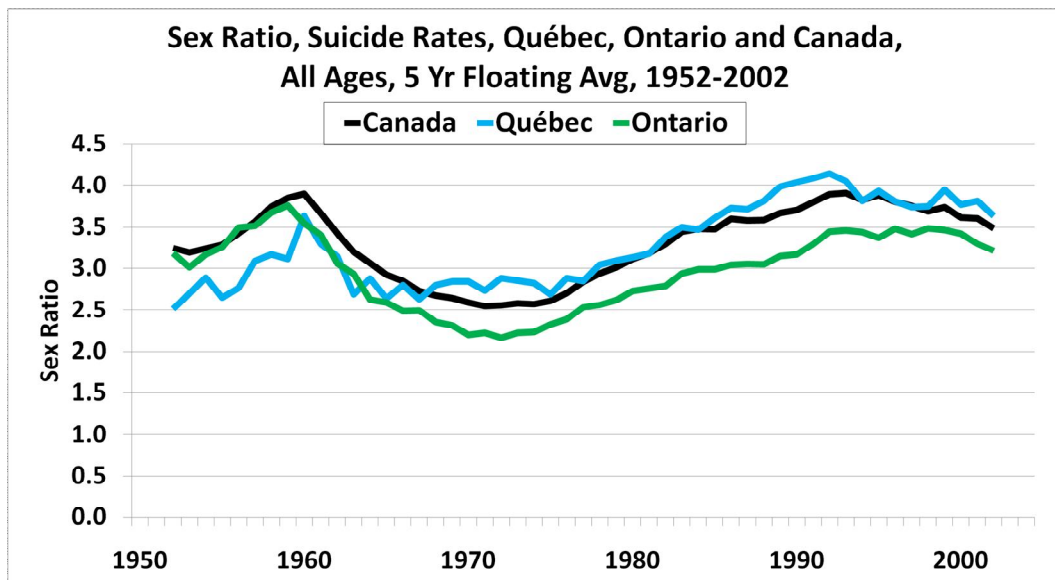
Figure 7: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, All Ages, 5 Year Floating Average, 1952-2002.

15 to 19 year age category

Fig. 8 shows male suicide rates for the 15 to 19 age category in Quebec, Ontario and Canada. In Ontario, the overall male suicide rate (range 4.0 to 19.5 per 100 000) closely follows the Canadian average (range 3.2 to 15.8 per 100 000) until 1974 when the rates in Ontario (range 9.2 to 15.1 per 100 000) flatten out and remain well below the Canadian average (range 15.0 to 20.9 per 100 000) for the

remainder of the time period. Quebec follows a similar pattern until 1980 (range 2.0 to 17.8 per 100 000) when male suicide rates increase dramatically from 19.5 per 100 000 in 1980 to reach 33.4 per 100 000 by 1996. It is particularly noteworthy that the divergent trajectories of Ontario and Quebec male suicide rates are again centered again around 1977-78.
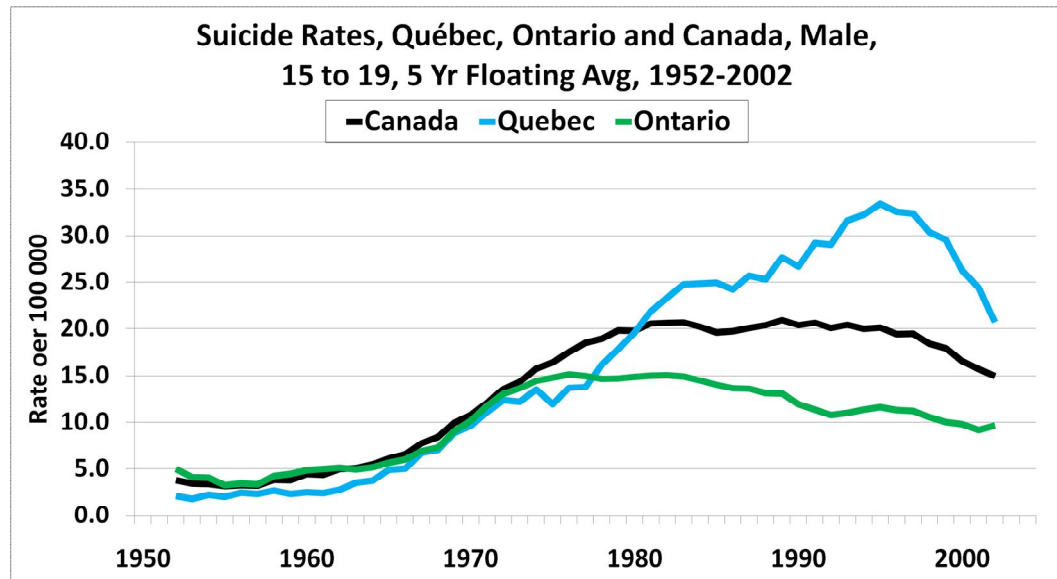
Figure 8: Male Suicide Rates, Quebec, Ontario and Canada, 15 to 19 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 15 to 19 age category, the data is a bit more erratic as shown in Fig. 9, which reflects substantial variation in the actual suicide counts in this age category. The Canadian average is marked by three subsequent peaks: the first in 1958 with a sex ratio of 4.9; the second around 1967 with a ratio reaching 5.1; and the third and highest peak shows a ratio of 6.0 in 1982 and 1983. Ontario (range 2.6 to 4.5) follows the same general trends as the Canadian data yet remains consistently below the Canadian values (range 3.1 to 5.1) except between 1972 and 1975 (range 4.0 to 4.1), slightly above the Canadian average values. On the other hand, between 1950 and

1960, Quebec (range 4.2 to 10.2) is well above the Canadian values (range 3.1 to 5.1), with one of the highest sex ratios, 10.2, ever for this province in 1954. The sex ratios in Quebec remain consistently higher than the Canadian data and peak again above 6.0 between 1966 (6.0) and 1967 (6.1), above 7.8 in the early-1980's and above 7.3 in 1989.
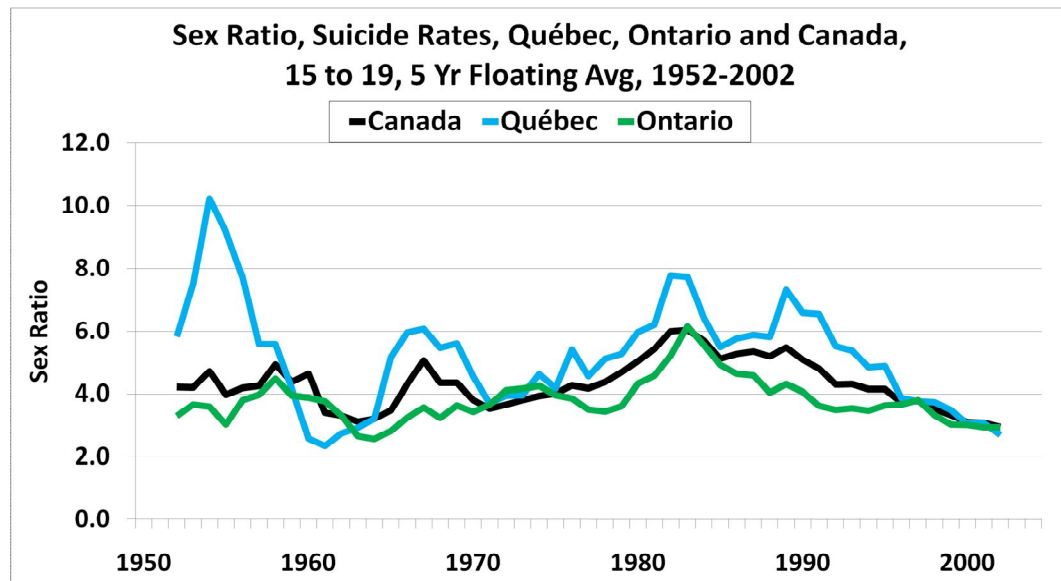
Figure 9: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 15 to 19 year age category, 5 Year Floating Average, 1952-2002.

20 to 24 year age category

Fig. 10 shows male suicide rates for the 20 to 24 age category in Quebec, Ontario and Canada. Male suicide rates in all three regions under consideration as a whole show a rapid climb between 1950 and 1977. In Ontario, the rates increase from around 7.0 per 100 000 at the beginning of the period to 29.2 per 100 000 by 1977. As of 1977, both Ontario (range 12.6 to 27.3 per 100 000) and Canada (range 21.4 to 32.6 per 100 000) see a marked decrease in the male rates which continues for the rest of the period. Quebec (range 31.1 to 45.4 per 100 000) follows an opposite trend and continues climbing to reach 31.1 per 100

000 in 1977, then flattens out above 36.0 per 100 000 until 1989, then the rates increase again to peak at almost 45.4 per 100 000 in 1994 and decrease slowly for the remainder of the period. Again, as of 1977-78, Ontario and Quebec follow opposite trends.
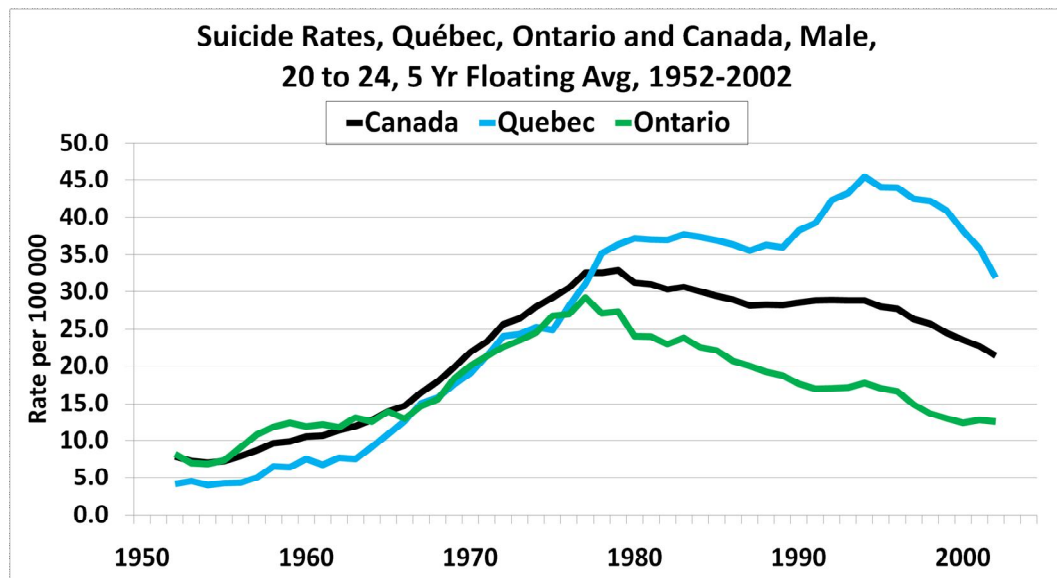
Figure 10: Male Suicide Rates, Quebec, Ontario and Canada, 20 to 24 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 20 to 24 age category, all three regions follow a similar trend with a peak in the late 1950's as shown in Fig. 11. However, what is particular in this age category is that Ontario (range 2.1 to 5.4 remains below the Canadian average (range 2.5 to 6.0) for the entire time period. Quebec however, quickly surpasses the Canadian average by 1972 (4.9) and remains well above until 1996 (5.7), with a peak and plateau at over 7.0 between 1989 and 1992 (range 7.3 to 7.5). Another interesting observation is that once the Quebec ratio (range 4.6 to 6.8) starts decreasing after 1992 (7.5), ratios in Ontario (range 3.1 to 5.4) and Canada (range 4.1 to 6.0) are still on the rise for the next 5 years and peak at their widest values, 5.4 and 6.0 respectively by

1997, to then decline into the late 1990's. Incidentally, the widest differentials are found in this age category.
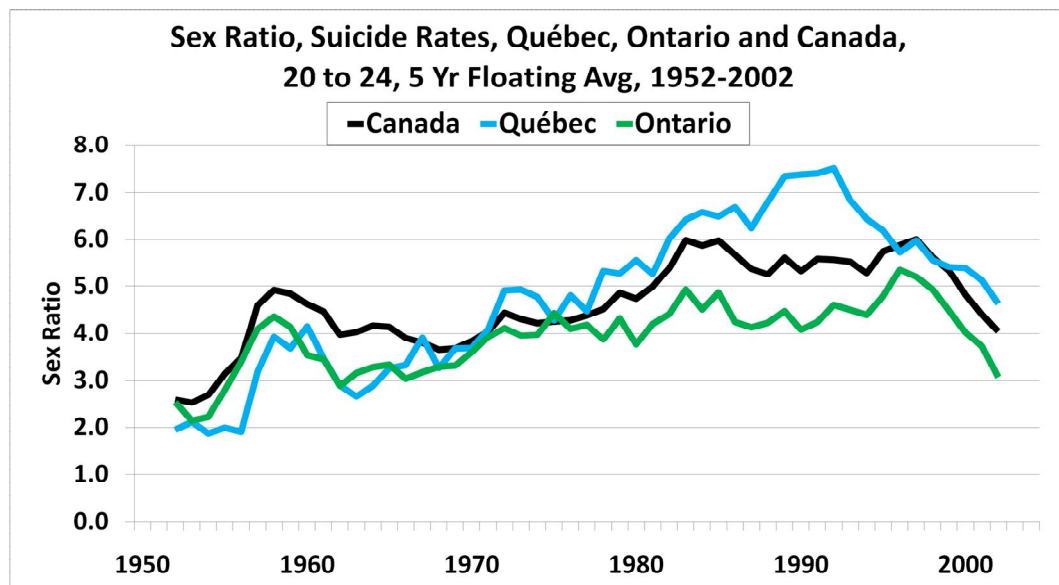
Figure 11: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 20 to 24 year age category, 5 Year Floating Average, 1952-2002.

25 to 29 year age category

Fig. 12 shows male suicide rates for the 25 to 29 age category in Quebec, Ontario and Canada. Similarly to the previous age category, all three regions follow a similar trend and increase until 1978 when the suicide rates converge around 30.0 per 100 000. However, as Canada stabilizes (range 21.4 to 29.4 per 100 000) and Ontario (range 12.7 to 27.9 per 100 000) decreases, the rates in Quebec (range 28.9 to 39.6 per 100 000) continue to climb and reach 39.6 per 100 000 by 1983, followed by a slight decrease to again rise to just below 39.2 per 100 000 again by 1996. Once more, as of 1977-78, Quebec and Ontario are clearly on opposite paths.
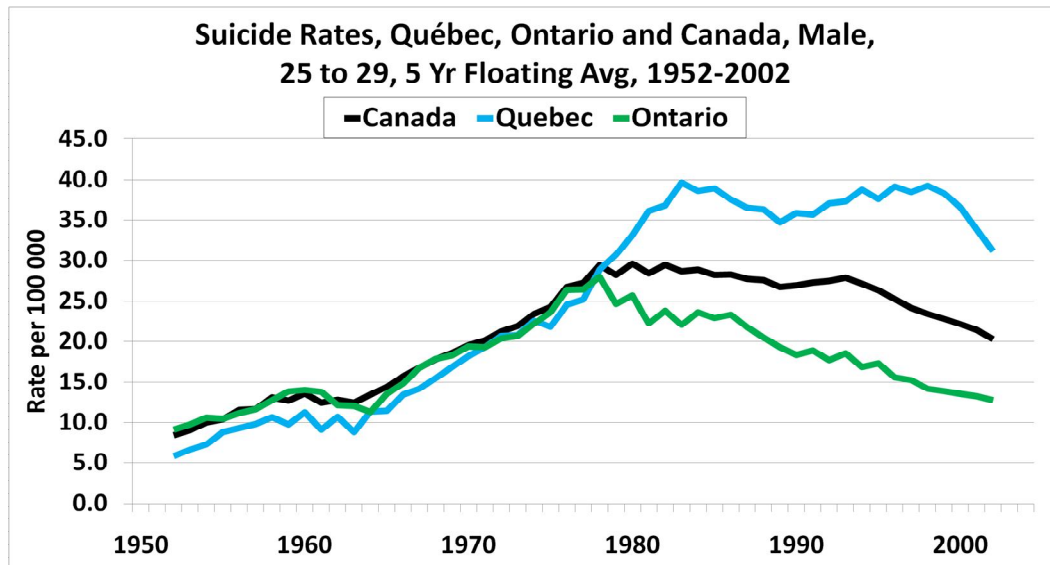
Figure 12: Male Suicide Rates, Quebec, Ontario and Canada, 25 to 29 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 25 to 29 age category, Fig. 13 shows that both provinces again follow a similar trend with a common peak in the early 1960's. However, both Ontario (range 2.2 to 4.5) and Quebec (range 1.9 to 3.9) remain close to the Canadian (range 2.4 to 4.5) average until this time. Quebec peaks at 5.7 by the early 1960's while Ontario and Canada peak at 4.9 and 4.6 respectively. This peak is then followed by a dramatic decrease in all three regions until 1974 with Ontario (range 2.1 to 4.0) and Quebec (2.0 to 3.5) both back under the Canadian average (range 2.4 to 3.7). As of 1974, all three regions increase again, albeit at a different pace. Quebec (range 2.4 to 5.5) surpasses the Canadian average sex ratio (range 2.6 to 4.9) and reaches 5.2 by 1988 to remain well above it for the duration of the period, reaching as high as 5.5 in 1992, while Ontario (range 2.1 to 5.0) remains significantly below for the same period except in 1993 where it stands at 5.0, slightly above the Canadian average.
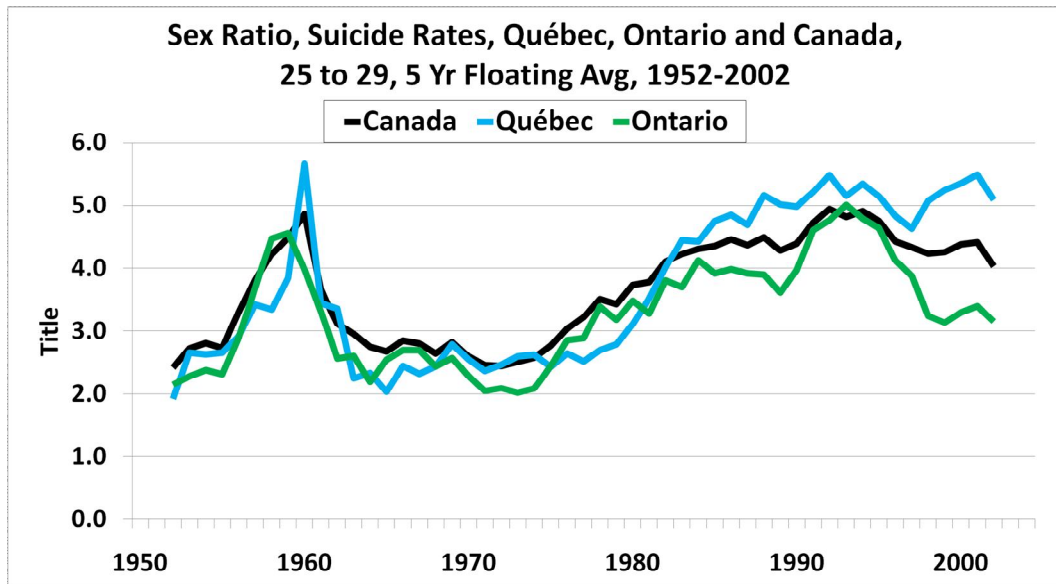
Figure 13: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 25 to 29 year age category, 5 Year Floating Average, 1952-2002.

30 to 34 year age category

Fig. 14 shows male suicide rates for the 30 to 34 age category in Quebec, Ontario and Canada. Similarly to the previous age category, both provinces follow a similar trend. What is particular is that Ontario (range 10.7 to 23.0 per 100 000) again remains below the Canadian average (range 10.9 to 29.0 per 100 000) for the entire duration of the period, while Quebec (range 7.4 to 23.2 per 100 000) remains so only until 1976 when it grossly surpasses the Canadians average and continues to increase peaking at above 40.0 per 100 000 between 1993 and 1999 (range 40.2 to 43.5 per 100 000). The highest rate in this age category is 43.5 per 100 000 in 1995. In addition, a similar inversion of the ranking between Ontario and Quebec takes place with Quebec starting out with lower rates than Ontario in the 1950's, but overtaking Ontario by 1969.
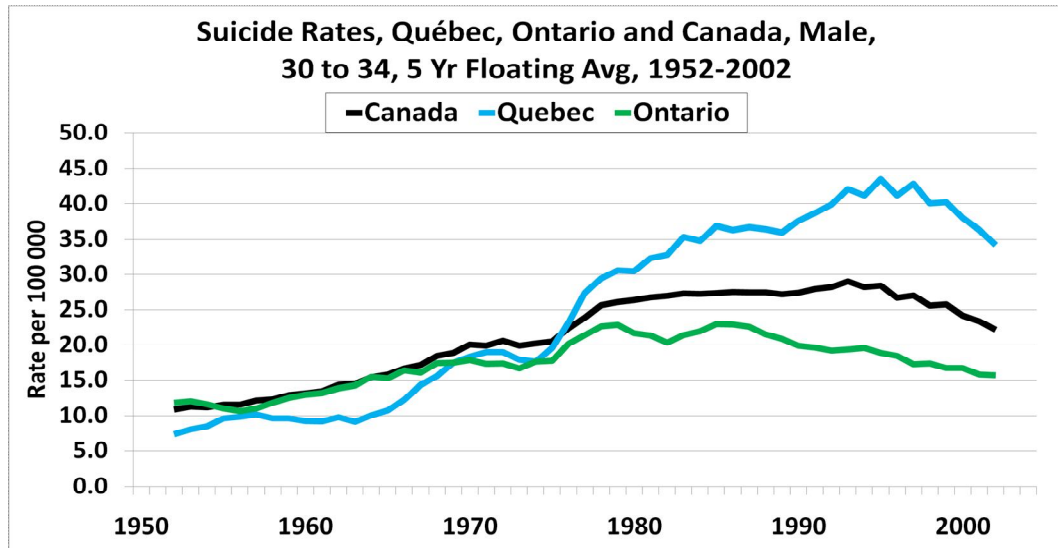
Figure 14: Male Suicide Rates, Quebec, Ontario and Canada, 30 to 34 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 30 to 34 age category, both provinces again follow a similar trend, however this time it is a downward trend as shown in Fig. 15. The sex ratio in Ontario (range 1.9 to 3.7) decreases from the early 1950's to stabilize around 2.0 by 1973. In Quebec (range 1.8 to 2.8), the ratio decreases from the early 1950's to reach 1.8 by 1965. The ratios in Quebec (2.0 to 5.3) then continue to increase for the remainder of the period to reach a maximum ratio of 5.3 in 1995. Generally, both Ontario (1.7 to 3.7) and Quebec (1.8 to 2.9) remain beneath the Canadian average (2.1 to 3.2) until the early to mid-1970's. The suicide sex ratio in Quebec (range 4.4 to 5.3) substantially surpasses the Canadian average (3.8 to 4.7) by 1992 and remains higher for the remainder of the period.
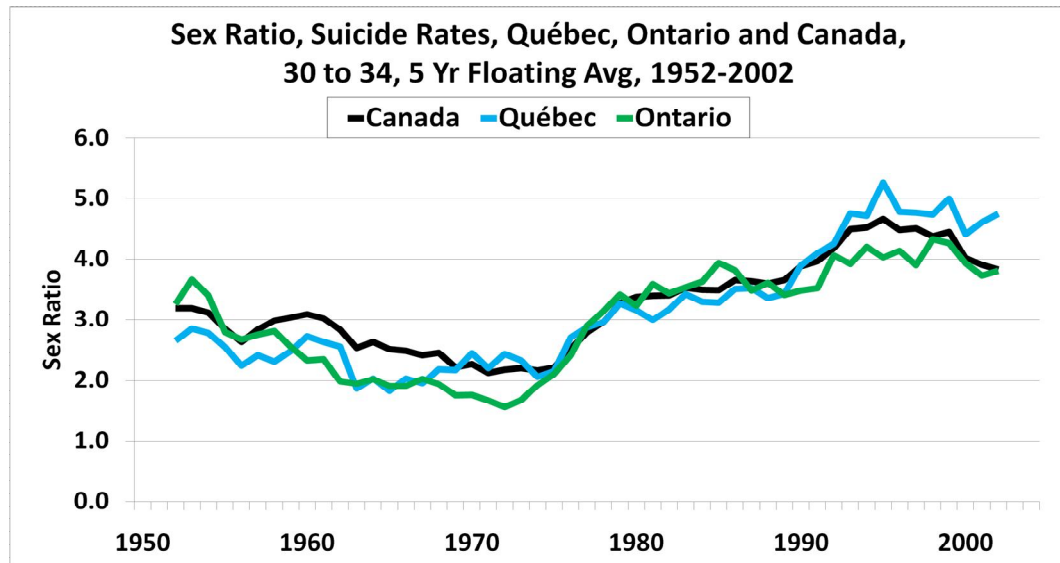
Figure 15: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 30 to 34 year age category, 5 Year Floating Average, 1952-2002.

35 to 39 year age category

Fig. 16 shows male suicide rates for the 35 to 39 age category in Quebec, Ontario and Canada. Similarly to the previous age category, both provinces follow a similar trend until 1978 when the ranking between Ontario and Quebec is reversed. Prior to 1978, Quebec male suicide rates (range 7.2 to 25.6 per 100 000) in this age category remain close or below both Ontario (range 17.1 to 27.1 per 100 000) and Canada (range 12.0 to 24.5 per 100 000) whose rates are almost identical. In 1978, the rates in Ontario (22.4 per 100 000) start decreasing until 1981 (18.9 per 100 000) then stabilize for a few years to increase and peak at 23.5 per 100 000 by 1994. On the other hand, Quebec rates continue to increase until they plateau above 40.0 per 100 000 between 1994 (42.4 per 100 000) and 2001 (41.2 per 100 000) and a peak in 1996-1997 of 43.2 per 100 000.
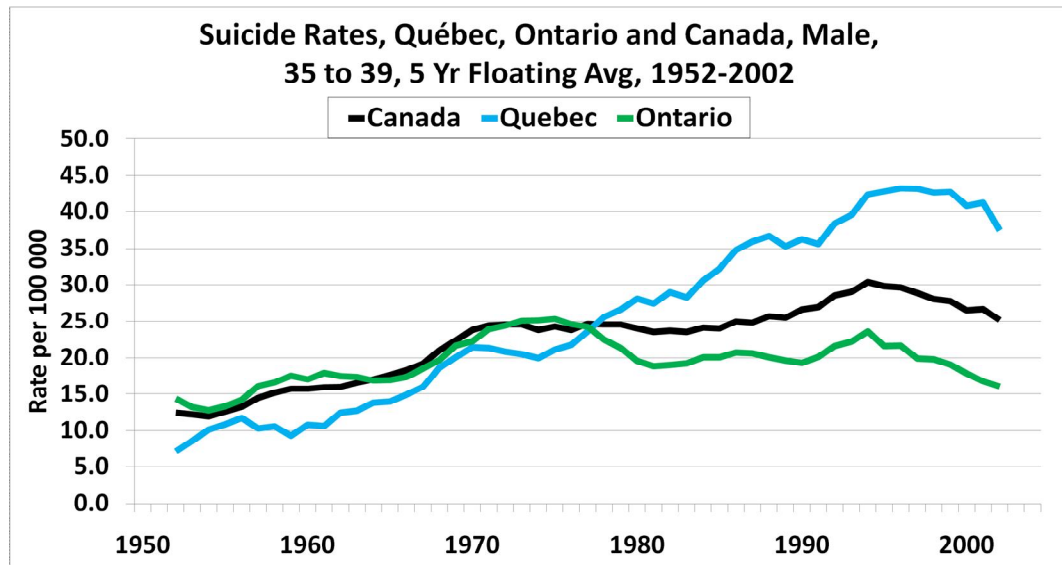
Figure 16: Male Suicide Rates, Quebec, Ontario and Canada, 35 to 39 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 35 to 39 age category, Fig. 17 shows that both provinces again follow a similar trend with a common peak between 1958 and 1962. What is particular in this age category is that the sex ratio for Quebec (range 2.4 to 3.5) is only marginally above both Ontario (range 2.9 to 3.5) and the Canadian average (range 3.0 to 3.4). The sex ratios then decrease and stabilize well into early 1980's to then increase until 1990 to again stabilize for a few years. Between 1998 and 2002 Ontario (range 3.4 to 4.1) remains above both Quebec (range 3.2 to 3.6) and Canada (range 3.4 to 3.9), with a sex ratio above 4.0.
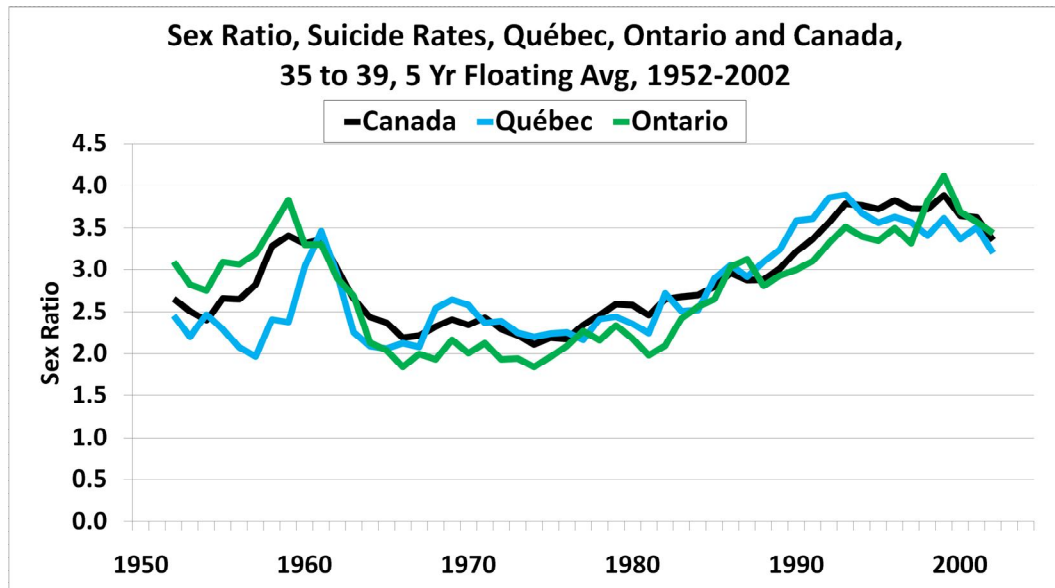
Figure 17: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 35 to 39 year age category, 5 Year Floating Average, 1952-2002.

40 to 44 year age category

Fig.18 shows male suicide rates for the 40 to 44 age category in Quebec, Ontario and Canada. A similar picture emerges as in the previous age categories. Quebec (range 9.5 to 25.3 per 100 000) begins much lower than the Canadian average (range 17.2 to 27.2 per 100 000) and remains below until 1978 when it continues to increase quite dramatically to peak 1982 at 33.9 per 100 000, plateau then increase again until to reach well above 45.4 per 100 000 by 1997. Ontario (range 17.1 to 31.0 per 100 000) begins slightly above the Canadian average, yet around the same time as Quebec dips below and ranges between a maximum of 25.3 per 100 000 in 1979 and a minimum of 17.0 per 100 000 by 1990. A closer look at the Canadian data shows relative stability in this age category for the duration of the period (range 17.2 and 29.0 per 100 000).
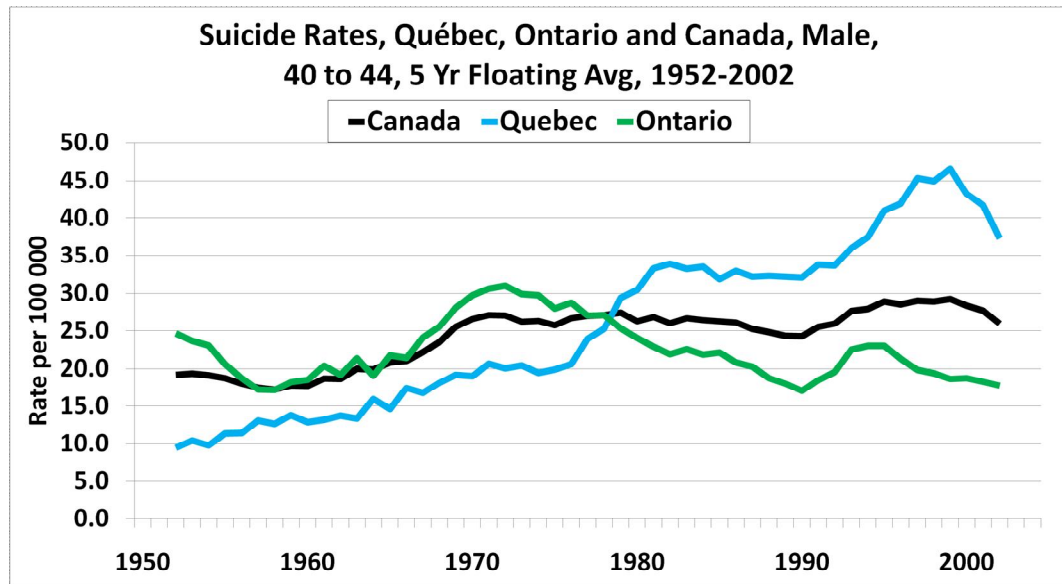
Figure 18: Male Suicide Rates, Quebec, Ontario and Canada, 40 to 44 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 40 to 44 year age category, Fig. 19 clearly shows that similar to the suicide rates, Ontario begins the 1950's with a sex ratio of 4.1 which is substantially higher than the Canadian average (3.0), while Quebec is substantially lower with a sex ratio below 1.7. The ratio for Canada peaks by 1961 at 3.6, then decreases concavely for a decade. Following this decrease to 2.3 by 1977, the sex ratios again increase for the remainder of the period to reach a value of 3.9 by 1999. Both Ontario and Quebec follow a similar pattern, although one important particularity in this age group is that the ranking between Ontario and Quebec switches more than once: first in 1957 with Quebec showing a higher sex ratio at 3.7, second by 1984 where Ontario overtakes the Quebec 2.3 ratio and peaks 2.6, third the positions switch again between 1988 and 1992 (Ontario range 2.5 to 3.7, Quebec range 2.6 to 2.8), to finally have Ontario (range 3.1 to 3.8) overtake Quebec (range 2.7 to 3.4) for the

duration of the 1990's. The ratios converge at the turn of the millennium in around a ratio of 3.5 for all three regions.
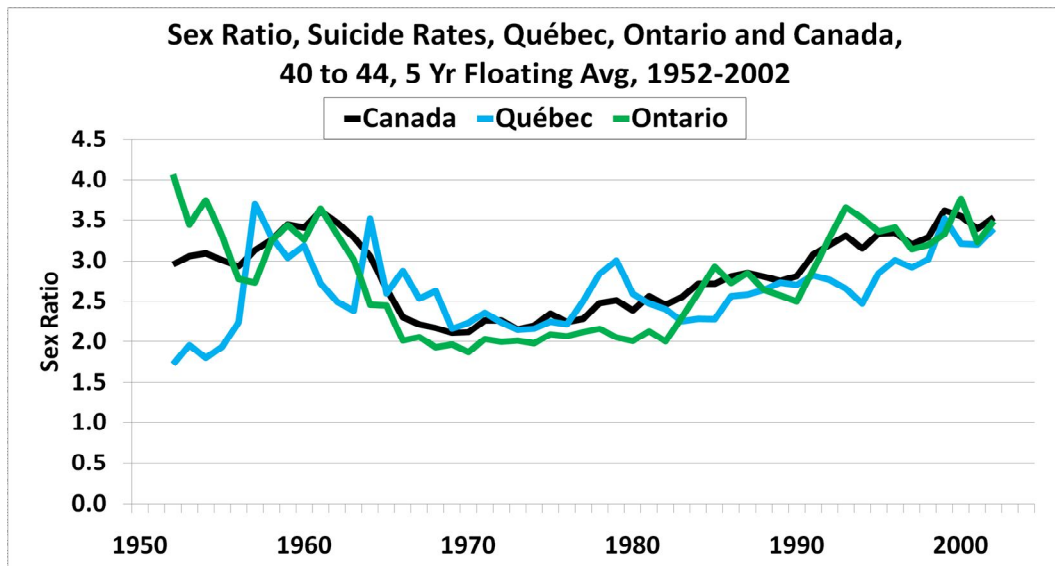
Figure 19: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 40 to 44 year age category, 5 Year Floating Average, 1952-2002.

45 to 49 year age category

Fig. 20 shows male suicide rates for the 45 to 49 age category in Quebec, Ontario and Canada. A similar picture emerges as in the previous age categories. Quebec (range 12.0 to 30.9 per 100 000) begins much lower than the Canadian average (range 18.4 to 30.4 per 100 000) and remains below until 1981 when it converges with both Ontario and Canada. After 1981, the male suicide rates in Quebec (range 30.8 to 31.7 per 100 000) plateau at just above 30.0 per 100 000 and remain constant until 1990 when they again increase to reach a peak of 46.4 per 100 000 by 1999. The rates in Ontario (range 17.0 to 31.4 per 100 000) remain slightly higher than the Canadian average until 1981 when they dip below and continue to decrease (range 17.3 to 27.1 per 100 000) for the remainder of the period. In Canada (range 18.4 to 30.4 per 100 000) the

rates remain relatively stable throughout the entire period although a clear increase is apparent between 1950 and 1981 (range 18.4 to 30.4 per 100 000), followed by a decrease into the early 1990's (range 23.9 to 29.2 per 100 000).
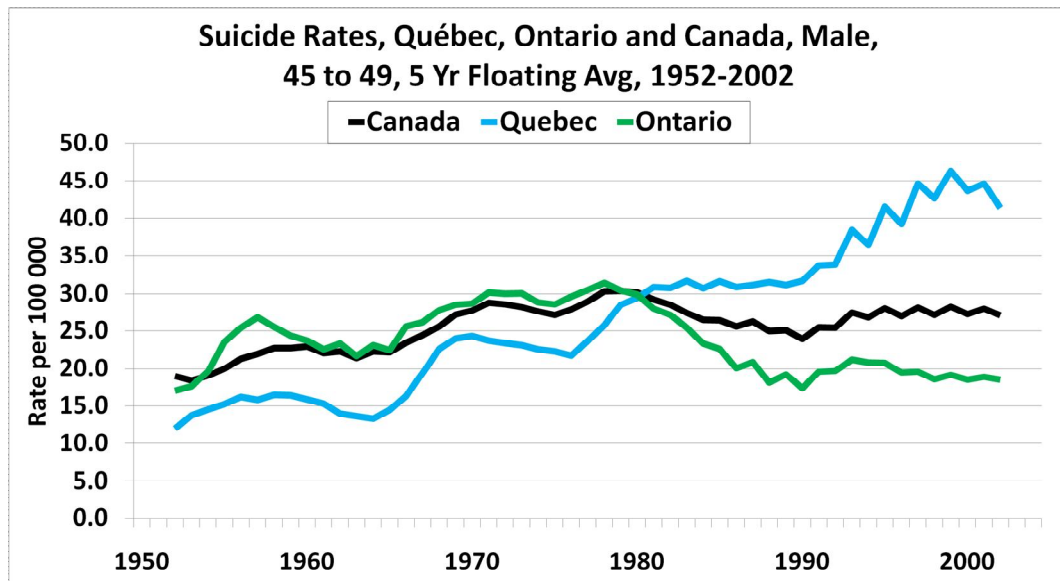

Figure 20: Male Suicide Rates, Quebec, Ontario and Canada, 45 to 49 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 45 to 49 year age category, Fig. 21 clearly shows that similar to the suicide rates, both provinces begin an upward trajectory peaking around the 1960's with the ratio in Ontario (range 2.0 to 3.4) and Canada (range 2.5 to 3.5) consistently higher than Quebec (range 1.8 to 3.2) until both provinces see a decrease back to the same ratio as in 1950. However Ontario (range 1.6 to 2.8) continues to decrease well into the mid-1970's while Quebec increases and is relatively stable between 1970 and 1975 (range 2.2 to 2.9). For the remainder of the period, all three regions follow the same trajectory with another high peak around 1993: Quebec 3.1, Ontario 3.3 and Canada 3.4. A slight decrease then follows this peak.
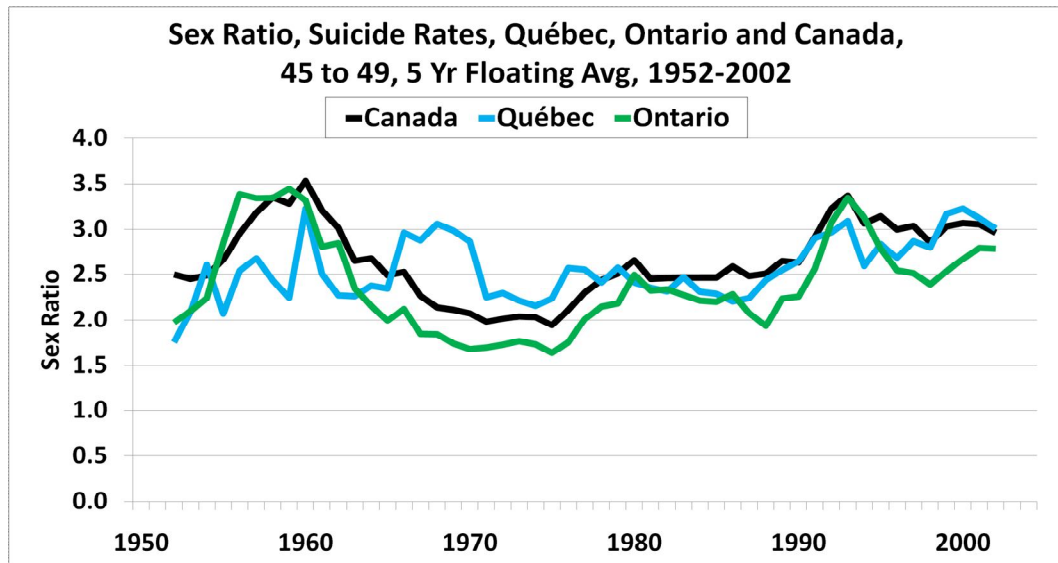
Figure 21: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 45 to 49 year age category, 5 Year Floating Average, 1952-2002.

50 to 54 year age category

Fig. 22 shows male suicide rates for the 50 to 54 age category in Quebec, Ontario and Canada. A similar picture emerges as in the previous age categories. Quebec (range 14.3 to 27.6 per 100 000) begins much lower than the Canadian average (range 25.1 to 30.6 per 100 000) and remains below until 1980 when it converges with both Ontario and Canada. As of 1977, rates in Quebec increase dramatically until 1985 (range 24.8 to 35.2), then decrease to again increase from 1990 peaking in 1997 (range 29.2 to 38.9). The rates in Quebec remain consistently above 35.0 for the remainder of the period (range 36.5 to 38.4). Ontario (range 27.6 to 39.5) follows a similar path until 1977 (29.0) although it is a bit higher than the Canadian average (range 25.1 to 30.6 per 100 000) during this period, then the rates decrease (range 16.2 to 29.5) to remain consistently lower than the Canadian average (range 23.0 to 33.1) which shows relative stability across the entire period.

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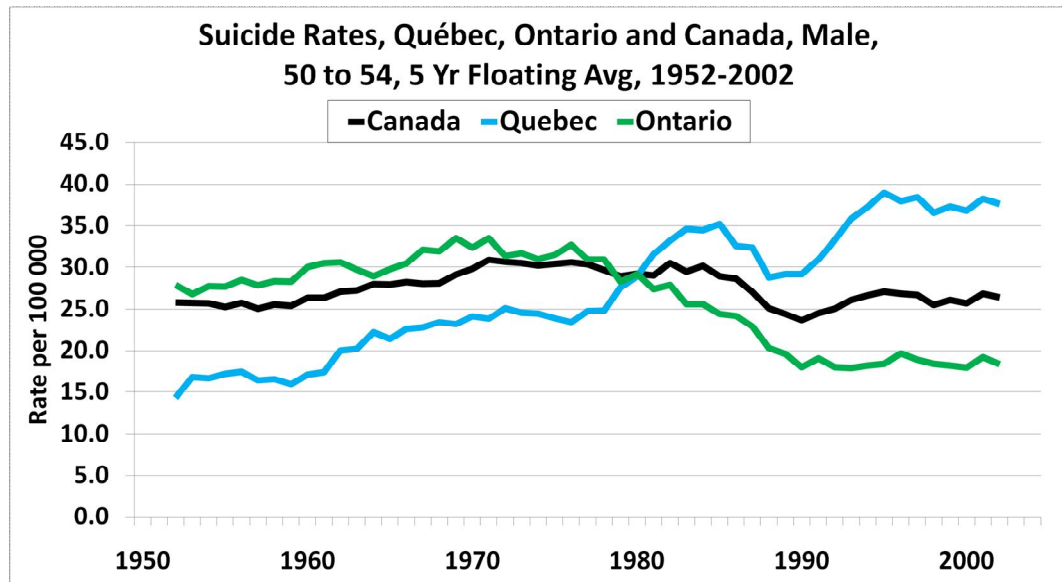
Figure 22: Male Suicide Rates, Quebec, Ontario and Canada, 50 to 54 year age category, 5 Year Floating Average, 1952-2002.

In terms of the suicide rate sex ratio for the 50 to 54 year age category, Fig. 23 clearly shows that similar to the suicide rates, both Ontario and Canada begin the 1950's with a relatively high sex ratio of 3.4 while Quebec is substantially lower with a sex ratio below 2.6. As of 1960, both provinces follow a concave path to finally reach sex ratios very similar to the one they had in 1950. Quebec shows an increase starting in 1967 (2.3), peaks in 1972 3.0, then decreases to mirror ratios in Canada (range 2.0 to 3.3) for the remainder of the period which finally converge with Ontario at the end of the period (range 2.8 to 3.0).
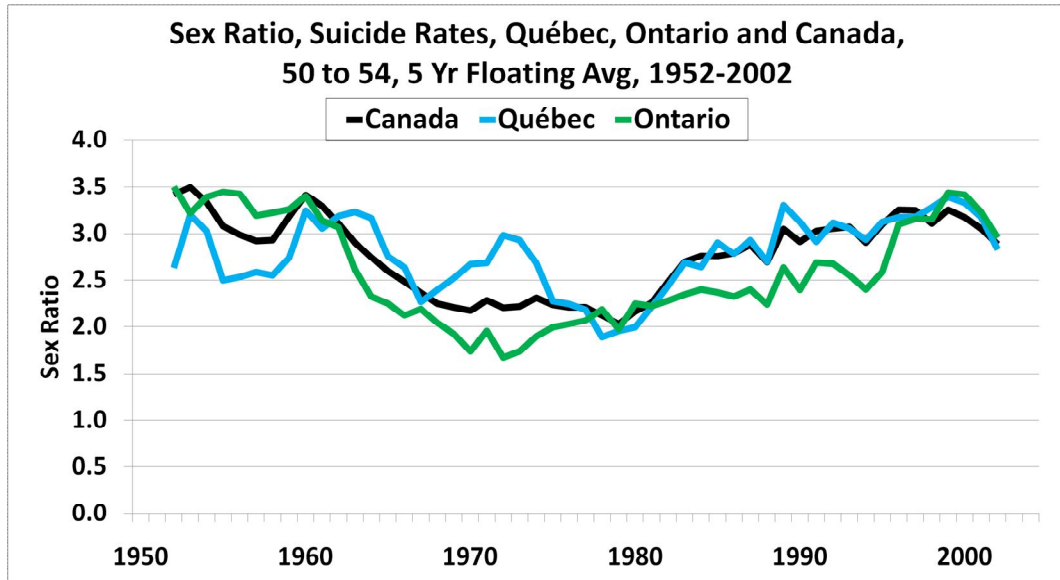
Figure 23: Sex Ratio of Suicide Rates, Quebec, Ontario and Canada, 50 to 54 year age category, 5 Year Floating Average, 1952-2002.

MORE RESULTS:

At first glance, the age specific rates and sex ratios presented in the results section seem quite basic however they manage in their totality to paint a more complete picture of the Canadian contemporary suicide regime than has been available in the literature up until now and clearly highlight its core defining feature: the emergence of youth suicide. Moreover, the selection of Quebec and Ontario as provinces to compare is particularly noteworthy since they exhibit trends which were very similar in the first half of the second part of the twentieth century, yet as of the late 1970's take on completely different trajectories. Furthermore, by placing both provinces against the backdrop of the Canadian data, we can see that as a whole Canada's male suicide rates have for the most part followed the same trajectory as in Quebec, although in a more muted way. In Canada male rates increased during the entire period to finally stabilize or decline by the 1980's, whereas rates in Quebec continue to climb while rates in Ontario decline.

Now, as stated in a previous section, the change in the age distribution of suicide rates in the contemporary regime has an additional equally striking component, that of a decrease in suicide rates in the older age groups. In Canada, suicide rates in the 55+ age categories are generally on the decrease for the entire period. However, the situation is not exactly the same for Quebec. Despite the fact that more recent suicide rates are also on the decline, they still stand higher than they were historically. An additional figure is required if we are to make

sense of this fact. Fig. 24 shows the male suicide rates in the 55 to 59, 60 to 64,

65 to 69, 70 to 74, 75 to 79 and 80 to 84 year age categories in Quebec, Ontario
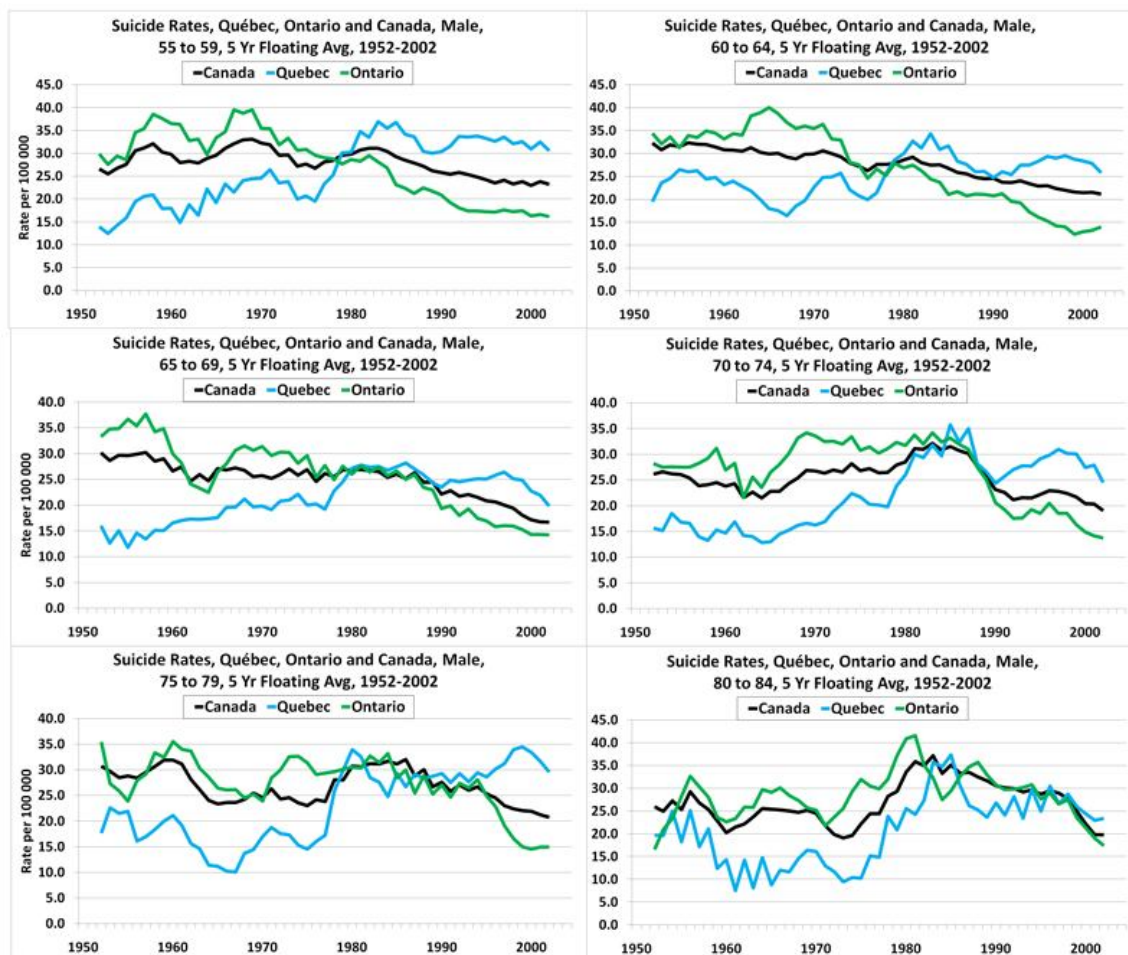
and Canada.

Figure 24: Male Suicide Rates, Quebec, Ontario and Canada, 55 to 59, 60 to 64, 65 to 69, 70 to 74, 75 to 79 and 80 to 84 year age category, 5 Year Floating Average, 1952-2002.

As shown in Fig. 24, the suicide rates for Quebec in these later age categories

reveal a slightly different pattern than the one exhibited by Ontario. In Ontario,

the rates for these late age categories show a clear decrease between 1950 and

2004. The image is particularly striking in the 60 to 69 age range. But, what is

important to notice is that rates in Ontario started quite high, between 30.0 per

100 000 and 35.0 per 100 000, while on the other hand, the rates for these same late age categories in Quebec started relatively lower, between 15.0 per 100 000 and 20.0 per 100 000. If we look at the entire period in question, the rates in Quebec have more or less returned to what they were at the beginning of the period, although still remain slightly above the initial value. However, what is particularly striking is the sharp downturn in rates which begins in the late 1990's across these late age groups. If we take a closer look at the period in between, we see that the suicide rate in these late age categories rose substantially into the late 1970's to stabilize and begin to decrease only in the early 1990's. One possible hypothesis is that the general decrease seen in Ontario in these categories was simply delayed in Quebec due to the unparalleled increase in male suicide rates across all age categories in this province prior to this decade. To be sure, rates in these age categories are certainly smaller after 1990 than they were just a few years before, and there seems to be no indication that this downward trajectory will stop. However, an examination of more recent statistics would be required to confirm this hypothesis.

Let's examine the young age categories in the other Canadian provinces. As shown in Fig. 25, the trend is relatively the same everywhere. A clear increase in suicide rates among the 15 to 19 year age category is obvious in all provinces; however the magnitude of these increases remain specific to each. The increases are even more noticeable in the 20 to 24 year age category and the timing of the peaks for each respective age category is in waves separated by a

few years. The rates for the 15 to 19 year age category peak in the mid to late 1970's. A few years later, by the early 1980's, even higher peaks are shown in the 20 to 24 year age category. To be sure, all provinces have suffered through a similar increase in youth suicide rates, much at the expense of males.
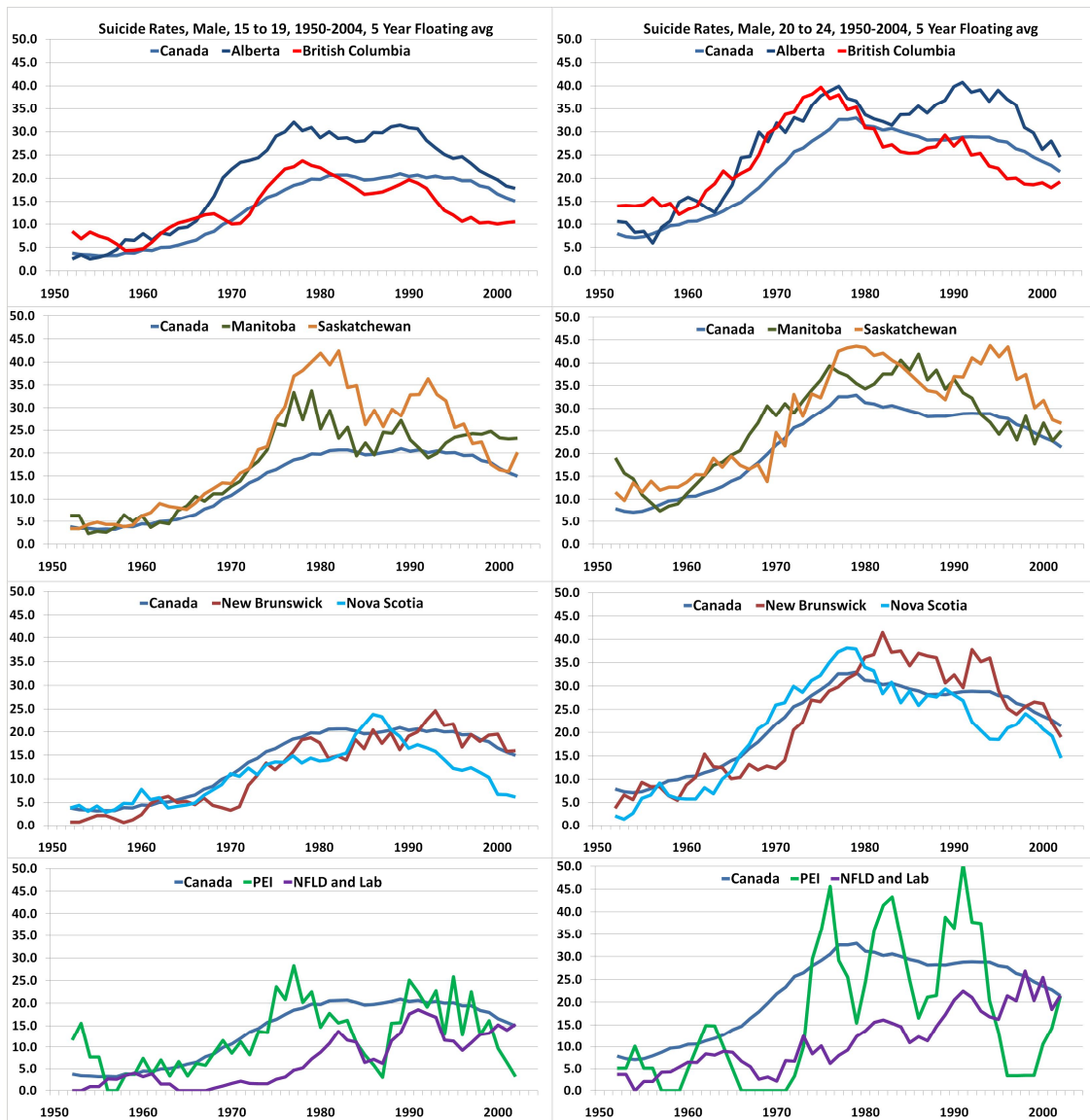
Figure 25: Male suicide rates, 15 to 19 and 20 to 24 year age categories, 5 Year floating Average, Canada, British Columbia, Alberta, Saskatchewan, Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, 1950 to 2004.

As hinted to in the previous paragraph, there is another potentially important finding which was only subtly underscored in this thesis; the question whether there is a generational effect in male suicide rates across Canada. The hypothesis is that the generation that *gave birth* to youth suicide continued to carry with it high rates over their lifespan. Another set of figures is necessary to explore whether such an effect is evidenced by the data. I have selected the 20 to 24 age category in 1975-1979 as my starting point since that is the period which has the highest rates for this age category in Canada between 1950 and 2004. In essence, it can be stated that youth suicide was *invented* by this generation; specifically by males who were 20 to 24 in 1975-1979 (or born between 1955 and 1960). Both figures follow the same scheme, male suicide rates were averaged for each five year period and for each 5 year age group.

Fig. 26 shows the age distribution of male suicide rates in Canada for subsequent 5 year periods beginning in 1975 to 2004. The individual graphs are positioned in such a way that we can follow any generation vertically. For example, those that were in 20 to 24 year age category in 1975-1979, are then in the 25 to 29 year age category in 1980-1984 and so on. The resulting trend, highlighted in blue, is particularly striking. The 20 to 24 year olds of 1975-1979 consistently exhibit the highest rates in each respective period across their lifespan. As shown in Fig. 26, this group which was aged 20 to 24 in 1975-1979 and is 45 to 49 by 2000-2004 not only *invented* youth suicide, but it also

continued to carry these alarmingly high rates across their entire lifespan. There does in fact seem to be a generational effect at work in Canada.

Let's see if the trend remains true for Ontario and Quebec. Fig. 27 follows the same scheme and clearly shows that this same generation, those aged 20 to 24 in 1975-1979 carry with them as they age some of the highest suicide rates for that period. It seems undeniable that there is a generational effect at play here since the same generation (the one that *invented* youth suicide) in Ontario, Quebec and Canada as a whole follow the exact same pattern. To be sure, these figures clearly show that there is something there, something that obviously requires a much more refined analysis than I can make in the scope of this thesis. However, with this observation in mind, the possibilities for further statistical analyses to clarify this generational effect are plentiful.
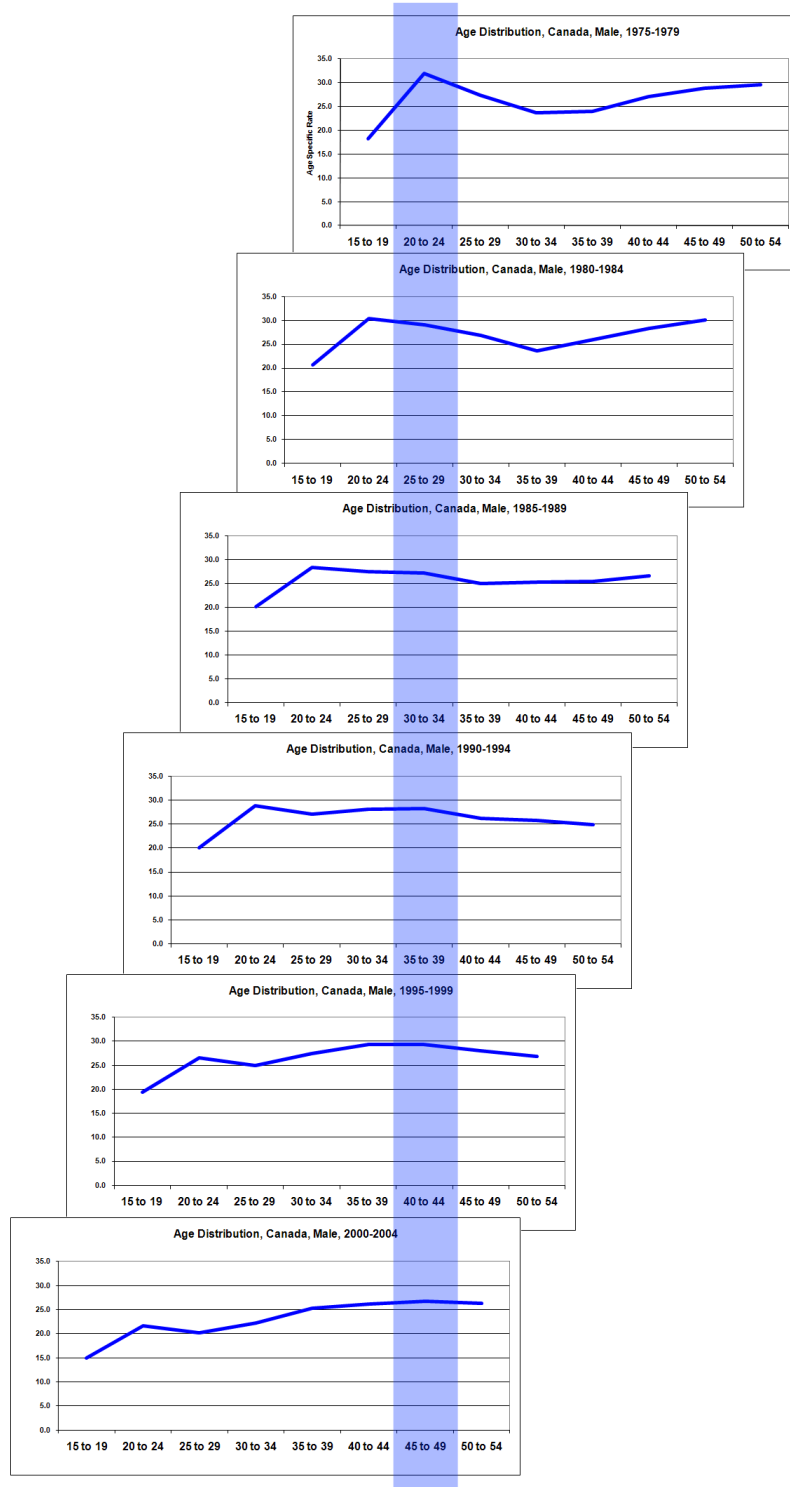
Figure 26: Male suicide rates by age, Canada, 5 year age categories, 5 year time periods 1975 to 2004.
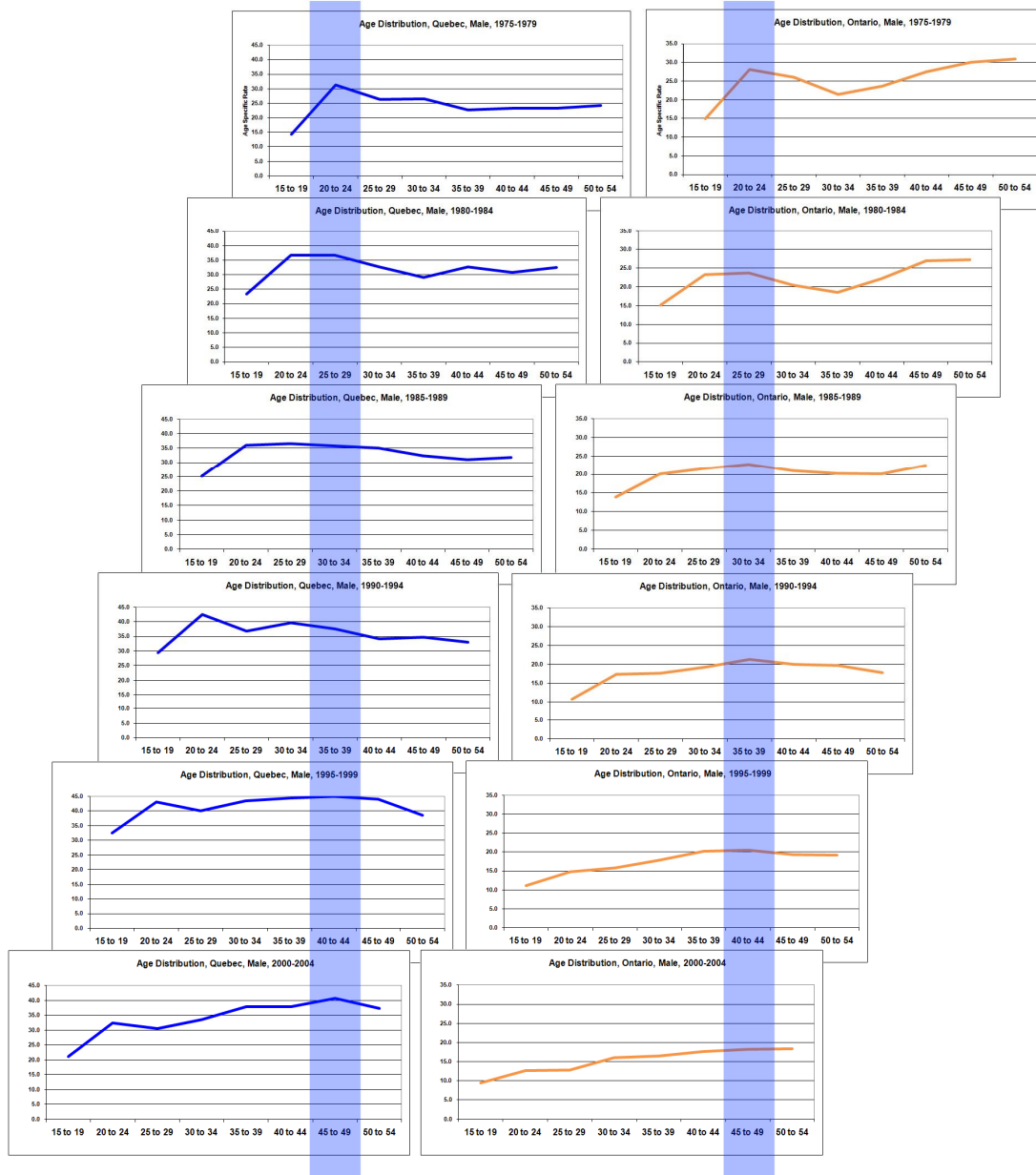
Figure 27: Male suicide rates by age, Quebec, Ontario, 5 year age categories, 5 year time periods 1975 to 2004

To fully characterize the contemporary suicide regime, a few additional remarks must be made which will bridge the figures presented in this thesis and the defining characteristics of the contemporary suicide regime as proposed in the

introduction: first, the continued overmortality of men and second, the change in the age distribution of suicide rates characterized by an increase in rates in the younger age categories and a decrease in rates in the older age categories. It should be clear already that despite efforts to treat gender and age separately, what the previous analyses confirms is that both features go hand in hand, and it is only if we combine age and gender (ie. age specific sex ratios) that the general trends can be accurately described. Clearly, the results evidenced in my own analysis and those evidenced by others show that by adopting a more exploratory approach in investigating suicide, specifically by examining suicide rate sex ratios instead of the gender specific suicide rates individually, we are more accurately highlighting the defining features of contemporary suicide. As such, the picture which is drawn out by examining sex ratios is richer and slightly different than if we considered the genders separately.

The continued overmortality of men in our contemporary suicide regime is clearly not a new fact of suicide, yet it remains a defining feature and is particularly striking in the province of Quebec. The male suicide rates in Quebec for the 'all ages' category show a consistent and substantial increase beginning at 6.0 per 100 000 by the mid 1960's to increase and finally reach well over 30.0 per 100 000 by the mid-1990's. It is clear that in all age groups, male suicide rates have been on the rise in Quebec. But, to further characterize this sex differential, the sex ratio of suicide rates must also be examined closely. In this province, the sex ratio for the all ages category shows after a first peak around 4.0 in 1960,

followed by a decrease until 1970, then a clear upward trend which continues well into the 1990's. Incidentally, a similar trend is also noticeable in Canada.

To fully appreciate the impact of these trends, let's add to the discussion the second defining feature of contemporary suicide and reexamine the suicide trends in the younger age groups. Although the sex ratios of suicide rates are remarkably high in all age groups in Quebec, they are particularly so in the younger age categories. For example, in the 15 to 19 year age category, the sex ratios remain consistently higher than the Canadian average for most of the period and its vertiginous peaks are worth repeating: in the mid 1950's the sex ratio is above 10.0 (male suicide rate is under 5.0 per 100 000), between 1966 and 1970 the sex ratio is above 6.0 (male suicide rate increases to 15.0 per 100 000 by the end of the period), in the mid 1980's the sex ratio is above 7.5 (male suicide rate is 25.0 per 100 000) and remains above 7 until 1990 (male suicide rate is 27.0 per 100 000). After 1990, the sex ratio in this age category decreases to finally converge with both the Ontario ratio and Canadian average situated around 3.0.

Let's examine the next age category. For the 20 to 24 year age category, the increase of the sex ratio in Quebec continues steadily until 1992 when it decreases rapidly to converge with both the Ontario ratio and the Canadian average around 6.0. The highest sex ratio is found between 1989 and 1993 and stands just above 7.0 with male suicide rates for the same period climbing from

35.0 per 100 00 to 45.0 per 100 000. It is clear from the suicide rates that the high sex ratios in this province are being carried by the dramatic increase in male suicides over the period, however, the highest male suicide rate in the 20 to 24 year age category is around 1995 with 34.0 per 100 000 while the sex ratio at this time is in decline to dip below 5.0 from a ratio of 7.0 just a few years prior.

Curiously, in both age groups a new fact emerges by the 1990's. The data suggests that female suicide rates in these age categories are also on the rise. This observation is evidenced by the increasing male rates coupled with a slight decrease in the sex ratio during this period. Clearly, the magnitude of the changes is not substantial enough to challenge the long standing pattern of the overmortality of males, yet the fact remains that females during this period are also killing themselves in greater numbers. A closer examination of more recent data would of course be necessary to confirm this observation, however what is important is that even if female rates are also increasing during this period the male rates are still significantly higher. As indicated by the sex ratio, males are still killing themselves more than 7 times more often than their female counterparts in certain age categories. It is worth mentioning that recent regional analyses of suicide rates in Quebec by the Institut National de Santé Publique suggest that the increase of young female suicide is centered in large urban regions, specifically around Montreal, while young male rates are still highest in peripheral regions such as Abitibi and Nunavik (St-Laurent and Bouchard, 2004).

Tremblay (2007) also looks more closely at these age categories in his own study of suicide sex ratios in Quebec. As evidenced by Tremblay (2007), the ratio widens throughout the 1980's well into the 90's, yet the provincial suicide rates by age do not show a uniform situation. His calculations of the sex ratio for the three youngest age groups 15-19, 20-24 and 25-29, clearly show that the variations seem to follow each other in successive waves. First the 15-19 ratios peak in 1989-1990, the 20-24 ratios peak in 1991-1992 and finally the 25-29 ratios peak in 1994-1995. In his interpretation, Tremblay (2007) suggests that the 2-3 year difference for each successive age group seems to be a generation effect where the phenomenon of an increased sex ratio is affecting a single generation which carries with it these high sex ratios. However, he also notes that the synchrony of this observation seems to stop at the turn of the century with a general increase in all three groups simultaneously, thus revealing that the generation effect is not the only thing at work here.
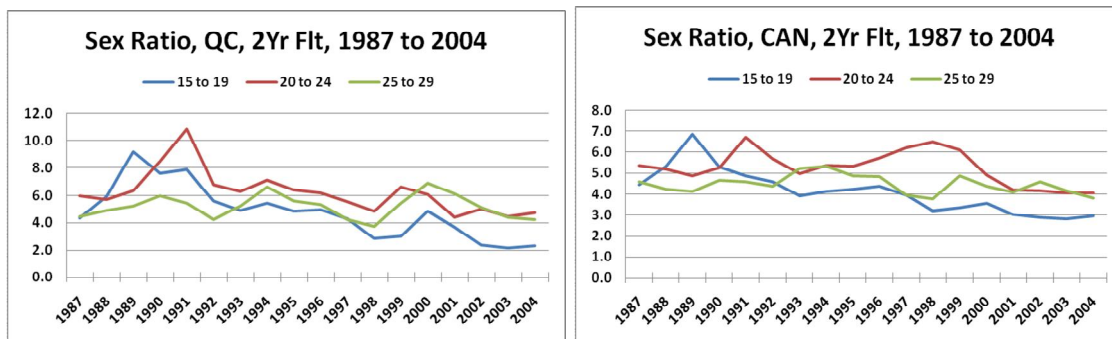
Figure 28: Sex Ratio of Suicide Rates, Quebec and Canada, 15 to 19, 20 to 24 and 25 to 29 year age category, 2 Year Floating Average, 1987-2004.

Naturally, Tremblay's (2007) *generational* hypothesis concerning the sex ratios during this period begs the question whether this phenomenon is also found in the rest of Canada and could be evidenced by my own data. In order to address this question, I have reproduced a few graphs using my data. Fig. 28 shows the sex ratio of suicide rates in Quebec and Canada as a whole for the same age categories Tremblay (2007) considers in his own analysis. In Quebec, the sex ratio for the 15 to 19 years of age peaks around 1989, 20 to 24 years of age peaks around 1991 and 25 to 29 years of age peaks around 1994. What is remarkable about this illustration is that the ratios are at their highest ever in this period and for the most part have not returned to these high numbers since. This effect is also noticeable in Canada as a whole. The sex ratios for the 15 to 19 years peak in 1989, 20 to 24 years peak a few years later in 1991 and finally the 25 to 29 peak around 1994. It seems that these results support Tremblay's assertion that there is a generational effect at play here where these specific generations are carrying with them shockingly high sex ratios over their lifespan. An examination of other provinces (Fig. 29) shows that for the most part this generational effect is also evident in these provinces; however, a more precise analysis is warranted to explore this important finding as well as to consider the practical implications of a generational effect in suicide sex ratios.
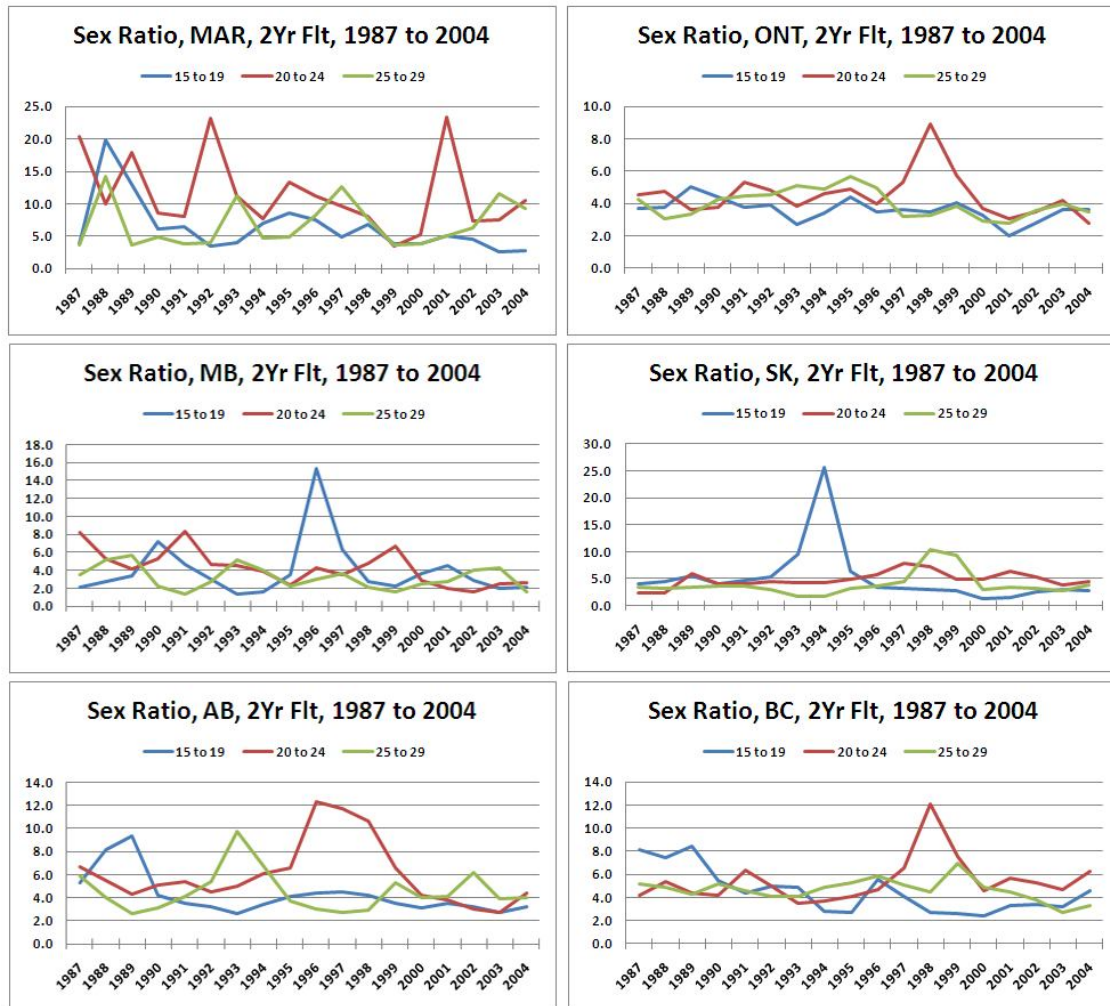
Figure 29: Sex Ratio of Suicide Rates, Maritimes, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, 15 to 19, 20 to 24 and 25 to 29 year age category, 2 Year Floating Average, 1987-2004.

We have already stated that the appearance of youth suicide is certainly the core feature of the contemporary suicide regime and is characterized by an ever increasing sex differential and inverted age distribution of suicide rates in favour of youth suicide. We have also shown that these particularities are amplified in the province of Quebec in the sense that they show in an exaggerated form the same traits observable in Canada as a whole. Two distinct yet related

phenomena mark the Quebec situation as particular without making it an exception. First, suicide rates in Quebec have been markedly high for more than 35 years and the situation is changing only very slowly. Second, youth in Quebec, and particularly young males, have been the driving force behind Quebec's high suicide rates in contrast to the traditional later age high risk groups. In fact, most countries in the Western world see youth suicide rates begin their vertiginous climb in the early 1970's, but for the most part these high rates normalized during the 1990's. In Quebec however, the rates of youth suicide began climbing in the early 1960's and skyrocketed in the early 1970's quickly surpassing all the other age groups and have remained consistently high through the 1980's and 1990's. It is only in recent years that these rates begin to level out in Quebec.

The fact that the Quebec data takes this form has led many researchers and popular media to suggest that suicide in Quebec is an exceptional situation, however, it is clear from these results that even if Quebec seems like an exception among western societies in terms of the actual rates of youth suicide which are particularly high, the sex ratio of suicide deaths in Quebec is altogether in the average range. It is clear from Fig. 30, that the ratio of male to female suicides has increased almost everywhere. For example, in Europe the ratio has gone from 2.7 to 3.6 despite the context of a general reduction of suicide rates. In fact, his table and subsequent analysis of the Quebec case suggests that the sex ratio seems indifferent to the general progression of suicide rates, and whether

the rates increase or decrease, the result remains the same: the difference between men and women continues to widen in favour of an increased male mortality by suicide.

TABLEAU 1

Taux de masculinité de suicide
et variation des taux de suicide selon le sexe

	Taux de masculinité		Variation des taux de suicide	
	1981-1983	1996-1998	Hommes	Femmes
Allemagne	2,39	3,19	-10%	-33%
Australie	3,08	4,04	22%	-7%
Autriche	3,10	3,59	-23%	-37%
Canada moins Québec	3,26	4,00	-20%	-35%
Danemark	1,89	2,63	-45%	-60%
Espagne	3,19	3,50	47%	33%
États-Unis	3,42	4,40	-3%	-25%
Finlande	4,04	3,82	-3%	3%
France	2,88	3,03	-13%	-18%
Grèce	2,65	4,75	8%	-40%
Irlande	2,44	5,00	80%	-12%
Italie	2,76	3,48	2%	-20%
Japon	2,02	2,49	-2%	-20%
Norvège	2,70	2,83	-15%	-19%
Nouvelle-Zélande	2,62	3,71	38%	-3%
Pays-Bas	1,65	2,11	-8%	-28%
Portugal	2,96	3,92	-34%	-50%
Québec	3,03	3,66	14%	-6%
Royaume-Uni	2,10	3,59	-7%	-46%
Suède	2,49	2,59	-28%	-31%
Suisse	2,56	2,85	-20%	-29%
Médiane	2,70	3,59	-7%	-25%

Figure 30: International comparison of sex ratios and changes in the gender specific suicide rates. (source: Tremblay, 2007)

St-Laurent and Gagné's latest report (2007), suggest that the Quebec situation is not permanent. Youth suicide rates are for the most part now decreasing across Quebec, and more specifically in the peripheral regions. The decrease is particularly striking in the younger age groups, although the gap between the

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young and the old continues to widen. For example, in the peripheral regions of Quebec, the suicide rate for men in the 15-19 in 2000 was 39.2 and 47.5 for those 20-24, but by 2005 the rates have gone down to 22.5 and 42.3 respectively (St-Laurent and Gagné, 2007). Naturally, we must ask ourselves whether it is possible that young men have finally managed to escape the clutches of the order of society which up until now has trapped them in an ever increasing vortex of high suicide rates.

CONCLUSION:

In conclusion, we have seen that the sociological understanding of suicide is firmly rooted in the social objectivity of the phenomenon itself. Standing in sharp contrast with the dominant medical paradigm, what sociology seeks is the historical personality of suicide as it mirrors our lived reality. The suggestion is that the risk factors and correlations identified in past and current research literature are simply indicators of the crises in the wider state of society. Despite the recognition that mental illness can have an aggravating effect of suicide, identified most commonly through the psychological autopsy, these retroactive data collection methods are limited by their focus on psychiatric antecedents.

Sociology has instead turned to focus on understanding how the institutions which govern our everyday lives through the integration and regulation of individuals in society have changed or been modified in such a way to either inhibit or encourage suicide. Durkheim's pioneering work, which was successful in explaining regularities in the suicide rates across time and geographies, now enables us to apprehend our contemporary suicide regime. Durkheim's emphasis on the fact that any change in the social suicide rate is an indicator of changes in the regulative and integrative potential of institutions through which we define our belonging to society still remains true today.

As sociologists interested in suicide, our first task is to accurately describe the parameters of the phenomenon in order to highlight what form it actually takes in

society. Having first apprehended age and gender as practical features of the contemporary suicide regime through an assessment of the existing literature followed by the presentation of data which evidenced the appearance of a new suicide regime characterized by the emergence of youth suicide in Canada; refuted the uniqueness of the Quebec situation; and suggested the possibility of a generational effect; this is precisely what this thesis has accomplished.

Through a careful examination of gender and age specific suicide rates and age specific suicide sex ratios, the defining characteristics of our shared contemporary suicide regime were underscored. First, the data presented clearly supports the increasing sex differential in completed suicides in Canada. This has always been a universal fact about suicide; however the differential continues to widen even more strikingly than in the past. This is not to minimize suicide amongst females, especially the more recent increases of female suicide in urban locales; however the continued overrepresentation of males in completed suicides remains a defining feature of our contemporary regime. Second, the data presented underscores the changes which characterize the age distribution of suicide in Canada since the 1950's, which simultaneously involves two movements: first, an increase of suicide rates in the younger age categories and second, a decrease of suicide rates in the later age categories. Third, the synchronicity of the spread of the phenomenon of youth suicide across the industrialised West clearly suggests the magnitude and importance of this transformation and as such makes it a purely contemporary phenomenon. In the

province of Quebec, this transformation took on a momentum of its own, yet it is clear from the data presented that despite the particularly high rates among its youth and the wide sex ratios in the province, it is not exactly an exception. It fully resembles suicide in other Western nations and has followed the same general trends as everywhere else, but in an alarmingly amplified manner.

As stated in the introduction, this thesis did not set out to interpret the transformations which characterize our contemporary suicide regime, but instead underscored the precise modalities of these changes. Now that this work has been completed, we must take a step back and consider the manner in which these trends mirror societal change. It is clear that these suicide rates and sex ratios do not exist in a vacuum; they are part and parcel of our shared reality. It is from this point, now that our actual object of interpretation has been delivered, that further statistical analyses are required to make sense of the emergence of youth suicide which appeared simultaneously in all Canadian provinces. For example, recalling Durkheim's treatment of anomic suicide as it relates to marriage and divorce, Dagenais (2007) suggests that youth suicide is anomic suicide and he relates its appearance to the collapse of marriage as the "*terminus de la jeunesse*". Leaving aside the validity of this and other interpretations, further statistical analyses must now seek to clarify the precise features evidenced in this thesis.

It seems to us that of all the explanations offered in the existing literature to account for the increase of youth suicide and the very existence of a new suicide regime, those which hold the most explanatory potential are clearly nestled amongst Durkheim's related concepts of integration and regulation (for example Dagenais's pathological identities and "*trou noir de la jeunesse*", Bearman's structural dissonance or Canetto's cultural scripts theory). What all these theories have in common with Durkheim is the recognition that suicide, as a purely individual act, results from a number of societal and cultural conditions which exist and are necessarily located outside of the individual. The active refusal to enter adulthood, the desire to grasp a gendered identity which no longer holds any promise and the problematic decoupling of society and self, are but symptoms of a much larger reality; a reality in which we all share.

By extension, what these theories point to is that if we are to prevent suicide, in society as a whole, we need to pay closer attention to the way that the social conditions of society impact those who participate, and more specifically those who are just beginning to participate. Direct intervention and prevention efforts centered on identifying psychopathologies are undeniably helping reduce the frequency of suicide within those who access the mental health system. For all the others who by choice or restriction don't access the system or alternatively don't exhibit any clear psychopathologies, they are left on the sidelines of these efforts. Clearly, the young man who lives in Abitibi with no clear or sustainable trajectory to join in collective life and who struggles to become a man as his

culture and society defines it is not suffering from a mental illness, but rather a social illness of becoming. This must be the starting point of any true intervention.

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APPENDICES

Appendix A: Male Suicide Rates, 5 Year Floating Average, 1950-2004

Canada
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
New Brunswick
Nova Scotia
Prince Edward Island
Newfoundland and Labrador

Appendix B: Male to Female Sex Ratio of Suicide Rates, 5 Year Floating Average 1950-2004

Canada
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
New Brunswick
Nova Scotia
Prince Edward Island
Newfoundland and Labrador

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 +
1950																		
1951																		
1952	11.2	0.4	3.8	7.9	8.4	10.9	12.4	19.2	19.0	25.8	26.6	32.2	30.1	26.1	30.7	26.0	23.0	15.8
1953	10.9	0.4	3.5	7.3	9.1	11.3	12.2	19.3	18.4	25.8	25.5	30.9	28.7	26.6	29.7	24.9	22.3	12.2
1954	11.0	0.5	3.4	7.1	10.0	11.2	12.0	19.1	19.0	25.7	26.7	31.9	29.7	26.2	28.5	27.3	22.7	11.2
1955	11.1	0.5	3.2	7.3	10.4	11.6	12.6	18.8	20.0	25.3	27.6	31.5	29.6	26.1	28.8	25.3	23.5	13.3
1956	11.4	0.7	3.3	7.9	11.5	11.6	13.3	18.0	21.3	25.8	30.6	32.3	29.9	25.4	28.4	29.3	22.5	18.5
1957	11.4	0.6	3.2	8.7	11.7	12.2	14.5	17.4	22.0	25.1	31.2	32.1	30.2	23.9	29.5	26.8	19.0	15.7
1958	11.7	0.8	3.9	9.7	13.0	12.4	15.2	17.2	22.8	25.6	32.1	32.0	28.5	24.1	30.6	25.3	14.8	19.7
1959	11.6	0.7	3.8	9.9	12.7	13.0	15.7	17.7	22.8	25.4	30.2	31.4	29.0	24.5	31.9	22.9	12.3	13.9
1960	11.7	0.8	4.5	10.6	13.5	13.2	15.7	17.7	23.0	26.3	29.8	30.8	26.7	23.8	31.9	20.2	10.9	18.1
1961	11.6	0.8	4.4	10.6	12.4	13.4	15.9	18.7	22.1	26.4	28.0	30.7	27.4	24.3	31.1	21.5	15.3	18.0
1962	11.7	1.0	5.0	11.4	12.8	14.3	16.0	18.7	22.3	27.1	28.3	30.5	24.6	21.6	28.1	22.2	16.3	19.1
1963	11.8	1.1	5.1	11.9	12.4	14.5	16.6	20.0	21.4	27.3	27.9	31.3	25.9	22.7	26.2	23.7	21.2	21.0
1964	12.1	1.3	5.5	12.8	13.4	15.4	17.1	19.9	22.3	28.0	28.9	30.3	24.7	21.5	24.0	25.6	21.1	21.7
1965	12.6	1.2	6.1	13.9	14.4	15.8	17.7	20.8	22.2	27.9	29.6	29.9	27.1	22.8	23.3	25.4	25.5	21.7
1966	13.1	1.3	6.6	14.8	15.7	16.7	18.3	21.1	23.4	28.2	31.1	30.1	26.8	22.8	23.6	25.2	23.1	19.6
1967	13.7	1.2	7.8	16.5	16.8	17.2	19.2	22.2	24.4	28.1	32.1	29.2	27.3	24.3	23.6	25.0	26.6	15.7
1968	14.4	1.2	8.4	18.0	17.8	18.4	21.0	23.5	25.6	28.1	33.0	28.9	26.8	25.4	24.2	24.7	21.9	16.5
1969	15.3	1.1	9.9	19.9	18.6	18.9	22.4	25.5	27.2	29.1	33.1	29.8	25.6	26.9	25.4	25.2	26.2	16.6
1970	16.0	1.2	10.8	21.9	19.5	20.1	23.8	26.6	27.7	29.8	32.2	29.9	25.7	26.7	24.6	24.5	26.2	15.7
1971	16.7	1.2	12.1	23.4	20.1	19.9	24.4	27.1	28.8	30.9	31.8	30.6	25.2	26.4	26.3	21.8	28.4	17.2
1972	17.2	1.3	13.5	25.7	21.2	20.6	24.5	27.1	28.6	30.7	29.6	30.0	26.0	27.0	24.3	19.9	30.2	14.6
1973	17.5	1.4	14.4	26.5	21.9	19.9	24.5	26.2	28.2	30.5	29.7	29.3	27.0	26.6	24.6	19.1	23.6	16.5
1974	17.8	1.4	15.8	28.0	23.4	20.3	23.8	26.3	27.6	30.2	27.2	28.0	25.8	28.2	23.5	19.7	25.4	15.8
1975	18.2	1.6	16.4	29.2	24.3	20.5	24.2	25.8	27.1	30.4	27.7	27.3	26.9	26.8	23.0	22.2	17.8	20.7
1976	19.0	1.6	17.5	30.5	26.7	22.4	23.8	26.7	27.9	30.6	26.7	26.2	24.6	27.2	24.2	24.4	25.3	19.8
1977	19.9	1.8	18.5	32.6	27.2	23.9	24.6	27.1	29.0	30.3	28.1	27.6	26.2	26.4	23.9	24.4	20.9	21.9
1978	20.6	1.8	18.9	32.6	29.4	25.6	24.5	27.2	30.4	29.6	28.4	27.7	25.6	26.5	28.1	28.2	29.1	20.5
1979	20.9	1.8	19.8	33.0	28.2	26.0	24.5	27.5	30.4	28.9	29.5	27.8	26.8	27.9	28.0	29.3	23.0	18.7
1980	21.1	1.9	19.8	31.3	29.6	26.3	24.0	26.3	30.2	29.2	29.8	28.6	26.8	28.5	30.7	33.5	29.6	18.4
1981	21.2	2.1	20.6	31.0	28.4	26.7	23.5	26.9	29.2	29.0	30.7	29.2	26.9	31.1	30.6	35.9	26.0	19.1
1982	21.4	2.2	20.7	30.3	29.4	26.9	23.7	26.0	28.5	30.5	31.1	28.0	26.7	31.0	31.2	34.9	33.9	23.1
1983	21.5	2.1	20.7	30.6	28.6	27.3	23.5	26.7	27.4	29.5	31.1	27.5	26.5	32.1	31.2	37.2	31.8	28.7
1984	21.3	2.1	20.2	30.1	28.8	27.2	24.1	26.4	26.5	30.1	30.4	27.5	25.4	30.9	31.7	33.3	36.2	28.4
1985	21.1	2.0	19.6	29.4	28.2	27.3	24.0	26.3	26.4	28.9	29.2	26.8	26.0	31.5	31.1	35.1	31.8	28.1
1986	21.0	2.1	19.7	29.0	28.2	27.5	25.0	26.1	25.6	28.6	28.5	25.9	25.2	30.7	32.0	33.3	31.3	23.7
1987	20.8	2.2	20.1	28.2	27.7	27.4	24.8	25.3	26.2	27.0	27.9	25.6	26.3	30.2	28.8	33.5	29.3	22.4
1988	20.6	2.3	20.4	28.3	27.5	27.4	25.7	24.8	25.0	25.1	27.2	24.8	24.5	27.6	30.1	32.4	33.2	22.6
1989	20.3	2.2	20.9	28.2	26.7	27.1	25.5	24.3	25.1	24.4	26.2	24.5	24.5	25.6	26.7	31.6	38.2	23.3
1990	20.1	2.3	20.4	28.5	26.9	27.4	26.7	24.3	23.9	23.7	25.8	24.6	22.1	23.1	27.6	30.6	39.7	22.0
1991	20.4	2.2	20.7	28.8	27.3	27.9	27.0	25.5	25.5	24.5	25.4	23.7	22.8	22.6	25.8	30.1	38.9	25.0
1992	20.5	2.6	20.1	28.9	27.5	28.2	28.5	26.0	25.4	25.1	25.8	23.7	21.7	21.2	27.0	30.0	35.7	22.6
1993	21.0	2.6	20.4	28.8	27.8	29.0	29.1	27.7	27.4	26.1	25.3	24.0	22.1	21.6	26.0	29.2	32.3	30.4
1994	21.0	2.9	20.0	28.8	27.1	28.2	30.3	28.0	26.8	26.7	24.8	23.4	21.5	21.5	26.7	29.7	33.0	32.1
1995	21.0	2.9	20.1	28.0	26.3	28.4	29.8	28.9	28.1	27.1	24.2	22.9	20.8	22.2	25.3	28.7	33.2	38.1
1996	20.6	3.1	19.4	27.7	25.2	26.7	29.7	28.5	27.0	26.9	23.5	23.0	20.7	23.0	24.5	29.5	34.0	38.0
1997	20.5	3.0	19.5	26.3	24.2	27.0	28.9	29.0	28.1	26.7	24.1	22.4	20.0	22.8	23.0	28.9	32.1	35.5
1998	19.9	3.0	18.4	25.7	23.4	25.6	28.1	28.9	27.1	25.5	23.3	22.0	19.4	22.4	22.4	27.7	29.6	32.6
1999	19.8	2.6	17.9	24.5	22.8	25.8	27.8	29.3	28.2	26.1	23.8	21.6	18.1	21.7	22.1	24.9	28.0	26.7
2000	19.1	2.3	16.6	23.6	22.1	24.2	26.6	28.4	27.2	25.7	23.0	21.5	17.2	20.4	21.9	22.1	27.3	27.5
2001	19.0	1.9	15.7	22.7	21.4	23.4	26.7	27.7	28.0	26.9	23.8	21.5	16.8	20.3	21.2	19.7	26.5	28.8
2002	18.3	1.8	15.0	21.4	20.3	22.2	25.2	25.9	27.1	26.4	23.2	21.2	16.7	19.1	20.7	19.8	27.4	31.1
2003																		
2004																		

Appendix A: British Columbia

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	23.0	0.4	8.5	13.9	15.3	22.8	18.3	36.1	35.6	46.8	42.1	63.9	45.9	41.3	50.5	56.4	61.6	0.0
1953	21.8	0.7	6.8	14.1	16.6	21.1	17.6	34.5	32.5	52.8	43.3	47.1	42.9	43.0	50.3	62.2	50.5	0.0
1954	20.8	0.4	8.3	13.9	17.0	21.3	17.0	28.1	30.3	50.0	41.0	52.2	43.1	42.6	50.1	45.9	39.2	27.8
1955	19.6	0.6	7.4	14.2	17.1	18.2	17.8	25.1	26.7	45.3	44.0	42.5	45.3	42.7	47.2	50.4	37.4	27.8
1956	18.7	0.5	6.9	15.7	18.2	17.3	15.6	23.5	26.6	41.8	43.8	46.8	41.0	42.2	43.8	37.5	27.4	55.6
1957	17.7	1.0	5.7	13.9	17.0	14.3	19.2	24.3	26.9	34.0	44.6	39.3	44.2	36.6	43.0	47.9	19.0	27.8
1958	17.3	1.0	4.3	14.5	17.8	13.6	18.1	27.6	30.6	35.6	43.9	38.3	35.6	35.9	42.0	34.6	12.8	27.8
1959	17.0	1.2	4.4	12.1	15.5	14.5	22.0	26.1	29.9	33.5	42.4	35.1	38.0	31.7	51.6	42.7	10.7	0.0
1960	16.7	0.9	4.7	13.2	15.8	15.6	19.6	26.3	30.9	37.0	40.9	35.4	33.3	34.2	46.8	29.1	13.1	0.0
1961	17.3	1.1	6.1	13.9	14.4	19.4	22.3	25.0	29.9	36.3	40.4	37.5	36.4	32.0	54.5	29.1	25.6	14.0
1962	17.8	1.1	8.0	17.3	15.7	20.6	19.7	27.1	31.7	37.1	38.7	40.1	37.3	32.1	45.7	24.6	40.6	26.5
1963	19.1	1.0	9.3	18.8	18.0	24.2	23.7	28.8	33.7	38.5	37.9	38.0	40.9	33.1	48.4	31.1	60.9	40.5
1964	19.3	1.2	10.2	21.5	19.8	22.1	22.7	30.7	33.2	38.5	35.1	39.6	43.0	32.6	44.7	38.3	59.4	62.4
1965	19.8	0.8	10.7	19.8	24.3	25.2	25.3	29.7	31.3	37.9	37.1	34.2	42.9	37.6	46.1	45.9	70.2	50.0
1966	19.6	1.4	11.3	21.0	26.2	23.7	25.1	30.2	28.2	36.5	36.6	37.4	38.4	33.4	47.8	47.0	50.2	59.4
1967	19.9	1.0	12.0	22.0	27.8	24.6	26.2	29.8	27.9	32.0	38.7	37.0	34.9	41.7	48.0	48.0	57.1	32.6
1968	20.5	1.5	12.2	25.0	27.1	25.9	29.2	33.8	28.8	33.8	41.0	39.0	27.2	32.8	46.9	47.8	35.6	40.6
1969	21.3	0.9	11.1	29.6	23.5	23.6	30.9	36.5	32.3	34.3	38.8	40.5	27.8	42.8	50.5	50.4	50.7	40.6
1970	21.8	1.1	10.0	30.9	25.6	26.8	33.3	37.1	33.8	38.8	40.7	36.1	23.2	34.4	43.4	53.1	45.6	39.4
1971	22.3	1.0	10.2	33.7	24.4	24.5	32.3	35.0	38.9	41.6	34.7	36.3	27.9	37.7	46.7	49.1	57.2	52.1
1972	22.3	1.4	12.0	34.3	30.5	26.9	31.4	31.6	37.0	40.4	33.9	31.6	27.0	34.8	36.1	38.3	53.7	34.5
1973	23.1	1.7	15.4	37.5	31.0	26.0	28.9	29.5	41.1	42.3	31.4	33.3	34.8	30.6	37.0	33.4	46.0	32.8
1974	22.9	2.1	18.0	38.2	32.9	23.8	26.3	30.0	39.0	40.0	29.6	31.6	32.9	35.4	30.4	19.8	33.1	18.0
1975	23.5	2.2	20.0	39.7	31.6	24.5	25.2	31.1	40.1	41.8	32.6	31.3	36.5	29.1	29.6	28.9	12.7	12.2
1976	23.4	2.6	21.9	37.3	33.2	23.3	23.8	31.9	38.0	39.0	31.7	28.6	34.0	35.2	33.7	25.1	7.6	11.0
1977	23.7	2.3	22.4	38.0	32.8	25.5	25.4	31.8	35.7	37.5	34.6	28.9	34.1	30.7	31.6	34.0	0.0	10.1
1978	23.7	2.4	23.7	34.7	34.7	26.9	25.6	31.1	33.1	33.6	32.3	29.0	33.7	30.6	36.0	36.9	13.8	20.2
1979	23.0	2.0	22.7	35.3	32.3	27.9	26.4	31.1	27.6	30.7	31.7	30.3	31.2	28.0	28.9	38.9	16.5	20.2
1980	22.6	2.0	22.3	30.8	34.4	29.1	25.1	28.1	24.0	30.6	31.8	30.8	31.4	26.7	26.5	39.5	38.7	25.3
1981	21.7	1.9	21.1	30.6	31.3	28.9	23.4	28.0	21.3	28.6	29.7	30.6	26.4	27.6	27.2	41.0	33.4	25.5
1982	21.6	1.9	20.1	26.7	32.4	29.9	23.4	24.1	21.3	30.8	32.7	28.7	27.0	28.9	28.1	40.2	52.8	30.9
1983	20.4	1.7	19.0	27.2	27.6	27.8	22.0	24.1	21.9	27.7	27.1	26.2	24.4	27.5	35.7	43.1	44.3	41.8
1984	20.5	1.9	17.8	25.6	26.9	27.1	22.7	23.6	24.9	29.6	28.9	23.1	24.8	28.1	41.0	38.5	57.2	42.1
1985	19.5	1.6	16.5	25.3	23.6	24.5	20.9	24.9	27.4	26.9	25.3	22.4	24.7	26.1	40.1	39.9	47.6	47.8
1986	20.1	2.0	16.7	25.5	25.7	24.1	22.4	25.5	28.1	27.5	29.4	22.3	23.7	29.5	40.7	35.8	45.9	32.2
1987	19.9	2.0	17.0	26.5	27.8	23.9	20.6	23.6	29.9	24.7	29.4	24.2	24.6	26.1	28.7	34.3	37.4	32.2
1988	19.9	2.0	17.8	26.8	28.7	24.7	22.9	23.1	26.7	24.9	29.2	24.3	22.2	26.8	25.9	32.8	36.9	26.1
1989	20.0	2.4	18.6	29.3	29.8	26.3	22.2	23.3	27.5	22.0	25.6	22.2	23.8	23.7	19.2	34.8	46.0	35.3
1990	19.7	1.7	19.6	26.9	28.1	26.6	24.6	24.0	23.4	23.7	24.0	20.9	21.3	24.1	20.2	38.1	49.7	34.5
1991	20.2	2.2	18.9	28.7	28.6	27.5	24.9	26.9	25.2	21.1	22.9	18.1	22.9	22.4	23.8	43.3	52.2	33.8
1992	19.7	2.1	17.8	24.9	26.8	26.7	27.8	26.5	22.6	23.0	24.1	19.8	21.6	22.0	23.9	42.9	46.5	23.4
1993	19.2	2.3	15.2	25.3	26.8	26.5	27.2	26.0	23.0	21.5	22.1	19.1	22.2	17.9	26.7	41.0	37.9	25.5
1994	18.3	2.9	13.0	22.6	24.6	24.6	28.2	23.5	21.6	22.3	20.2	21.4	21.5	17.3	23.6	33.7	38.9	35.9
1995	17.7	2.5	11.9	22.1	23.4	24.2	25.8	22.1	21.5	22.4	18.4	21.2	20.9	18.1	25.9	33.4	38.4	47.5
1996	17.1	2.5	10.6	19.9	20.8	21.9	24.6	22.5	22.3	21.7	17.6	22.3	19.7	20.1	21.7	29.5	48.9	58.0
1997	17.4	2.0	11.4	20.0	20.3	22.0	23.6	23.3	23.3	23.6	20.2	22.6	17.9	20.4	23.0	31.4	45.7	42.0
1998	16.8	1.7	10.2	18.8	19.4	20.4	22.7	24.9	23.1	22.1	19.9	22.4	16.4	20.3	20.3	27.6	46.0	39.2
1999	17.2	1.6	10.3	18.6	19.5	21.7	24.1	24.9	23.8	24.7	21.6	21.9	14.9	20.6	20.7	25.4	41.3	27.9
2000	16.9	1.5	10.0	19.0	18.9	19.9	24.4	24.8	22.0	23.1	21.4	21.4	16.1	20.9	21.1	20.8	40.2	36.1
2001	17.0	1.7	10.3	17.9	18.4	19.8	26.0	23.4	22.3	24.6	21.6	20.6	16.5	20.9	20.3	17.1	39.4	42.2
2002	17.1	2.0	10.5	19.2	17.6	17.7	26.2	22.7	22.6	24.6	22.8	20.7	19.2	20.1	21.9	19.1	35.4	36.9
2003																		
2004																		

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	13.9	0.8	2.6	10.6	8.0	13.0	14.8	20.0	35.7	40.4	31.3	34.3	31.5	37.6	25.4	15.2	31.8	0.0
1953	13.3	1.5	3.4	10.4	8.0	13.9	11.9	20.6	28.4	36.9	30.7	34.7	28.1	42.7	24.2	15.2	48.5	0.0
1954	14.1	1.1	2.6	8.2	9.3	13.8	12.3	28.3	29.4	39.4	30.3	37.9	32.4	36.8	32.9	39.6	59.8	0.0
1955	13.7	1.1	2.9	8.4	10.8	13.7	12.3	29.5	23.7	35.6	31.9	38.2	34.1	34.4	37.7	33.0	44.6	0.0
1956	14.5	1.3	3.5	5.9	13.5	14.3	14.4	31.8	24.3	39.7	32.5	39.3	36.8	29.5	54.4	46.2	40.8	0.0
1957	14.6	0.9	4.6	9.3	14.6	16.2	18.6	26.0	26.9	39.9	32.5	39.0	35.3	23.3	48.4	37.7	12.8	0.0
1958	15.1	1.5	6.6	10.7	17.2	17.9	20.6	23.4	27.2	35.9	34.1	44.9	32.8	23.7	52.2	33.2	22.6	0.0
1959	15.3	1.1	6.5	14.8	16.6	21.5	24.6	20.0	31.4	37.3	31.1	42.4	33.4	16.7	40.5	33.8	9.8	0.0
1960	15.1	1.3	7.9	15.9	17.5	21.7	21.9	20.3	28.8	30.3	33.6	49.3	30.7	22.2	42.9	17.8	19.6	0.0
1961	14.7	1.5	6.6	15.0	16.4	22.7	20.8	22.2	27.3	33.0	29.4	44.9	33.7	16.5	37.7	28.7	9.8	25.1
1962	14.7	1.4	8.1	13.6	16.8	22.4	18.0	23.0	25.6	28.6	36.1	47.6	33.4	21.0	43.2	20.1	17.1	25.1
1963	14.8	1.6	7.7	12.5	17.0	22.7	17.3	26.9	24.3	30.0	35.5	44.4	39.6	20.2	37.8	36.2	14.1	50.1
1964	15.6	1.7	9.0	15.6	15.5	23.9	20.8	24.6	26.1	30.1	44.7	40.0	39.3	24.9	37.3	31.7	33.9	25.1
1965	15.7	1.9	9.3	18.5	15.3	23.5	21.3	28.0	25.2	30.5	41.1	39.6	38.9	24.0	28.2	34.1	39.3	25.1
1966	15.8	2.7	10.7	24.4	12.8	23.0	24.0	25.2	25.7	31.0	45.7	29.6	27.5	23.0	28.2	30.1	45.1	0.0
1967	15.9	2.8	13.3	24.7	17.7	21.5	22.1	28.4	28.1	31.3	40.1	29.1	21.4	18.5	21.0	22.1	31.1	0.0
1968	16.5	3.1	16.1	29.9	17.1	21.5	21.3	25.7	29.9	30.7	42.4	27.7	17.4	20.7	22.8	23.8	23.4	0.0
1969	17.4	2.8	20.1	27.8	25.0	20.8	19.4	28.5	33.1	33.7	36.0	27.9	19.3	19.3	20.1	20.7	15.4	0.0
1970	18.4	2.2	21.9	31.9	21.7	23.2	19.5	27.3	35.3	33.4	37.5	30.6	24.2	24.8	20.2	22.9	32.4	12.1
1971	18.4	2.0	23.4	29.8	24.0	22.8	21.1	28.9	33.7	34.0	35.5	28.0	25.0	22.9	17.3	20.3	32.1	12.1
1972	19.2	1.4	23.8	33.0	20.9	26.6	21.7	29.1	34.0	33.4	33.7	28.1	26.9	24.2	14.3	18.3	53.9	24.3
1973	19.3	1.9	24.4	32.3	21.1	24.9	26.4	30.0	29.2	32.3	29.7	28.2	32.6	21.9	14.2	18.6	31.1	22.7
1974	21.0	2.0	26.0	35.7	24.8	27.8	25.6	30.1	31.1	34.7	30.8	31.9	31.6	23.9	18.4	24.0	39.3	22.7
1975	22.3	3.1	29.0	37.8	24.7	23.9	29.6	30.5	31.3	38.4	29.4	34.6	39.5	24.2	22.3	29.2	17.2	30.7
1976	23.8	3.9	30.0	38.9	30.3	26.6	29.1	31.4	35.4	38.1	29.3	36.1	32.5	27.0	28.7	41.4	30.6	20.1
1977	24.5	4.1	32.0	39.9	29.7	23.8	30.6	32.7	38.7	40.0	31.5	30.7	34.5	23.7	26.5	36.6	26.7	38.5
1978	24.9	4.3	30.2	37.2	34.5	29.3	29.7	30.3	40.0	35.5	31.8	32.0	26.9	29.3	30.2	38.7	40.4	18.4
1979	24.2	3.6	30.9	36.7	31.3	29.0	28.3	29.8	39.6	33.9	34.1	26.1	27.6	24.6	27.4	34.9	36.1	27.3
1980	24.3	4.0	28.7	33.7	32.8	32.9	26.9	27.3	39.5	32.9	32.5	31.5	26.8	31.0	33.5	38.5	40.8	8.9
1981	23.7	3.4	30.0	32.7	28.5	32.1	26.6	28.7	38.1	31.3	35.1	26.7	29.3	32.6	30.3	39.4	31.9	8.9
1982	24.3	4.4	28.5	32.2	29.0	32.5	25.2	30.4	38.1	38.0	35.0	32.1	31.8	40.9	31.2	40.0	27.4	9.3
1983	23.5	3.6	28.7	31.4	26.7	30.2	25.9	31.8	34.1	34.8	37.5	27.3	30.2	44.0	24.9	41.8	27.1	18.4
1984	24.4	4.2	27.8	33.7	28.5	30.8	25.7	32.7	33.5	39.6	38.6	33.6	29.6	46.7	26.5	41.0	17.9	27.7
1985	23.9	3.3	28.1	33.7	28.5	30.6	25.2	30.1	32.8	35.2	40.2	31.2	29.4	40.5	28.0	44.7	26.1	27.6
1986	25.2	4.1	29.8	35.6	29.5	32.4	26.9	31.2	34.4	39.0	41.7	35.6	27.6	39.1	34.9	43.9	23.6	18.4
1987	24.4	3.2	29.7	34.0	28.7	32.4	25.5	29.5	35.5	35.3	38.1	33.9	31.1	32.9	35.1	41.0	37.5	26.4
1988	25.0	4.4	31.0	35.9	29.5	31.4	28.1	31.9	35.1	37.0	36.3	35.1	25.7	32.4	37.0	36.3	45.2	25.5
1989	24.5	3.4	31.4	36.8	29.5	30.6	30.0	29.8	33.6	33.7	32.0	34.1	26.8	29.4	36.3	35.3	56.7	50.4
1990	25.1	5.1	30.8	39.9	32.9	30.9	32.4	31.6	32.5	32.5	31.1	32.3	23.6	24.5	35.2	35.9	58.3	48.7
1991	25.7	3.4	30.6	40.8	36.1	34.0	35.1	29.7	29.9	30.9	32.8	32.4	24.0	27.5	36.5	33.4	59.1	61.8
1992	25.9	4.5	28.1	38.6	40.1	36.7	34.0	30.8	30.9	33.0	32.0	31.0	26.9	24.8	30.4	31.1	42.8	44.3
1993	26.1	2.9	26.5	39.1	39.1	38.6	34.7	31.4	28.0	34.7	35.4	30.1	26.3	31.2	29.6	27.0	41.9	55.2
1994	25.4	4.3	25.1	36.6	37.7	37.5	32.9	31.3	31.3	37.9	30.8	26.9	28.9	29.3	22.1	24.6	23.4	53.0
1995	25.0	4.0	24.2	39.0	32.1	36.1	32.6	33.3	29.6	37.3	33.8	23.9	28.0	30.7	22.2	28.6	23.2	82.9
1996	24.1	4.9	24.6	37.1	29.0	33.2	32.2	31.8	32.3	36.3	31.0	21.0	28.4	26.2	18.9	29.0	13.9	81.6
1997	23.6	4.4	23.2	35.8	26.0	34.7	31.4	32.7	29.8	32.2	33.5	20.7	26.2	26.0	17.5	36.7	16.0	86.9
1998	22.4	3.9	21.6	30.9	24.2	32.5	30.5	31.1	29.5	31.0	33.4	20.8	25.3	24.1	19.3	31.2	12.9	72.6
1999	22.6	3.0	20.6	29.7	25.6	33.8	31.1	32.2	29.1	30.9	33.5	23.0	21.6	25.1	20.4	32.8	14.7	47.4
2000	22.1	2.1	19.6	26.1	24.0	30.0	29.9	32.1	30.8	32.9	34.5	23.1	21.4	23.5	25.5	25.4	22.4	50.6
2001	22.7	1.5	18.3	27.9	25.3	28.6	32.8	33.3	33.6	34.1	33.2	23.5	18.3	22.8	24.3	25.2	22.0	37.5
2002	21.9	1.5	17.8	24.5	22.6	26.1	30.3	32.3	35.1	34.2	32.7	23.5	20.4	20.1	24.4	26.2	35.6	53.0
2003																		
2004																		

Appendix A: Saskatchewan

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	11.7	0.5	3.4	11.6	10.0	8.2	12.4	24.1	21.5	22.1		33.6	29.0	24.7	14.8	22.0	0.0	0.0
1953	12.1	0.0	3.4	9.7	12.1	10.4	13.9	26.7	16.2	18.6	26.6	38.1	24.0	31.9	20.6	15.1	25.6	0.0
1954	13.0	0.0	4.3	13.6	14.8	12.0	14.5	28.0	15.6	18.2	32.3	32.7	26.9	28.2	19.2	33.5	38.5	41.7
1955	13.6	0.0	4.8	11.6	12.8	14.8	18.4	26.6	12.7	17.9	37.8	42.1	25.2	29.9	28.7	27.7	64.1	41.7
1956	14.0	0.4	4.3	14.0	14.8	15.4	22.4	24.7	19.0	17.8	44.3	35.6	31.3	24.0	22.1	44.5	51.3	83.3
1957	13.3	0.8	4.3	12.0	12.3	16.6	20.8	21.1	16.2	20.5	39.2	38.1	32.1	22.5	32.1	33.5	38.5	41.7
1958	13.3	1.1	3.8	12.6	15.8	15.5	22.6	19.9	24.9	20.8	36.4	32.1	33.6	21.2	21.6	36.8	12.8	41.7
1959	13.3	1.1	4.2	12.7	13.1	16.6	14.1	21.0	25.1	26.2	31.6	33.4	40.0	22.4	31.5	35.7	0.0	0.0
1960	13.9	1.1	6.2	13.8	15.1	17.2	14.1	22.7	32.4	28.6	29.2	34.5	32.0	23.7	18.6	34.3	0.0	0.0
1961	14.4	1.4	7.0	15.4	12.5	16.8	11.4	20.9	30.3	31.8	30.4	33.5	45.1	31.2	21.6	45.0	0.0	25.1
1962	14.2	1.3	9.0	15.3	17.1	21.9	12.0	20.4	32.1	32.0	31.5	30.3	29.1	30.4	14.5	36.2	0.0	25.1
1963	14.9	2.0	8.4	19.0	18.0	19.3	16.1	20.0	29.6	30.8	28.6	24.9	41.0	30.7	17.5	35.9	0.0	50.3
1964	14.1	2.0	8.1	17.0	23.9	24.0	15.1	18.3	32.7	31.1	33.5	19.5	28.0	22.6	17.6	25.2	0.0	48.5
1965	14.4	2.6	7.7	19.4	20.2	17.0	18.1	19.0	35.3	28.0	28.3	17.9	36.3	16.5	21.0	21.4	12.0	48.5
1966	14.0	2.5	9.2	17.5	23.9	19.2	18.6	14.3	35.3	27.1	34.7	18.3	35.2	14.6	19.6	18.2	12.0	46.8
1967	14.0	2.8	11.1	16.6	15.6	15.5	24.0	15.1	35.5	23.6	27.2	19.6	36.0	11.0	23.2	17.9	24.0	23.4
1968	14.8	2.8	12.3	17.6	21.1	19.0	27.6	16.7	28.8	24.3	32.6	20.1	37.6	19.7	27.2	12.8	12.0	23.4
1969	14.9	2.5	13.5	13.9	15.4	19.4	29.4	19.3	31.4	25.0	29.1	20.6	27.9	17.2	31.1	12.7	16.9	0.0
1970	17.3	2.2	13.3	24.6	21.9	20.3	30.9	29.1	31.2	29.8	36.6	22.8	30.1	26.0	31.8	12.8	14.7	0.0
1971	17.5	1.9	15.6	21.7	18.4	21.9	30.4	29.1	33.3	31.9	32.8	24.2	21.0	24.3	27.3	15.5	24.6	0.0
1972	19.8	1.3	16.6	33.1	22.1	24.2	32.9	38.3	32.4	34.6	37.6	28.0	25.7	28.2	24.5	20.9	39.5	11.7
1973	19.6	1.3	20.7	28.2	22.2	28.8	29.9	33.1	29.0	31.4	29.2	34.7	16.2	28.5	23.7	21.5	34.6	23.1
1974	20.3	0.7	21.4	33.3	27.0	30.3	31.0	36.4	24.1	30.8	32.1	34.4	17.1	25.3	27.9	19.0	39.8	56.1
1975	20.8	2.4	27.4	32.4	29.7	30.0	25.3	28.6	21.1	27.0	25.9	38.7	14.5	24.7	33.6	25.9	30.6	55.7
1976	21.6	3.6	30.2	37.3	31.9	27.2	24.3	26.9	19.9	29.2	29.5	34.5	17.9	21.4	36.8	23.8	41.4	65.7
1977	23.3	5.4	36.9	42.6	31.5	23.5	24.9	25.1	19.3	27.4	27.3	36.7	26.8	24.7	33.9	30.2	42.3	32.7
1978	24.2	5.9	38.2	43.3	30.1	23.2	28.2	24.5	23.0	33.7	30.7	35.8	29.3	27.7	37.8	21.6	47.9	31.7
1979	24.8	5.2	29.7	43.6	29.1	21.8	32.6	29.6	21.9	30.5	28.4	31.9	31.8	35.3	34.7	21.2	42.9	20.7
1980	25.8	4.2	40.0	43.4	31.1	26.6	34.2	24.4	27.8	34.0	33.2	32.6	30.3	39.4	40.6	20.4	38.1	31.1
1981	25.6	3.2	41.9	41.6	32.8	27.0	36.0	29.1	26.1	27.2	30.5	24.7	29.0	43.3	45.8	25.3	50.6	52.0
1982	26.0	2.8	39.3	42.1	33.5	30.3	35.2	23.6	27.7	31.0	34.1	27.5	30.4	38.1	42.2	32.9	56.9	41.7
1983	24.4	2.4	42.4	40.6	31.6	26.2	33.0	29.0	25.7	27.8	29.3	23.6	26.9	36.4	45.8	39.9	68.8	52.3
1984	23.3	2.1	34.4	39.5	27.7	25.1	29.4	28.6	25.8	36.9	30.1	29.6	24.3	27.1	34.0	41.1	51.7	21.0
1985	21.4	2.1	34.9	37.6	25.8	21.8	23.8	32.8	24.3	33.6	25.3	27.4	19.9	25.5	37.9	42.6	44.5	21.0
1986	21.3	3.8	26.2	35.8	23.1	27.6	21.2	30.0	24.9	37.0	26.9	30.5	17.2	20.9	32.3	39.2	21.5	11.1
1987	20.8	4.2	29.4	34.0	24.9	31.0	19.3	28.9	21.7	28.2	27.8	27.6	20.4	21.7	33.3	38.4	28.9	11.1
1988	22.0	5.4	25.7	33.6	26.9	36.5	24.2	24.8	22.0	25.0	30.9	24.6	24.6	19.5	36.7	35.1	27.8	43.3
1989	21.4	3.8	28.1	31.9	29.6	34.3	24.2	26.4	20.1	20.8	34.3	20.1	32.1	19.4	30.5	34.2	36.8	32.2
1990	22.5	3.3	32.8	37.1	32.5	33.1	26.9	25.1	21.0	20.1	32.4	16.4	36.3	18.3	32.4	33.5	31.2	53.3
1991	21.0	1.3	32.9	36.9	31.2	29.0	20.9	27.5	22.9	20.8	36.9	18.0	34.6	17.1	23.9	28.5	26.5	21.1
1992	21.9	2.1	36.3	41.1	30.3	29.1	21.3	23.9	23.8	21.2	32.9	26.2	30.5	16.9	30.1	23.5	26.1	21.1
1993	20.8	1.6	32.9	39.8	28.2	26.6	22.6	24.2	26.9	25.2	40.5	30.3	19.5	15.8	24.7	16.5	24.9	0.0
1994	22.0	2.4	31.6	43.8	30.1	27.5	25.3	21.5	26.9	25.5	34.5	36.2	20.5	19.6	32.4	15.9	28.7	8.6
1995	21.4	2.8	25.5	41.3	31.5	24.0	33.0	24.3	28.2	27.7	35.4	33.3	14.6	21.5	25.8	21.0	28.0	8.6
1996	22.0	2.8	26.3	43.5	34.9	26.6	29.3	24.0	25.2	28.7	20.9	31.3	20.6	27.4	24.5	32.0	26.8	25.3
1997	21.1	4.5	22.0	36.4	32.0	28.8	33.1	29.3	24.8	30.1	13.5	26.8	12.9	27.6	16.5	35.6	22.3	24.8
1998	20.4	3.7	22.4	37.5	31.5	30.6	25.1	30.2	23.7	31.5	12.5	23.7	14.8	24.6	15.1	37.4	21.5	33.0
1999	19.3	4.9	17.5	30.1	24.9	33.3	28.9	32.4	24.9	29.7	10.0	23.9	8.9	21.8	15.0	24.3	17.3	24.4
2000	18.5	3.7	16.3	31.8	22.9	27.2	28.3	31.2	26.0	28.7	13.0	18.9	10.8	18.9	16.2	20.4	13.9	16.2
2001	18.0	3.8	16.0	27.4	21.1	27.1	30.9	29.7	24.1	23.9	15.8	18.8	9.2	22.1	18.6	9.2	13.3	15.5
2002	17.9	3.4	20.2	26.6	19.8	20.1	32.2	27.9	26.7	22.1	22.2	12.8	9.3	24.2	17.4	10.9	9.8	27.8
2003																		
2004																		

Appendix A: Manitoba

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	14.8	2.1	6.3	19.0	12.1	13.0	16.2	14.9	24.0	26.6	41.2	27.3	43.0	28.4	34.7	29.1	44.2	0.0
1953	14.6	1.5	6.3	15.7	11.0	16.2	17.8	17.8	19.8	26.0	42.3	30.9	38.4	27.1	42.2	23.3	15.2	0.0
1954	13.0	1.0	2.3	14.5	8.8	15.5	12.0	19.6	20.7	23.9	40.5	29.4	36.9	18.3	38.9	21.1	15.2	0.0
1955	13.6	0.9	2.8	10.9	9.4	19.9	15.9	21.1	20.1	30.1	38.3	31.9	31.3	23.4	42.6	14.8	0.0	0.0
1956	13.6	0.5	2.6	9.2	9.5	20.4	16.4	24.3	21.7	29.5	36.0	31.2	37.9	20.4	33.8	19.7	0.0	0.0
1957	13.7	0.5	3.6	7.4	11.2	22.6	20.3	21.8	21.2	29.9	35.4	31.3	34.1	24.2	30.7	14.2	0.0	0.0
1958	14.8	0.4	6.5	8.5	11.3	21.0	21.3	23.5	24.5	32.1	37.4	34.4	44.6	23.9	27.5	13.5	0.0	33.3
1959	13.8	0.4	5.0	9.0	15.2	18.2	21.1	19.9	25.8	27.0	34.4	29.2	38.8	29.0	24.1	12.4	0.0	33.3
1960	14.8	1.1	6.3	11.2	14.1	14.9	20.3	21.5	32.1	30.8	38.0	31.1	41.6	30.3	23.6	19.0	9.1	66.7
1961	13.3	0.7	3.6	13.2	18.1	15.6	18.0	20.2	31.7	23.3	27.9	22.6	35.0	26.4	22.9	18.9	27.0	33.3
1962	14.0	1.1	4.8	15.2	13.6	15.7	17.4	21.2	35.1	30.9	34.7	23.3	30.6	22.7	16.9	22.4	36.0	56.6
1963	13.6	0.4	4.5	17.4	16.0	19.7	16.5	23.2	30.1	30.0	26.6	24.5	27.2	17.8	16.7	20.7	53.2	23.3
1964	14.6	0.4	7.4	18.1	11.1	18.9	18.5	26.0	32.0	39.5	31.0	26.1	27.3	19.5	11.0	20.0	35.3	46.6
1965	15.5	0.0	8.5	19.6	15.3	22.3	18.3	30.0	27.3	35.2	27.1	33.2	32.0	22.7	16.5	28.5	49.4	48.1
1966	16.1	0.3	10.5	20.7	14.7	24.8	21.6	28.0	27.4	36.3	27.3	31.5	37.7	25.7	18.6	25.2	30.4	48.1
1967	16.5	1.0	9.5	24.1	18.0	27.0	19.6	28.3	23.8	26.5	27.4	35.6	39.7	28.8	24.2	34.3	45.3	49.7
1968	17.2	1.3	11.1	26.7	20.6	29.7	24.3	26.5	21.3	24.6	30.3	36.3	37.0	32.0	28.6	21.5	35.8	24.8
1969	17.6	2.6	11.1	30.5	20.3	25.9	25.8	28.1	22.4	21.5	30.6	38.2	31.5	30.7	32.9	21.4	34.7	24.8
1970	18.6	1.9	12.7	28.3	21.0	27.6	32.1	27.9	22.4	26.7	35.7	40.1	30.4	30.9	39.3	12.2	26.4	0.0
1971	18.9	2.9	13.9	31.1	20.7	23.8	32.0	24.4	28.0	30.6	29.9	39.9	31.5	23.4	35.8	9.1	18.7	16.2
1972	19.5	1.3	16.7	29.0	21.7	27.7	29.1	21.5	32.6	36.3	34.8	35.9	33.0	24.2	34.1	6.2	12.6	31.1
1973	19.3	1.6	18.2	31.6	25.3	24.1	26.6	19.9	35.3	36.6	27.9	32.0	33.5	21.8	22.2	3.1	6.0	61.5
1974	19.6	1.3	20.7	34.0	25.5	21.9	19.8	23.1	37.6	36.4	32.9	24.9	28.0	27.8	18.4	3.1	17.9	60.2
1975	20.8	1.7	26.4	36.2	30.8	17.7	24.4	26.5	32.8	39.4	31.5	22.2	28.1	32.4	10.3	0.0	17.9	72.5
1976	21.6	2.4	26.0	39.3	30.4	15.8	22.6	29.2	33.2	40.2	34.2	26.4	27.2	33.3	13.9	0.0	41.9	42.1
1977	23.5	3.2	33.3	38.0	33.8	18.2	30.3	26.2	34.8	44.9	34.4	27.1	31.2	33.9	7.7	0.0	30.1	40.3
1978	22.3	2.9	27.2	37.2	33.3	19.4	26.1	22.5	36.3	36.8	31.4	33.3	30.6	24.8	14.5	6.4	42.3	13.1
1979	22.9	4.1	33.7	35.5	34.0	22.0	28.4	17.4	41.2	35.3	30.4	29.6	28.3	25.4	17.3	9.6	24.5	13.1
1980	20.6	2.3	25.2	34.3	31.6	21.2	25.5	14.1	38.3	24.5	25.6	28.0	27.7	20.9	29.1	22.0	24.5	0.0
1981	22.2	3.9	29.4	35.4	31.9	24.1	27.5	13.7	40.0	26.8	26.9	29.9	24.7	24.0	38.5	30.1	18.5	0.0
1982	21.2	2.4	23.2	37.6	30.6	24.4	27.4	13.9	33.0	22.2	25.7	25.9	24.6	24.4	44.8	38.4	12.4	25.2
1983	22.5	3.6	25.6	37.5	31.5	27.7	27.4	17.6	29.6	25.6	29.9	32.9	23.8	21.8	42.8	42.6	12.4	25.2
1984	21.3	2.8	19.4	40.6	30.4	26.6	24.9	19.7	20.8	20.3	27.3	26.8	23.8	28.4	43.2	38.5	18.3	50.3
1985	21.3	2.8	22.2	38.4	31.2	25.6	22.2	24.2	20.2	22.5	28.8	29.5	25.5	23.7	35.9	34.9	24.0	25.2
1986	21.3	2.0	19.6	41.9	31.8	24.3	21.0	25.9	17.2	21.4	20.0	27.3	29.4	29.6	49.6	30.8	29.8	38.2
1987	21.6	2.0	24.5	36.3	33.0	22.6	21.4	27.3	24.9	25.6	18.0	27.4	31.6	25.5	43.8	37.5	23.5	26.2
1988	21.8	2.1	24.3	38.4	32.8	25.0	23.7	27.1	23.7	22.9	12.7	26.8	30.4	23.5	52.1	41.9	29.8	39.3
1989	21.3	2.1	27.1	34.3	28.8	24.0	25.6	26.4	27.2	28.9	14.2	23.4	29.2	24.5	36.7	48.6	23.5	39.3
1990	20.7	1.7	22.9	36.4	27.3	26.3	28.0	26.4	23.1	25.8	17.2	21.4	25.9	21.3	33.1	42.7	29.8	26.2
1991	20.4	0.8	21.0	33.5	25.8	26.1	27.2	24.5	26.8	31.5	20.2	20.9	26.6	27.1	21.5	37.2	23.5	13.1
1992	19.5	0.8	18.9	32.3	26.9	26.1	25.4	25.0	24.6	28.1	23.9	17.3	22.7	21.7	24.0	32.7	27.7	0.0
1993	19.3	1.2	19.9	28.6	29.3	26.4	21.9	22.5	26.1	28.2	26.8	16.5	21.1	25.2	18.6	37.4	25.3	0.0
1994	18.4	2.4	22.2	26.8	28.5	23.2	20.8	22.1	23.5	22.9	27.4	15.1	18.0	22.0	23.9	38.9	29.5	10.2
1995	18.6	4.0	23.4	24.2	29.6	24.3	23.2	21.2	23.7	18.4	31.4	14.4	16.5	23.8	22.2	40.0	29.2	20.2
1996	18.2	4.4	23.9	26.9	25.6	20.2	25.9	22.3	22.9	16.4	26.8	18.4	15.8	21.9	27.2	29.9	31.4	39.8
1997	18.3	4.8	24.2	23.0	23.3	20.4	29.6	23.0	23.8	16.3	26.3	18.4	16.7	21.9	28.0	27.7	32.7	39.5
1998	18.1	3.9	24.1	28.2	20.5	17.4	27.4	24.5	24.4	17.1	21.2	21.5	13.4	24.9	25.1	19.8	34.8	47.6
1999	17.5	3.9	24.7	22.1	16.8	17.2	26.1	26.4	23.6	19.8	22.9	18.4	12.6	22.2	24.6	21.6	41.7	36.2
2000	17.1	4.3	23.3	26.7	19.5	16.5	20.4	26.4	20.3	20.6	22.5	17.5	9.3	25.1	20.5	21.3	34.0	51.7
2001	17.5	5.0	23.1	22.8	18.8	19.2	23.8	26.7	21.7	23.4	22.5	17.8	11.1	19.3	20.4	22.5	36.8	41.9
2002	17.3	5.0	23.2	25.0	20.6	20.7	20.6	24.9	19.2	24.7	21.8	17.4	10.3	21.2	20.3	18.3	25.2	50.4
2003																		
2004																		

Appendix A: Ontario

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	13.1	0.5	5.0	8.3	9.1	11.9	14.4	24.6	17.0	27.9	29.9	34.4	33.3	28.2	35.4	16.6	27.3	35.6
1953	12.4	0.6	4.1	7.0	9.8	12.1	13.2	23.6	17.6	26.8	27.6	32.1	34.8	27.5	27.3	20.9	28.9	17.5
1954	12.6	1.0	4.0	6.9	10.6	11.7	12.8	23.0	19.6	27.7	29.4	33.6	34.9	27.6	25.9	23.4	29.6	8.8
1955	12.4	0.8	3.3	7.4	10.5	11.1	13.3	20.6	23.6	27.7	28.6	31.3	36.7	27.5	23.9	28.2	28.7	6.9
1956	13.0	1.2	3.4	9.1	11.2	10.7	14.2	18.7	25.4	28.5	34.5	34.0	35.4	28.3	27.9	32.6	27.6	13.6
1957	13.2	0.9	3.4	10.8	11.7	11.1	16.1	17.2	26.8	27.8	35.4	33.5	37.7	29.2	29.2	30.3	25.1	20.6
1958	13.5	1.3	4.2	11.8	12.7	11.9	16.6	17.1	25.5	28.3	38.6	34.9	34.2	29.2	33.3	28.0	20.5	32.2
1959	13.6	1.1	4.4	12.4	13.8	12.6	17.5	18.2	24.4	28.3	37.6	34.5	34.9	31.2	32.4	23.6	19.6	25.5
1960	13.3	1.3	4.8	11.9	14.0	13.0	17.1	18.5	23.7	30.0	36.6	33.2	29.9	27.0	35.5	22.6	15.3	30.5
1961	13.4	1.3	5.0	12.2	13.7	13.2	17.9	20.4	22.6	30.5	36.3	34.3	28.2	28.2	34.0	23.3	18.7	17.1
1962	12.9	1.6	5.1	11.7	12.1	13.9	17.5	19.2	23.4	30.6	32.8	34.0	24.1	21.6	33.7	25.9	10.8	17.1
1963	13.1	1.7	4.9	13.1	12.1	14.3	17.4	21.4	21.7	29.7	33.1	38.2	23.3	25.6	30.3	25.8	12.0	15.2
1964	12.8	1.9	5.2	12.5	11.3	15.5	16.9	19.1	23.1	28.9	29.8	38.9	22.5	23.5	28.5	29.7	9.8	15.1
1965	13.6	1.8	5.7	13.9	13.5	15.3	17.0	21.8	22.5	29.8	33.4	40.0	26.4	26.5	26.4	29.1	14.2	19.9
1966	14.0	1.8	6.0	12.9	14.8	16.4	17.4	21.4	25.6	30.5	34.7	38.8	28.0	28.0	26.1	30.1	16.8	14.9
1967	15.0	1.3	6.9	14.7	16.8	16.1	18.5	24.1	26.1	32.2	39.5	36.7	30.6	30.1	26.1	28.4	26.4	18.9
1968	15.6	1.3	7.3	15.6	17.9	17.4	19.7	25.5	27.8	32.0	38.8	35.5	31.5	33.2	24.5	27.3	28.6	18.2
1969	16.5	0.8	9.1	18.4	18.3	17.5	21.6	28.2	28.5	33.5	39.5	36.0	30.6	34.2	25.2	25.7	35.9	22.2
1970	16.9	1.1	10.2	20.1	19.4	17.9	22.3	29.8	28.7	32.4	35.4	35.5	31.4	33.6	23.9	25.2	34.7	17.4
1971	17.5	0.9	11.7	21.3	19.3	17.3	23.9	30.6	30.2	33.6	35.4	36.4	29.6	32.5	28.4	21.8	33.9	16.4
1972	17.7	1.3	13.0	22.6	20.4	17.3	24.3	31.0	30.0	31.4	31.9	33.2	30.3	32.5	30.0	23.7	30.3	7.5
1973	18.0	1.2	13.6	23.6	20.6	16.7	25.1	29.9	30.1	31.7	33.3	32.9	30.2	32.0	32.5	25.6	22.5	9.5
1974	18.2	1.3	14.5	24.6	22.2	17.6	25.1	29.8	28.9	31.0	30.6	28.1	28.1	33.4	32.6	29.3	23.5	6.2
1975	18.6	1.3	14.8	26.8	23.7	17.7	25.3	28.0	28.6	31.5	30.9	27.5	29.6	30.8	31.3	32.0	19.6	14.7
1976	19.0	1.1	15.1	27.0	26.4	20.2	24.6	28.8	29.6	32.7	29.6	24.6	25.4	31.5	29.1	30.4	27.8	19.3
1977	19.4	1.2	15.0	29.2	26.4	21.4	24.2	27.1	30.5	31.0	29.0	26.6	27.7	30.3	29.4	29.9	26.3	24.7
1978	19.4	1.0	14.7	27.1	27.9	22.7	22.4	27.1	31.4	30.9	28.8	25.2	24.9	31.1	29.6	32.0	33.0	29.8
1979	19.1	1.1	14.7	27.3	24.7	22.9	21.3	25.3	30.4	28.3	27.6	27.9	27.6	32.4	30.1	37.2	24.4	24.2
1980	18.8	1.4	14.9	24.1	25.7	21.7	19.6	24.1	29.9	29.2	28.6	26.8	26.0	31.7	30.5	40.8	29.5	24.2
1981	18.4	1.5	15.0	24.0	22.2	21.4	18.9	22.9	28.0	27.4	28.2	27.4	27.7	33.8	30.4	41.5	25.1	26.6
1982	18.4	1.8	15.1	23.0	23.8	20.4	19.0	21.9	27.1	27.9	29.5	26.2	26.5	32.0	32.7	35.1	32.2	31.2
1983	18.2	1.4	14.9	23.9	22.0	21.4	19.2	22.6	25.4	25.6	28.1	24.4	27.4	34.2	31.4	32.2	27.4	40.9
1984	18.0	1.4	14.5	22.6	23.6	22.0	20.1	21.9	23.3	25.6	26.8	23.8	25.8	32.4	33.2	27.4	30.4	35.1
1985	17.6	1.1	14.0	22.1	22.9	23.0	20.1	22.1	22.7	24.5	23.1	21.0	26.6	33.2	28.4	29.4	24.4	36.8
1986	17.3	1.3	13.6	20.7	23.4	22.9	20.7	20.8	20.1	24.2	22.4	21.7	25.0	32.0	30.0	32.6	27.0	23.9
1987	16.9	1.4	13.6	20.0	21.7	22.7	20.6	20.3	20.9	22.9	21.2	20.7	26.0	31.0	25.5	34.7	29.9	23.0
1988	16.2	1.2	13.1	19.2	20.5	21.5	20.1	18.7	18.1	20.3	22.4	21.2	23.4	27.5	28.9	35.7	38.7	13.3
1989	15.7	1.2	13.0	18.7	19.3	20.9	19.6	18.0	19.2	19.6	21.8	21.0	22.9	25.1	25.3	33.0	48.8	14.8
1990	14.8	1.0	11.9	17.7	18.4	19.9	19.3	17.0	17.3	18.0	20.9	20.8	19.3	20.6	27.1	30.7	48.4	11.9
1991	15.0	1.4	11.3	17.0	18.9	19.7	20.1	18.5	19.5	19.1	20.2	21.2	19.9	19.2	24.7	29.7	47.0	21.8
1992	14.8	1.6	10.7	17.0	17.7	19.2	21.6	19.6	19.7	18.0	18.0	19.6	18.0	17.5	27.4	29.8	39.5	25.8
1993	15.3	1.9	11.0	17.2	18.5	19.3	22.2	22.5	21.2	18.0	17.4	19.2	19.3	17.6	26.5	30.2	32.4	37.5
1994	15.4	1.9	11.3	17.8	16.9	19.6	23.5	23.0	20.8	18.3	17.4	17.2	17.5	19.2	28.0	30.8	36.2	42.0
1995	15.0	1.8	11.6	17.1	17.3	18.9	21.6	23.0	20.8	18.4	17.2	16.1	16.9	18.5	24.9	27.6	34.7	43.3
1996	14.6	1.6	11.3	16.7	15.6	18.4	21.6	21.3	19.4	19.7	17.1	15.3	15.8	20.5	22.8	28.9	39.7	39.6
1997	13.9	1.6	11.2	14.9	15.3	17.2	19.9	19.9	19.6	18.9	17.6	14.2	16.0	18.5	19.1	26.5	34.2	32.4
1998	13.5	1.8	10.5	13.6	14.1	17.4	19.8	19.4	18.5	18.4	17.2	14.0	16.0	18.5	16.6	27.4	33.2	25.3
1999	13.0	1.6	10.0	13.0	13.8	16.7	19.1	18.7	19.1	18.2	17.5	12.4	15.3	16.3	15.0	23.5	28.7	20.5
2000	12.7	1.7	9.8	12.3	13.5	16.7	17.9	18.8	18.5	18.0	16.3	12.9	14.3	14.9	14.5	21.3	28.4	17.7
2001	12.6	1.3	9.2	12.7	13.2	15.8	16.8	18.3	18.9	19.2	16.6	13.3	14.3	14.1	15.0	19.0	28.7	26.7
2002	12.4	1.2	9.7	12.6	12.7	15.7	16.0	17.7	18.5	18.4	16.2	14.0	14.2	13.7	15.0	17.4	29.6	28.3
2003																		
2004																		

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	5.7	0.1	2.1	4.2	5.8	7.4	7.2	9.5	12.0	14.3	14.0	19.5	16.0	15.6	17.7	19.7	4.6	16.7
1953	6.2	0.1	1.8	4.5	6.7	8.0	8.6	10.5	13.8	16.9	12.5	23.6	12.6	15.2	22.6	19.6	4.6	16.7
1954	6.6	0.2	2.3	4.0	7.3	8.5	10.1	9.8	14.6	16.7	14.2	24.6	15.1	18.5	21.5	25.0	0.0	0.0
1955	7.0	0.1	2.0	4.3	8.8	9.6	10.9	11.4	15.3	17.2	15.9	26.5	11.8	16.8	21.9	18.2	3.9	0.0
1956	7.3	0.2	2.5	4.3	9.3	9.9	11.8	11.5	16.2	17.5	19.5	26.0	14.6	16.6	16.1	25.1	7.7	0.0
1957	7.3	0.1	2.4	5.0	9.8	10.2	10.3	13.1	15.8	16.5	20.6	26.2	13.4	14.0	17.0	17.2	11.5	0.0
1958	7.5	0.2	2.7	6.6	10.7	9.6	10.6	12.7	16.5	16.6	20.9	24.4	15.1	13.3	18.4	21.1	11.5	0.0
1959	7.2	0.2	2.3	6.5	9.8	9.6	9.4	13.8	16.4	16.0	18.0	24.8	15.1	15.3	20.0	12.4	10.8	0.0
1960	7.4	0.2	2.5	7.6	11.2	9.3	10.8	12.9	15.9	17.1	18.0	23.2	16.6	14.7	21.1	14.3	6.9	0.0
1961	7.1	0.2	2.4	6.8	9.1	9.2	10.7	13.2	15.3	17.5	14.9	24.0	17.0	16.9	19.2	7.5	6.3	0.0
1962	7.7	0.3	2.8	7.7	10.7	9.8	12.4	13.8	14.0	20.0	18.8	22.8	17.3	14.2	15.7	14.2	11.8	0.0
1963	7.4	0.5	3.5	7.6	8.8	9.2	12.7	13.4	13.7	20.2	16.4	21.8	17.2	14.0	14.6	8.1	11.8	0.0
1964	8.3	0.7	3.7	9.2	11.3	10.1	13.8	15.9	13.4	22.2	22.2	20.0	17.4	12.8	11.4	14.7	20.1	0.0
1965	8.4	0.8	4.9	10.9	11.4	10.8	14.0	14.6	14.5	21.4	19.2	18.0	17.6	13.0	11.2	8.8	11.4	0.0
1966	9.4	0.5	5.0	12.6	13.4	12.3	14.9	17.4	16.3	22.6	23.3	17.6	19.5	14.5	10.3	12.0	16.8	0.0
1967	10.2	0.7	6.7	15.0	14.2	14.3	16.0	16.8	19.4	22.8	21.5	16.5	19.6	15.3	10.1	11.6	5.4	0.0
1968	11.3	0.6	7.0	15.8	15.5	15.6	18.6	18.1	22.6	23.4	24.0	18.6	21.2	16.2	13.7	14.5	8.0	0.0
1969	12.3	0.9	8.9	17.6	16.9	17.5	20.1	19.2	24.0	23.2	24.5	19.7	19.7	16.6	14.5	16.4	4.9	0.0
1970	13.1	1.0	9.6	19.1	18.2	18.4	21.4	19.1	24.3	24.1	24.6	22.6	19.8	16.3	17.0	16.1	9.5	0.0
1971	14.0	1.2	11.1	21.4	19.3	19.0	21.3	20.7	23.7	23.8	26.5	24.8	19.1	16.9	18.8	12.9	9.1	0.0
1972	14.6	1.1	12.4	24.1	20.7	19.0	20.8	20.1	23.4	25.1	23.5	24.9	20.8	18.9	17.5	11.7	15.7	0.0
1973	14.7	1.1	12.2	24.4	20.8	17.9	20.5	20.5	23.1	24.6	23.8	25.7	21.0	20.5	17.3	9.5	15.5	0.0
1974	15.0	0.9	13.5	25.3	22.6	17.6	20.0	19.5	22.6	24.5	20.0	22.0	22.1	22.4	15.3	10.4	23.9	0.0
1975	15.1	1.0	11.9	24.9	21.8	19.6	21.1	19.9	22.3	23.9	20.7	20.8	20.0	21.7	14.6	10.2	21.6	10.4
1976	16.3	1.0	13.7	28.1	24.6	23.2	21.8	20.6	21.8	23.4	19.5	20.0	20.2	20.3	16.0	15.1	23.7	10.4
1977	17.9	1.2	13.8	31.1	25.2	27.4	23.6	23.9	23.7	24.8	23.3	21.5	19.2	20.2	17.3	14.9	17.1	20.8
1978	20.0	1.3	16.2	35.2	28.9	29.4	25.6	25.3	25.7	24.8	25.2	25.6	22.8	19.8	25.9	23.8	16.5	15.3
1979	21.8	1.6	17.8	36.4	30.7	30.6	26.7	29.5	28.6	27.6	30.1	28.6	24.5	23.9	29.9	20.9	14.0	15.3
1980	23.0	1.6	19.5	37.2	33.1	30.5	28.1	30.5	29.5	28.9	30.3	30.0	27.1	26.0	33.9	25.5	17.4	14.6
1981	24.5	2.1	21.9	37.0	36.1	32.3	27.5	33.3	30.9	31.6	34.8	32.7	27.8	30.1	32.6	24.3	15.1	9.7
1982	25.0	2.1	23.4	36.9	36.8	32.8	29.0	33.9	30.8	33.3	33.5	31.2	27.4	29.4	28.5	27.3	16.4	14.4
1983	26.2	2.5	24.8	37.7	39.6	35.4	28.3	33.3	31.7	34.6	36.9	34.3	27.5	31.8	27.6	35.7	17.2	9.0
1984	26.0	2.2	24.9	37.4	38.6	34.8	30.6	33.5	30.7	34.5	35.5	30.9	26.8	29.7	24.8	34.7	23.5	17.3
1985	26.7	2.5	25.0	36.9	38.9	36.8	32.2	31.9	31.6	35.2	36.8	31.7	27.4	35.8	29.4	37.3	28.1	16.8
1986	26.2	2.1	24.3	36.4	37.5	36.3	34.8	33.0	30.9	32.6	34.2	28.3	28.2	32.4	26.7	30.5	32.2	32.4
1987	26.2	2.2	25.7	35.5	36.5	36.7	35.9	32.2	31.1	32.4	33.6	27.6	27.0	35.0	29.2	26.2	26.8	27.7
1988	25.8	2.2	25.3	36.3	36.3	36.4	36.7	32.3	31.6	28.8	30.4	26.0	25.9	28.2	28.3	25.3	28.3	35.0
1989	25.4	2.5	27.7	36.0	34.7	36.0	35.3	32.2	31.1	29.2	30.1	26.1	24.3	26.6	28.8	23.6	19.9	22.0
1990	25.9	3.0	26.6	38.2	35.8	37.6	36.3	32.1	31.7	29.2	30.3	24.8	23.5	24.4	29.3	26.8	24.5	18.4
1991	26.6	3.1	29.2	39.2	35.6	38.7	35.6	33.8	33.7	31.0	31.5	26.0	24.8	25.7	27.5	24.1	15.7	22.2
1992	27.7	4.0	29.1	42.4	37.0	39.9	38.4	33.7	33.8	33.3	33.7	25.4	24.5	27.0	29.3	28.2	21.3	21.3
1993	28.9	3.7	31.6	43.3	37.3	42.1	39.5	36.1	38.5	35.9	33.6	27.5	24.9	27.8	27.7	23.4	21.1	36.4
1994	29.6	4.2	32.2	45.4	38.8	41.2	42.4	37.5	36.5	37.2	33.8	27.4	25.1	27.7	29.4	29.8	26.4	27.0
1995	30.6	3.9	33.4	44.1	37.6	43.5	42.8	41.0	41.6	38.9	33.3	28.3	25.1	29.1	28.6	24.9	33.1	26.8
1996	30.5	4.3	32.5	44.0	39.2	41.2	43.2	41.9	39.3	37.9	32.6	29.3	25.8	29.8	30.1	30.5	29.3	17.1
1997	31.4	4.0	32.3	42.5	38.4	42.8	43.2	45.4	44.7	38.4	33.6	29.0	26.4	31.0	31.2	26.5	34.3	24.4
1998	30.7	4.1	30.4	42.2	39.2	40.1	42.7	45.0	42.6	36.5	32.1	29.5	25.1	30.2	33.9	28.7	24.6	26.5
1999	31.0	3.5	29.6	41.0	38.3	40.2	42.7	46.6	46.4	37.3	32.6	28.8	24.9	30.1	34.5	25.9	27.7	31.5
2000	29.3	3.0	26.2	38.2	36.5	38.0	40.8	43.2	43.6	36.8	30.9	28.4	22.8	27.5	33.4	24.4	23.5	29.7
2001	28.8	2.1	24.4	35.9	33.8	36.3	41.2	41.7	44.7	38.2	32.5	27.8	21.9	27.9	31.6	23.0	21.2	26.1
2002	26.6	2.0	20.7	32.0	31.2	34.2	37.5	37.3	41.4	37.6	30.6	25.8	19.8	24.5	29.6	23.4	22.8	24.6
2003																		
2004																		

Appendix A: New Brunswick

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	5.9	0.7	0.8	3.7	3.8	2.9	3.0	13.4	7.0	20.1	20.6	25.3	20.1	11.4	22.4	43.0	0.0	0.0
1953	5.5	0.0	0.7	6.6	4.8	5.7	3.0	8.6	5.3	10.8	22.1	27.1	19.9	11.3	30.6	8.3	0.0	0.0
1954	5.6	0.0	1.5	5.6	8.8	2.8	2.0	8.5	3.7	13.7	23.7	26.8	22.0	11.1	21.3	8.3	18.5	0.0
1955	6.2	0.0	2.2	9.3	7.9	4.8	2.9	9.3	8.3	8.9	28.6	24.7	19.7	8.3	29.1	0.0	37.0	0.0
1956	6.5	0.0	2.2	8.4	13.0	2.9	2.9	7.2	8.0	17.1	30.1	24.4	15.2	13.4	28.2	0.0	55.6	0.0
1957	7.3	0.0	1.5	8.4	10.0	4.8	5.8	9.1	16.8	20.9	28.2	30.0	10.9	10.6	31.9	0.0	55.6	0.0
1958	7.6	0.0	0.7	6.5	16.0	9.8	6.7	6.0	16.5	27.4	23.0	29.9	8.5	15.9	31.1	0.0	37.0	0.0
1959	7.9	0.0	1.2	5.5	11.9	10.8	8.6	8.9	24.0	26.7	21.0	35.6	6.3	10.5	30.5	0.0	18.5	0.0
1960	8.2	0.0	2.4	8.8	17.9	17.8	9.5	6.9	19.4	24.6	14.3	28.0	12.5	7.9	33.9	0.0	0.0	0.0
1961	8.2	0.5	4.7	10.4	14.9	12.9	11.5	10.8	19.3	18.6	15.6	29.8	12.5	2.6	29.8	6.3	15.6	0.0
1962	8.8	0.5	5.8	15.3	19.9	14.0	15.4	10.8	14.9	18.0	14.8	25.7	16.6	0.0	26.0	6.3	15.6	0.0
1963	8.8	0.9	6.3	12.6	16.9	11.2	16.6	13.7	14.8	17.6	18.8	29.2	18.8	0.0	14.8	12.7	31.2	0.0
1964	8.9	0.5	5.0	12.4	18.0	9.2	18.7	13.7	20.0	17.4	18.3	32.4	20.9	0.0	11.0	6.3	15.6	0.0
1965	8.5	0.5	5.2	10.1	14.0	14.5	15.0	12.8	20.0	17.2	17.8	26.6	21.0	7.5	3.7	6.3	15.6	0.0
1966	7.8	0.0	4.5	10.4	10.0	9.4	12.2	11.9	25.2	14.8	16.0	22.8	18.9	10.1	10.9	6.0	0.0	0.0
1967	8.4	0.0	5.9	13.2	8.7	15.7	12.5	10.1	23.0	16.9	20.4	16.6	16.6	17.6	7.2	6.0	0.0	0.0
1968	8.1	0.0	4.4	12.0	5.6	12.5	12.7	11.3	29.2	13.4	18.8	17.4	14.3	15.2	10.8	12.0	0.0	0.0
1969	9.7	0.0	3.9	12.8	10.9	15.6	19.0	11.4	30.0	17.9	27.1	18.2	19.6	15.2	10.4	6.0	0.0	0.0
1970	9.7	0.4	3.3	12.3	8.7	16.2	20.9	14.6	32.1	16.6	21.9	20.7	19.3	10.3	10.4	6.0	0.0	0.0
1971	11.4	1.3	4.1	14.0	14.4	17.1	28.0	17.7	25.7	23.0	26.3	18.8	24.5	10.2	17.2	0.0	0.0	0.0
1972	12.3	2.2	8.6	20.5	11.2	22.4	26.8	19.8	20.7	22.7	23.6	19.4	18.2	10.0	13.8	0.0	0.0	0.0
1973	13.2	3.0	10.8	22.3	13.3	26.0	26.5	21.7	12.4	24.7	24.7	19.8	17.8	12.3	17.3	0.0	0.0	0.0
1974	14.6	3.0	13.4	27.1	14.2	31.4	22.0	22.6	16.9	21.3	24.6	29.7	13.5	12.0	10.4	16.6	0.0	0.0
1975	14.6	2.6	11.9	26.7	18.3	30.9	20.1	24.6	14.8	17.0	18.6	34.5	11.4	20.8	10.4	16.6	0.0	0.0
1976	16.9	2.2	13.6	29.0	21.7	29.8	23.2	28.5	26.3	18.1	19.5	41.8	11.1	22.4	16.9	33.3	11.6	0.0
1977	17.5	1.3	15.7	29.8	24.7	24.6	25.1	31.3	26.2	19.3	19.1	39.1	14.9	30.5	16.9	16.6	11.6	0.0
1978	19.8	1.4	18.4	31.5	25.0	23.2	30.9	34.9	34.5	27.0	25.6	36.5	19.0	27.5	29.7	22.1	34.5	0.0
1979	19.9	0.5	18.8	32.6	26.1	20.8	27.3	33.2	32.4	29.3	34.2	33.8	23.2	27.0	22.8	22.1	22.9	0.0
1980	20.6	0.5	17.7	36.1	25.4	22.5	27.0	32.3	30.3	30.5	40.9	26.1	27.2	23.5	28.6	43.9	45.7	0.0
1981	20.8	0.0	14.3	36.7	25.2	23.7	23.2	29.3	27.2	35.8	45.3	30.7	29.9	24.4	21.1	65.7	45.5	0.0
1982	21.5	0.5	14.9	41.3	25.9	25.2	20.2	27.3	24.0	35.7	44.5	25.2	33.9	27.4	23.8	70.5	101.4	0.0
1983	21.8	0.5	14.0	37.2	22.8	24.5	22.6	25.3	26.8	41.0	42.6	33.3	36.6	32.0	33.4	64.3	101.4	0.0
1984	21.9	1.1	18.4	37.4	25.0	25.1	19.0	25.7	30.1	38.9	37.2	30.5	32.4	28.2	35.1	47.1	134.5	0.0
1985	20.8	1.1	16.4	34.3	21.7	21.5	23.1	22.4	31.6	36.9	36.2	29.4	32.0	27.8	45.0	40.1	78.6	0.0
1986	21.2	2.8	20.4	36.9	26.5	24.2	20.2	24.6	33.4	33.7	29.4	23.5	23.2	27.3	38.5	33.8	67.2	0.0
1987	19.9	2.9	17.5	36.4	25.5	21.6	23.5	21.2	29.3	28.2	32.5	17.7	25.5	27.1	30.5	33.1	21.1	0.0
1988	20.9	4.0	19.8	36.0	30.9	25.5	23.7	24.7	30.5	24.8	26.7	15.4	24.9	38.6	19.6	23.2	30.5	0.0
1989	19.9	2.9	16.2	30.7	30.5	26.2	27.4	21.5	28.8	21.0	34.2	16.6	22.2	33.2	13.9	13.8	28.8	0.0
1990	20.6	2.3	19.1	32.4	33.4	27.7	27.6	24.0	27.8	17.1	31.9	17.7	19.3	39.4	15.8	4.5	37.5	0.0
1991	21.1	1.8	20.0	29.7	34.2	29.6	29.3	23.9	29.3	22.6	38.4	19.9	15.4	27.3	17.7	0.0	45.3	19.7
1992	21.8	1.2	22.5	37.7	32.9	28.1	27.8	26.0	25.6	21.0	36.1	25.4	18.1	23.8	17.6	14.1	61.5	19.7
1993	24.2	2.4	24.6	35.2	40.0	28.6	32.7	30.3	32.4	25.0	33.7	32.2	20.8	20.1	17.5	24.5	60.5	39.5
1994	23.9	2.5	21.4	36.0	34.8	27.2	33.5	35.1	31.4	18.1	32.8	35.6	24.8	15.2	19.3	42.0	60.2	19.7
1995	24.9	5.0	21.8	28.9	42.9	28.0	38.2	37.5	36.9	18.7	24.8	35.6	24.7	18.2	19.0	44.8	41.6	39.2
1996	23.3	7.0	16.8	25.3	37.2	27.5	37.5	37.5	32.9	17.8	27.7	29.9	25.8	15.2	23.0	37.8	31.3	19.4
1997	23.0	8.3	19.5	24.0	40.4	29.4	35.5	33.7	31.3	20.8	21.7	26.4	21.7	21.4	22.5	33.5	21.7	38.9
1998	23.1	8.4	17.9	25.7	38.5	26.9	36.4	34.8	28.4	25.8	23.1	22.7	22.8	20.0	28.0	23.0	34.1	19.4
1999	22.6	6.5	19.3	26.6	37.0	27.1	31.2	33.9	27.5	24.8	21.8	23.3	18.9	26.2	29.4	32.4	27.2	19.4
2000	23.6	5.2	19.5	26.2	39.5	24.7	35.0	36.9	29.3	27.7	23.0	23.7	17.6	23.0	35.1	28.7	32.6	0.0
2001	22.0	3.3	15.8	22.0	34.5	22.2	31.1	35.3	29.4	25.7	28.1	21.7	18.8	28.6	29.1	31.4	12.8	0.0
2002	21.9	2.7	16.0	19.0	35.0	22.2	32.2	32.7	30.3	27.3	28.9	22.7	21.0	20.8	29.0	30.1	12.8	0.0
2003																		
2004																		

Appendix A: Nova Scotia

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	8.3	0.0	3.8	2.1	6.4	7.3	15.3	10.7	15.4	24.5	18.4	12.1	23.7	23.3	34.8	47.4	13.9	0.0
1953	7.7	0.0	4.4	1.4	8.7	7.3	13.7	11.0	16.3	20.7	14.4	11.9	23.5	16.7	25.1	35.3	0.0	33.3
1954	7.2	0.0	3.1	2.7	8.0	5.1	11.6	12.3	17.3	17.1	11.7	14.8	23.4	18.5	18.5	23.6	0.0	33.3
1955	8.1	0.0	4.2	5.9	9.5	8.9	9.4	16.6	22.1	12.1	14.1	21.9	23.3	18.3	12.0	5.8	0.0	66.7
1956	7.7	0.5	2.9	6.6	8.9	7.4	6.6	15.1	23.8	10.7	17.8	24.7	19.9	18.2	11.9	0.0	0.0	33.3
1957	9.0	0.5	3.4	9.2	9.6	11.9	8.9	18.0	22.8	12.5	24.0	30.3	18.2	16.1	17.5	5.2	0.0	33.3
1958	8.8	0.9	4.8	6.5	11.1	8.2	10.4	14.9	23.9	14.9	26.1	30.3	13.1	15.9	19.9	5.2	0.0	0.0
1959	9.2	0.9	4.8	5.9	9.6	9.8	13.4	17.9	18.7	19.2	24.7	28.7	16.2	15.8	22.7	10.4	10.8	0.0
1960	9.5	1.3	7.8	5.8	11.8	10.0	16.6	18.0	20.1	20.5	20.7	25.7	12.9	17.7	19.6	10.0	10.8	0.0
1961	9.4	1.2	5.6	5.7	8.2	10.0	16.6	21.1	18.2	23.4	16.6	21.2	22.5	17.6	13.9	24.2	21.5	0.0
1962	9.8	1.2	6.0	8.2	10.4	11.6	19.1	22.7	19.0	21.3	14.7	21.1	17.7	21.5	11.0	28.4	10.8	0.0
1963	10.2	1.2	3.8	6.9	6.7	9.4	19.5	24.5	21.3	26.8	22.2	19.5	24.1	23.4	8.2	37.7	10.8	0.0
1964	11.2	2.0	4.2	10.0	12.8	11.1	23.0	25.5	18.2	24.7	28.6	25.8	16.1	25.3	10.9	28.2	10.8	0.0
1965	12.6	2.0	4.5	11.6	12.9	12.0	24.9	25.8	23.1	32.9	35.4	26.5	20.9	25.3	13.6	18.8	9.6	0.0
1966	13.0	2.8	4.8	15.1	17.5	13.5	26.7	27.0	17.6	30.1	36.4	32.6	16.0	21.4	13.6	9.0	9.6	0.0
1967	14.0	1.6	6.5	17.4	17.8	15.9	26.8	29.8	23.4	35.0	29.0	28.8	20.6	19.4	18.9	17.7	19.2	0.0
1968	13.9	1.6	7.6	20.8	16.6	14.2	26.8	32.5	17.0	28.3	28.0	28.9	21.7	23.4	16.1	26.5	9.6	25.4
1969	14.9	0.8	8.8	22.1	18.9	21.5	25.0	33.6	21.8	28.3	23.5	26.1	22.8	21.5	21.4	44.1	9.6	25.4
1970	15.5	1.9	11.1	26.0	17.7	20.4	27.1	32.9	18.7	26.6	27.7	27.0	20.9	27.3	13.4	35.3	0.0	50.7
1971	16.6	2.6	10.5	26.5	24.8	28.1	25.2	30.3	22.0	25.6	30.1	33.3	18.6	19.4	13.4	35.3	0.0	25.4
1972	17.2	3.0	12.3	30.0	22.8	25.5	28.9	28.5	22.3	32.9	29.2	33.5	15.3	23.1	5.3	13.2	0.0	25.4
1973	17.4	3.0	10.9	28.7	27.9	28.1	27.8	26.6	22.5	28.8	31.9	37.7	16.9	18.8	5.4	8.8	0.0	0.0
1974	17.6	2.2	13.0	31.2	23.7	28.6	30.7	28.9	21.1	35.4	24.9	31.3	15.1	23.9	2.7	9.1	9.0	0.0
1975	17.6	1.9	13.6	32.2	26.8	30.1	27.9	25.6	18.6	26.7	24.8	31.0	19.7	25.0	5.4	9.1	9.0	0.0
1976	17.7	1.5	13.5	34.9	24.2	32.4	25.9	26.3	18.5	26.9	21.1	25.9	18.9	24.5	5.4	27.2	36.2	0.0
1977	18.4	1.6	14.9	37.2	26.3	31.9	22.9	23.7	19.2	24.1	25.2	27.8	19.6	26.8	13.1	22.7	27.2	0.0
1978	19.1	1.6	13.3	38.1	27.1	28.5	21.2	24.2	23.9	22.5	30.3	29.7	24.5	24.2	18.0	36.2	45.4	0.0
1979	19.6	2.1	14.5	37.9	25.7	26.3	23.4	24.6	27.9	24.4	31.2	25.9	25.2	30.7	23.1	31.2	18.2	0.0
1980	19.7	2.2	13.8	34.1	29.1	22.4	24.3	22.8	33.5	23.4	32.2	23.8	29.3	32.3	24.9	31.1	27.4	0.0
1981	19.6	3.1	14.0	33.2	26.0	22.5	25.8	27.9	34.1	26.7	25.5	18.8	25.8	37.4	19.5	34.8	9.2	0.0
1982	19.1	2.3	14.8	28.4	29.9	20.8	24.1	23.5	33.1	29.0	27.7	18.6	23.6	37.7	18.5	21.6	36.5	0.0
1983	19.4	3.2	15.5	30.8	25.3	18.8	24.9	29.7	28.0	28.8	28.8	24.9	21.4	35.5	17.1	25.7	36.2	0.0
1984	18.7	2.3	19.4	26.5	25.1	17.0	22.2	23.4	24.4	29.4	35.1	28.7	17.1	32.2	23.0	12.3	54.3	0.0
1985	19.7	3.8	21.7	28.9	24.2	14.7	22.5	25.7	21.5	29.1	35.9	33.4	23.2	32.7	26.1	19.6	35.9	0.0
1986	19.0	4.4	23.8	25.9	22.6	16.1	18.7	18.8	23.1	32.2	36.6	30.8	22.9	31.1	29.2	14.8	27.0	0.0
1987	19.8	5.5	23.4	28.0	25.4	15.7	16.0	19.6	22.6	36.1	37.0	28.2	31.8	33.4	30.3	24.9	8.9	0.0
1988	19.6	5.6	20.5	27.7	24.5	18.0	14.8	19.4	22.7	35.9	38.4	29.4	29.6	33.2	34.6	20.8	0.0	0.0
1989	20.0	4.1	19.0	29.4	25.7	18.9	17.3	21.2	18.6	34.6	38.1	26.7	32.6	33.0	40.7	32.7	0.0	0.0
1990	19.8	3.1	16.5	28.1	26.4	19.9	22.6	23.9	17.4	30.7	34.4	30.4	26.6	30.3	42.0	22.0	7.2	0.0
1991	19.7	1.6	17.2	26.9	24.6	20.9	26.3	26.4	19.0	27.6	29.8	24.5	26.8	27.3	41.6	36.3	7.2	0.0
1992	19.0	1.6	16.6	22.3	26.8	20.0	28.1	26.3	23.2	28.3	25.3	25.1	24.0	21.0	31.0	23.4	14.4	0.0
1993	19.2	2.1	15.8	20.4	23.3	22.8	29.7	26.5	28.8	27.1	24.1	18.3	27.2	23.1	25.6	31.4	26.5	0.0
1994	19.1	2.6	14.1	18.5	25.3	21.7	29.2	25.7	29.5	32.6	24.5	20.8	25.2	17.0	21.8	22.0	32.5	0.0
1995	19.8	3.1	12.2	18.5	21.4	27.8	29.8	26.2	30.6	34.1	25.6	17.9	26.1	23.1	19.9	27.3	50.3	0.0
1996	20.0	3.6	11.8	21.0	22.0	23.7	30.7	27.5	29.3	36.9	25.0	22.1	25.7	19.6	22.9	24.1	37.1	0.0
1997	20.2	3.1	12.4	21.8	18.0	26.6	28.0	28.6	28.4	36.6	26.0	24.3	25.4	22.2	20.8	26.4	36.8	0.0
1998	19.1	3.6	11.3	24.1	16.6	16.7	27.8	29.4	29.0	31.5	23.1	27.5	24.1	20.9	22.2	26.1	11.8	0.0
1999	18.5	2.6	10.3	22.7	18.0	18.4	23.3	30.9	25.4	29.2	24.4	28.1	20.8	20.8	23.6	23.3	10.8	0.0
2000	20.0	3.1	6.7	20.7	15.0	13.5	24.9	28.1	23.7	27.5	19.7	28.3	19.5	24.0	20.5	24.9	14.7	0.0
2001	17.1	2.1	6.6	19.2	20.9	16.4	22.5	29.2	20.8	25.6	23.6	27.4	18.2	23.5	17.3	17.3	19.8	12.4
2002	16.6	2.1	6.2	14.5	15.9	17.5	24.1	24.7	21.3	28.3	20.7	27.5	17.9	26.6	12.5	19.1	28.8	24.8
2003																		
2004																		

Appendix A: Prince Edward Island

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	9.5	0.0	11.6	5.1	4.9	20.2	15.8	11.1	12.6	13.9	23.8	45.8	20.2	0.0	16.7	0.0	0.0	0.0
1953	10.1	0.0	15.5	5.1	0.0	10.1	10.6	16.7	19.0	28.1	23.8	45.3	19.6	0.0	33.3	0.0	0.0	0.0
1954	10.8	0.0	7.8	10.1	0.0	16.1	16.0	27.8	24.7	14.2	31.7	35.6	29.4	0.0	16.7	0.0	0.0	0.0
1955	9.8	0.0	7.8	5.1	0.0	18.8	5.4	22.2	18.5	36.0	15.9	26.3	49.0	11.1	16.7	0.0	0.0	0.0
1956	10.2	0.0	0.0	5.1	0.0	31.1	11.3	16.7	18.1	42.6	15.9	17.5	58.8	23.0	0.0	0.0	0.0	0.0
1957	8.6	0.0	0.0	0.0	0.0	38.0	11.9	5.6	6.0	57.1	0.0	8.8	49.0	34.1	0.0	0.0	0.0	0.0
1958	10.2	0.0	3.7	0.0	0.0	44.0	23.8	0.0	11.9	62.8	0.0	0.0	49.0	34.9	0.0	0.0	0.0	0.0
1959	9.7	0.0	3.7	0.0	0.0	31.6	29.7	11.6	11.7	42.0	0.0	0.0	48.0	23.0	0.0	0.0	0.0	170.1
1960	10.8	0.0	7.4	5.0	5.3	31.1	29.7	11.6	17.7	34.2	0.0	0.0	66.8	11.9	0.0	0.0	0.0	170.1
1961	10.0	0.0	3.7	9.9	10.6	12.4	29.4	23.2	17.5	18.8	0.0	0.0	65.8	0.0	0.0	0.0	0.0	340.1
1962	11.1	0.0	7.1	14.8	15.8	17.9	23.3	11.6	17.6	30.9	14.2	0.0	56.1	21.9	0.0	0.0	0.0	170.1
1963	10.7	0.0	3.4	14.8	15.9	5.5	23.1	11.6	17.7	36.4	21.1	8.7	27.6	32.9	15.4	0.0	0.0	170.1
1964	12.1	0.0	6.7	9.9	16.4	22.6	17.2	5.9	17.8	36.4	48.8	8.7	18.0	54.8	15.4	0.0	0.0	0.0
1965	11.2	0.0	3.4	4.9	11.1	17.1	23.7	5.9	24.0	36.6	41.5	17.3	9.0	43.8	30.8	0.0	0.0	0.0
1966	12.7	0.0	6.3	0.0	11.5	28.6	18.0	17.9	18.0	30.7	61.2	24.8	27.4	32.9	15.4	0.0	0.0	0.0
1967	11.8	0.0	5.8	0.0	16.8	17.3	24.4	18.1	18.3	43.4	39.9	32.5	18.4	11.0	15.4	0.0	0.0	0.0
1968	14.7	0.0	8.7	0.0	16.8	34.8	24.1	24.2	12.3	43.7	71.7	47.5	27.7	0.0	0.0	0.0	0.0	0.0
1969	16.4	0.0	11.5	0.0	26.9	45.9	29.9	18.3	12.3	56.3	57.8	39.1	9.3	32.6	0.0	0.0	47.6	0.0
1970	17.3	0.0	8.6	0.0	20.4	57.6	29.6	24.2	12.3	44.1	83.3	39.0	9.3	32.6	0.0	0.0	47.6	0.0
1971	17.9	0.0	11.3	0.0	37.5	56.9	34.7	30.0	6.2	37.9	57.3	15.3	8.7	75.9	0.0	0.0	95.2	0.0
1972	16.6	0.0	8.3	3.4	29.9	44.7	40.2	35.9	12.4	31.7	57.5	21.2	8.7	43.3	0.0	0.0	47.6	0.0
1973	18.1	0.0	13.7	10.0	41.3	32.2	45.0	41.4	6.3	19.0	44.9	13.6	34.0	65.0	0.0	0.0	47.6	0.0
1974	20.4	0.0	13.4	29.6	31.4	30.4	55.4	41.0	18.8	31.5	51.7	34.0	33.1	21.7	0.0	0.0	0.0	0.0
1975	21.9	0.0	23.6	36.0	26.6	25.0	54.9	40.3	12.5	25.3	58.3	27.1	57.4	32.6	0.0	0.0	0.0	0.0
1976	24.3	0.0	20.8	45.6	17.8	32.4	54.4	56.3	36.5	50.7	51.9	33.8	40.0	11.0	0.0	0.0	0.0	0.0
1977	21.8	0.0	28.3	29.2	17.4	24.6	42.0	56.1	35.7	44.4	38.9	33.8	39.8	11.0	11.3	0.0	0.0	0.0
1978	22.2	0.0	20.2	25.5	20.8	34.3	36.0	66.8	65.0	50.9	25.9	25.9	15.6	0.0	11.3	0.0	0.0	0.0
1979	19.3	0.0	22.5	15.4	20.8	29.1	33.9	44.1	52.7	44.2	19.3	47.5	7.7	0.0	22.7	0.0	0.0	0.0
1980	18.9	0.0	14.7	24.5	17.4	35.7	27.7	38.2	58.4	37.5	19.3	40.7	0.0	0.0	11.3	20.7	0.0	0.0
1981	17.8	0.0	17.8	36.0	13.7	24.6	27.4	21.3	29.1	43.0	19.3	47.4	0.0	8.7	14.0	41.5	0.0	0.0
1982	17.9	3.1	15.6	41.4	6.8	31.3	20.9	20.6	28.8	53.7	12.8	33.7	0.0	8.7	14.0	62.1	0.0	0.0
1983	15.7	3.1	16.2	43.3	6.6	24.4	12.1	15.4	11.4	53.7	12.7	26.8	0.0	17.4	0.0	62.3	0.0	0.0
1984	16.1	6.1	11.1	33.8	9.5	31.2	21.6	19.4	22.4	58.9	6.3	20.0	0.0	8.7	0.0	41.5	0.0	0.0
1985	13.1	3.1	8.3	24.9	15.6	24.0	14.0	13.4	11.0	29.4	12.5	19.9	7.2	17.2	0.0	63.9	0.0	0.0
1986	14.6	3.1	5.9	16.5	18.5	26.8	24.3	17.9	16.3	29.3	24.3	26.5	7.2	17.1	11.3	43.1	0.0	0.0
1987	13.5	0.0	3.1	21.2	18.5	19.7	10.3	23.7	5.4	11.5	36.2	26.6	14.4	25.6	11.3	86.2	0.0	0.0
1988	16.8	0.0	15.6	21.5	15.3	25.8	13.7	19.5	10.2	22.8	59.9	39.6	14.4	25.7	22.7	43.1	0.0	0.0
1989	18.8	3.3	15.7	38.8	15.5	16.1	6.8	36.3	18.5	39.3	53.8	26.4	21.5	25.9	11.3	43.1	0.0	0.0
1990	21.4	3.3	25.1	36.4	19.2	19.1	23.6	24.8	31.7	50.1	53.8	39.1	21.4	17.4	11.3	0.0	0.0	0.0
1991	22.4	6.5	22.4	50.4	22.5	12.7	23.5	35.1	44.4	55.4	29.7	19.4	35.8	17.5	28.1	0.0	0.0	0.0
1992	22.1	3.3	22.5	37.7	22.9	15.9	33.6	31.1	53.9	49.1	29.4	32.0	28.8	8.8	0.0	0.0	0.0	0.0
1993	20.9	3.3	22.7	37.4	16.8	19.0	23.1	34.3	48.1	42.2	34.6	12.6	36.1	8.8	11.4	0.0	0.0	0.0
1994	19.2	0.0	13.0	20.4	14.0	18.9	19.7	41.0	55.5	30.7	45.7	24.9	21.7	0.0	23.1	0.0	0.0	0.0
1995	18.8	0.0	25.9	13.5	15.5	18.9	28.0	33.7	35.9	32.6	50.7	12.3	21.7	0.0	34.6	0.0	0.0	0.0
1996	17.2	0.0	12.9	3.4	19.1	12.5	21.7	36.5	38.7	30.6	44.4	18.5	21.1	0.0	56.7	0.0	0.0	0.0
1997	17.6	0.0	22.5	3.4	27.4	9.8	40.2	22.7	17.1	41.2	37.8	12.0	20.6	8.3	55.9	0.0	0.0	0.0
1998	15.8	0.0	12.9	3.5	26.6	6.7	21.4	25.2	20.3	30.9	36.4	12.0	27.4	16.6	66.4	0.0	0.0	0.0
1999	17.5	0.0	16.1	3.5	26.7	10.7	30.5	15.7	26.5	37.3	44.5	11.8	20.2	24.9	54.1	0.0	0.0	0.0
2000	16.5	0.0	9.7	10.5	22.8	15.0	15.0	28.0	33.0	21.7	43.8	11.3	13.5	24.8	53.9	0.0	0.0	0.0
2001	17.8	0.0	6.5	14.3	15.4	22.6	21.5	24.8	39.3	24.2	50.2	11.3	6.7	31.9	42.6	0.0	0.0	0.0
2002	15.1	0.0	3.2	21.4	12.4	27.2	12.5	34.2	26.2	13.6	34.9	10.8	0.0	31.1	31.8	0.0	0.0	0.0
2003																		
2004																		

Appendix A: Newfoundland and Labrador

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1950																		
1951																		
1952	3.9	0.0	0.0	3.7	3.7	5.3	10.9	6.3	10.3	12.0	8.1	9.7	3.6	0.0	28.8	30.3	0.0	0.0
1953	3.8	0.0	0.0	3.7	3.7	2.7	10.9	7.6	15.7	9.4	5.4	6.3	7.1	0.0	27.8	15.2	0.0	0.0
1954	3.2	0.0	0.9	0.0	7.0	1.3	8.1	6.0	7.6	9.4	10.6	6.3	3.6	4.5	27.8	15.2	0.0	0.0
1955	3.4	0.0	0.9	2.1	7.0	1.2	4.0	7.2	11.0	8.9	10.4	12.3	7.1	4.5	27.8	0.0	0.0	0.0
1956	3.7	0.0	2.7	2.1	12.8	2.5	3.9	6.8	3.3	6.6	15.5	9.3	7.3	9.0	20.9	13.9	0.0	0.0
1957	4.6	0.0	2.6	4.2	10.4	6.2	2.5	9.3	6.4	12.3	17.8	15.4	10.9	4.5	20.3	13.9	0.0	0.0
1958	4.9	0.0	3.5	4.3	13.9	8.7	5.0	10.6	4.6	8.1	15.2	6.2	11.0	4.5	31.9	27.8	0.0	0.0
1959	5.4	0.0	4.1	5.4	9.3	11.1	7.6	11.9	7.5	15.3	14.9	6.2	10.9	9.1	31.4	13.9	0.0	0.0
1960	5.0	0.0	3.2	6.5	8.2	11.2	7.6	10.5	5.9	7.3	14.2	0.0	10.7	18.0	43.5	13.9	0.0	0.0
1961	5.1	0.0	3.9	6.4	4.7	11.1	8.9	11.7	7.3	10.8	16.3	2.8	7.0	31.4	24.9	0.0	0.0	0.0
1962	4.9	0.0	1.5	8.4	5.9	9.9	7.6	14.3	7.1	6.7	18.2	2.8	6.8	31.3	18.5	0.0	0.0	0.0
1963	5.6	0.0	1.5	8.1	7.1	11.1	13.9	14.3	12.5	8.3	17.5	8.4	10.0	30.9	0.0	0.0	0.0	0.0
1964	5.9	0.0	0.0	8.9	12.9	11.1	13.9	14.3	17.9	9.5	14.9	5.5	13.3	17.5	6.2	0.0	0.0	0.0
1965	6.1	0.0	0.0	8.7	10.6	12.4	20.2	10.5	20.6	7.9	13.8	10.8	16.6	12.8	6.2	0.0	0.0	0.0
1966	5.4	0.0	0.0	6.7	15.1	10.0	15.2	9.2	19.2	7.8	9.6	5.2	13.3	4.2	18.3	0.0	0.0	0.0
1967	4.1	0.0	0.0	5.4	9.1	7.5	14.0	6.7	12.4	3.1	9.5	10.0	10.0	4.2	17.9	0.0	0.0	0.0
1968	4.0	0.0	0.6	2.6	14.2	8.7	12.8	6.7	9.7	8.8	3.7	7.0	3.3	4.1	23.9	0.0	0.0	0.0
1969	3.9	0.0	1.1	3.1	9.4	8.4	11.5	6.7	8.3	8.7	5.0	11.3	5.8	4.1	17.6	0.0	0.0	0.0
1970	5.2	0.0	1.7	2.2	11.3	13.1	15.4	9.2	13.7	16.0	6.3	8.7	8.7	8.1	11.8	0.0	0.0	0.0
1971	5.6	0.0	2.2	6.8	5.9	13.7	11.3	9.1	13.7	12.9	14.2	12.3	17.3	7.9	5.8	0.0	0.0	0.0
1972	5.6	0.0	1.7	6.7	3.9	12.5	11.3	11.7	15.0	11.5	17.4	8.0	19.7	11.7	5.9	9.9	0.0	0.0
1973	5.9	0.0	1.6	12.4	3.0	10.7	9.7	9.0	9.5	9.9	23.6	9.5	22.2	11.5	5.9	9.9	0.0	0.0
1974	5.3	0.0	1.6	8.4	2.8	7.0	8.4	9.0	11.0	8.6	23.6	7.3	21.3	11.4	11.8	19.7	0.0	0.0
1975	6.2	0.0	2.6	10.2	7.0	8.6	10.7	8.9	11.0	14.5	23.4	7.3	20.1	7.7	5.9	9.9	0.0	0.0
1976	5.5	0.0	3.1	6.2	6.2	7.0	7.1	10.2	13.7	11.7	21.7	8.9	17.1	3.8	5.9	9.9	0.0	0.0
1977	6.3	0.0	4.7	8.0	8.9	8.4	6.8	11.4	19.1	14.6	16.9	10.6	18.0	0.0	0.0	0.0	0.0	0.0
1978	5.8	0.5	5.2	9.2	5.4	9.5	4.3	10.1	16.2	11.6	15.2	14.1	11.0	0.0	0.0	0.0	0.0	0.0
1979	6.7	0.5	7.3	12.4	6.7	9.8	4.2	8.7	18.8	17.3	9.1	14.0	12.8	0.0	0.0	0.0	18.6	0.0
1980	7.1	1.0	8.8	13.7	5.4	13.8	3.0	9.5	16.0	15.8	12.3	10.4	4.2	5.5	9.9	0.0	18.6	0.0
1981	8.3	0.5	10.9	15.6	7.3	14.3	5.3	11.5	16.0	18.6	7.8	15.1	6.2	5.5	14.7	0.0	37.2	0.0
1982	9.6	1.1	13.7	16.1	7.3	19.8	5.8	12.6	17.3	15.6	14.0	14.8	4.0	11.1	29.0	0.0	18.6	0.0
1983	9.7	1.1	11.6	15.4	8.0	16.8	9.6	15.3	14.5	14.2	12.3	24.6	9.9	5.5	24.0	17.2	18.6	0.0
1984	9.8	1.7	11.2	14.6	7.3	17.5	7.9	13.7	16.9	12.7	18.5	23.1	11.8	5.5	27.6	25.0	0.0	0.0
1985	8.7	1.7	6.5	11.0	7.4	14.6	8.6	16.2	12.8	9.8	19.9	21.6	13.7	2.5	20.9	25.0	17.5	0.0
1986	9.0	1.1	7.2	12.3	10.1	11.8	8.2	15.9	14.9	9.8	22.8	13.4	15.2	2.5	20.1	40.5	17.5	0.0
1987	8.9	1.2	6.2	11.3	10.8	13.2	10.2	16.5	11.0	7.0	24.2	8.5	15.0	7.4	19.3	31.2	35.1	0.0
1988	11.2	0.6	11.5	14.6	14.9	12.4	15.8	17.9	16.1	6.9	21.1	13.3	20.5	12.0	15.0	38.7	17.5	0.0
1989	11.5	2.0	13.3	17.3	12.8	14.5	16.4	15.4	11.0	9.4	19.4	13.3	18.7	16.7	11.0	28.2	34.7	0.0
1990	13.7	2.0	17.6	20.5	14.2	15.8	19.8	18.8	17.9	9.3	17.8	23.0	20.7	21.1	13.4	21.1	17.2	0.0
1991	13.5	3.4	18.6	22.5	15.7	15.8	16.2	15.2	11.8	17.6	17.6	18.0	16.9	20.8	10.0	19.9	34.3	0.0
1992	14.9	2.8	17.6	21.1	18.7	19.3	17.5	19.3	16.1	19.4	19.0	22.8	18.8	22.8	19.8	6.4	17.2	0.0
1993	14.5	2.8	16.9	18.1	21.7	17.3	17.6	16.9	12.1	31.0	17.4	14.5	18.7	20.2	19.4	11.8	17.2	0.0
1994	14.5	1.4	11.6	16.8	20.8	18.2	18.4	22.6	12.7	27.8	17.1	19.1	22.4	17.9	25.7	5.4	0.0	0.0
1995	13.7	1.5	11.4	16.2	18.4	18.1	19.3	18.9	12.2	27.3	12.5	17.4	18.6	15.7	25.4	21.5	0.0	0.0
1996	12.9	0.8	9.3	21.4	14.6	17.9	18.0	21.1	9.6	17.4	14.8	18.9	18.5	11.2	21.9	16.1	0.0	0.0
1997	12.1	2.5	11.0	20.4	11.4	19.3	19.0	13.9	10.1	15.8	14.2	15.7	11.0	9.0	21.5	26.8	0.0	0.0
1998	12.2	2.6	13.0	26.8	9.1	18.3	17.0	14.0	8.4	13.5	18.8	13.9	12.7	6.7	21.2	10.7	0.0	0.0
1999	11.8	3.5	13.3	20.4	7.7	17.2	17.3	11.8	10.6	18.2	19.1	9.1	10.7	8.8	21.1	10.7	0.0	0.0
2000	12.3	2.7	15.2	25.5	8.7	16.5	13.7	14.9	11.4	16.2	19.7	8.9	14.2	8.8	21.3	9.3	0.0	0.0
2001	12.2	1.8	14.0	18.4	10.0	19.4	14.1	16.5	12.9	16.0	19.5	5.8	15.8	13.0	15.1	9.3	0.0	0.0
2002	13.1	0.9	15.3	21.5	15.8	22.0	14.0	17.5	14.5	13.9	15.6	13.5	14.0	10.8	9.1	18.7	10.6	0.0
2003																		
2004																		

Appendix B: Canada

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	3.2	4.2	4.2	2.6	2.4	3.2	2.7	3.0	2.5	3.4	3.5	3.7	3.6	4.8	5.2	9.9	12.8	
1953	3.2	4.3	4.2	2.5	2.7	3.2	2.5	3.1	2.5	3.5	3.1	3.4	4.0	4.8	4.8	7.7	6.6	
1954	3.2	4.3	4.7	2.7	2.8	3.1	2.4	3.1	2.5	3.3	3.3	3.5	4.2	4.7	5.8	7.2	9.2	
1955	3.3	7.8	4.0	3.1	2.7	2.8	2.7	3.0	2.7	3.1	3.5	3.8	4.3	5.0	7.2	5.9	14.9	
1956	3.4	32.5	4.2	3.5	3.3	2.6	2.7	2.9	3.0	3.0	4.0	3.9	4.7	4.7	8.5	5.7	14.2	
1957	3.6	29.2	4.3	4.6	3.8	2.8	2.8	3.1	3.2	2.9	4.1	3.9	4.7	4.4	8.2	4.8	12.0	
1958	3.7	20.0	4.9	4.9	4.2	3.0	3.3	3.3	3.3	2.9	4.4	4.0	4.2	4.3	8.4	4.3		
1959	3.8	35.0	4.4	4.8	4.5	3.0	3.4	3.5	3.3	3.2	4.2	4.5	4.3	4.6	9.5	3.8		
1960	3.9	13.6	4.6	4.6	4.9	3.1	3.3	3.4	3.5	3.4	4.4	4.3	4.0	4.8	9.0	4.1	19.1	5.9
1961	3.7	10.4	3.4	4.5	3.7	3.0	3.4	3.6	3.2	3.3	3.8	4.7	3.8	4.3	7.6	5.1	26.9	5.8
1962	3.4	9.7	3.3	4.0	3.1	2.8	3.0	3.5	3.0	3.1	3.5	4.9	3.5	4.0	7.9	6.3	28.6	4.3
1963	3.2	7.9	3.1	4.0	3.0	2.5	2.7	3.3	2.6	2.9	3.2	4.7	3.5	4.2	6.2	10.0	10.5	4.8
1964	3.1	7.8	3.2	4.2	2.7	2.6	2.4	3.1	2.7	2.7	2.9	4.1	3.6	3.9	5.2	14.4	10.4	4.9
1965	2.9	7.7	3.5	4.1	2.7	2.5	2.4	2.6	2.5	2.6	2.7	3.8	3.6	3.8	4.5	10.9	17.6	8.6
1966	2.8	6.6	4.3	3.9	2.9	2.5	2.2	2.3	2.5	2.5	2.8	3.6	3.3	3.9	4.3	10.4	10.2	7.8
1967	2.7	4.8	5.1	3.8	2.8	2.4	2.2	2.2	2.3	2.4	2.7	3.0	3.3	4.0	4.0	8.7	10.0	7.2
1968	2.7	5.0	4.3	3.6	2.6	2.5	2.3	2.2	2.1	2.3	2.6	3.0	3.0	4.3	4.4	7.0	11.3	5.3
1969	2.6	3.6	4.3	3.7	2.8	2.2	2.4	2.1	2.1	2.2	2.7	3.0	2.6	4.1	4.5	5.9	11.5	5.3
1970	2.6	3.3	3.8	3.8	2.6	2.3	2.3	2.1	2.1	2.2	2.6	2.9	2.5	3.9	3.9	5.3	10.1	8.0
1971	2.6	3.4	3.5	4.1	2.5	2.1	2.4	2.3	2.0	2.3	2.3	2.7	2.3	3.4	4.3	4.0	9.5	8.8
1972	2.6	3.6	3.7	4.4	2.4	2.2	2.3	2.3	2.0	2.2	2.2	2.7	2.3	3.3	4.1	3.6	10.4	6.4
1973	2.6	3.9	3.8	4.3	2.5	2.2	2.2	2.2	2.0	2.2	2.2	2.5	2.4	3.4	3.9	3.2	9.6	12.1
1974	2.6	3.8	3.9	4.2	2.6	2.2	2.1	2.2	2.0	2.3	2.0	2.5	2.3	3.6	3.6	3.2	10.5	8.1
1975	2.6	3.9	4.0	4.3	2.8	2.2	2.2	2.3	1.9	2.2	2.1	2.4	2.4	3.3	4.0	3.5	7.5	8.2
1976	2.7	3.7	4.3	4.3	3.0	2.5	2.2	2.2	2.1	2.2	2.0	2.3	2.3	3.5	4.4	3.6	9.4	7.9
1977	2.8	3.4	4.2	4.4	3.2	2.8	2.3	2.3	2.3	2.2	2.2	2.6	2.4	3.4	3.9	3.5	7.2	13.4
1978	2.9	3.1	4.4	4.5	3.5	3.0	2.5	2.5	2.4	2.1	2.3	2.4	2.5	3.1	4.4	4.3	8.1	9.7
1979	3.1	2.6	4.7	4.9	3.4	3.3	2.6	2.5	2.5	2.0	2.4	2.5	2.5	3.2	4.4	4.1	4.9	6.4
1980	3.1	3.0	5.0	4.7	3.7	3.4	2.6	2.4	2.7	2.2	2.4	2.7	2.6	3.4	4.7	5.2	5.9	7.9
1981	3.2	3.4	5.4	5.0	3.8	3.4	2.5	2.6	2.4	2.3	2.6	2.9	2.7	3.6	4.4	5.8	6.3	6.0
1982	3.3	4.0	6.0	5.4	4.1	3.4	2.7	2.5	2.5	2.5	2.6	2.7	2.7	3.8	4.9	5.5	6.4	7.6
1983	3.4	3.9	6.0	6.0	4.2	3.5	2.7	2.6	2.5	2.7	2.7	3.0	2.7	4.1	5.0	6.2	6.0	7.7
1984	3.5	4.5	5.7	5.9	4.3	3.5	2.7	2.7	2.5	2.8	3.0	2.9	2.7	3.9	4.9	6.2	9.3	10.6
1985	3.5	3.9	5.1	6.0	4.4	3.7	2.8	2.7	2.6	2.8	3.1	2.9	2.8	4.2	4.7	5.9	6.3	7.6
1986	3.6	4.1	5.3	5.7	4.5	3.6	3.0	2.8	2.5	2.9	3.2	3.3	2.9	4.6	4.6	6.1	6.3	6.7
1987	3.6	3.8	5.4	5.4	4.4	3.6	2.9	2.8	2.5	2.9	3.3	3.5	3.3	4.6	4.0	7.1	6.8	5.5
1988	3.6	3.9	5.2	5.3	4.5	3.7	2.9	2.8	2.6	2.7	3.3	3.7	3.2	4.4	4.6	6.2	8.3	5.8
1989	3.7	3.3	5.5	5.6	4.3	3.9	3.0	2.7	2.6	3.1	3.4	4.1	3.4	4.4	4.4	6.7	8.3	6.6
1990	3.7	3.2	5.1	5.3	4.4	4.0	3.2	2.8	2.6	2.9	3.6	4.1	3.3	4.1	5.2	6.9	9.4	6.6
1991	3.8	2.2	4.8	5.6	4.7	4.2	3.4	3.1	2.9	3.0	3.6	3.8	3.5	3.9	5.3	6.0	7.8	7.8
1992	3.9	2.3	4.3	5.6	4.9	4.5	3.6	3.2	3.2	3.1	3.6	3.9	3.6	3.8	5.9	6.1	7.4	9.0
1993	3.9	1.8	4.3	5.5	4.8	4.5	3.8	3.3	3.4	3.1	3.4	3.6	3.6	4.0	5.5	6.2	6.9	14.4
1994	3.8	2.1	4.1	5.3	4.9	4.7	3.8	3.2	3.1	2.9	3.3	3.7	3.6	4.3	5.7	6.7	6.8	12.4
1995	3.9	2.0	4.2	5.8	4.8	4.5	3.7	3.3	3.1	3.1	3.2	3.7	3.9	4.2	5.1	6.6	8.1	12.1
1996	3.8	2.2	3.7	5.9	4.4	4.5	3.8	3.3	3.0	3.3	3.3	4.0	4.0	4.3	5.1	7.4	9.9	12.4
1997	3.8	2.3	3.8	6.0	4.3	4.5	3.7	3.2	3.0	3.2	3.5	3.9	3.8	4.5	4.9	6.4	8.9	10.3
1998	3.7	2.4	3.5	5.6	4.2	4.4	3.7	3.3	2.9	3.1	3.6	4.2	3.7	4.6	4.9	6.4	9.0	9.2
1999	3.7	2.0	3.3	5.3	4.3	4.5	3.9	3.6	3.0	3.3	3.6	3.9	3.6	4.5	4.9	5.6	9.5	7.3
2000	3.6	1.7	3.1	4.8	4.4	4.0	3.6	3.5	3.1	3.2	3.3	3.9	3.4	4.7	5.4	5.1	9.7	10.4
2001	3.6	1.5	3.1	4.4	4.4	3.9	3.6	3.4	3.1	3.1	3.3	3.9	3.2	5.3	5.9	5.5	7.7	8.4
2002	3.5	1.4	2.9	4.1	4.0	3.8	3.4	3.5	3.0	2.9	3.3	3.7	3.1	4.8	6.2	6.3	8.2	9.4
2003																		
2004																		

Appendix B: British Columbia

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	3.2	0.8	3.0	1.7	3.3	3.5	1.5	2.6	3.1	3.2	2.3	4.2	4.4	4.5	6.2	7.7		
1953	3.4	1.5	4.2	2.3	4.9	2.8	1.6	3.4	3.0	3.8	2.5	3.5	4.6	4.6	6.7	8.5	6.1	
1954	3.3	0.8	7.9	2.8	5.1	2.6	1.7	2.7	2.6	3.5	2.4	4.1	5.7	3.9	9.2	6.3	4.7	
1955	3.6		3.9	3.6	5.1	2.5	2.5	2.7	2.4	3.4	2.7	4.2	6.8	4.4	13.7	5.0	4.5	
1956	3.8		5.0	6.5	4.9	2.4	2.3	3.0	2.2	3.0	4.1	5.5	8.3	4.9	26.7	5.9	3.3	
1957	3.5		4.2	6.0	3.8	1.9	2.6	2.6	2.4	2.4	4.3	4.0	11.1	4.4	6.4	6.2	2.3	
1958	3.5		3.4	8.1	3.7	2.5	3.0	2.4	2.7	3.0	4.3	3.7	7.5	4.1	4.3	3.5		
1959	3.6		3.5	5.6	3.9	3.3	3.2	2.7	2.6	3.4	3.5	4.8	6.1	3.7	5.2	3.5		
1960	3.6	3.5	12.4	6.2	4.4	3.6	2.8	2.5	2.9	3.1	4.2	4.9	4.3	4.0	4.8	3.1		0.0
1961	3.2	2.1	4.6	4.3	4.4	3.1	3.6	2.5	3.1	3.0	2.5	3.3	3.1	2.9	4.6	3.1		0.9
1962	3.3	2.0	4.9	6.1	3.0	3.5	3.9	3.0	2.8	2.4	3.0	4.0	2.7	3.8	5.7	4.0		1.8
1963	3.2	2.0	6.0	5.4	4.1	3.2	3.2	3.3	2.8	2.2	2.4	3.7	2.5	3.9	6.6	8.1	15.4	2.7
1964	2.9	2.2	5.0	6.6	4.2	2.9	2.8	2.9	2.4	1.9	2.0	3.2	2.7	3.9	5.4	7.7	15.1	4.1
1965	2.6	2.9	4.2	4.1	3.5	3.4	2.4	2.4	1.9	1.9	1.7	2.7	2.3	4.1	4.1	9.3	17.8	5.0
1966	2.5		4.9	3.9	3.3	2.6	2.2	2.0	1.6	1.9	2.1	3.5	2.0	4.1	3.9	7.3	7.1	6.0
1967	2.3	4.9	6.1	3.1	3.4	2.2	2.0	2.0	1.3	1.7	2.1	2.7	1.9	4.3	2.9	6.4	8.1	1.8
1968	2.3	7.3	5.2	3.2	2.5	2.5	2.3	2.1	1.2	1.6	2.4	3.0	1.6	4.2	2.9	5.4	6.2	1.6
1969	2.1	4.7	3.1	3.3	1.9	1.9	2.1	2.2	1.3	1.6	2.4	2.8	1.5	5.7	2.7	5.3	8.8	1.6
1970	2.1	2.8	2.3	3.3	2.1	2.0	2.2	2.2	1.3	1.7	2.6	2.3	1.3	3.6	2.2	5.6	5.6	2.6
1971	2.1	1.8	2.1	3.7	2.0	1.9	2.1	2.3	1.5	1.9	1.6	2.0	1.4	3.5	2.2	6.1	6.0	3.4
1972	2.1	3.9	2.1	3.5	2.5	2.2	2.0	2.3	1.5	1.9	1.5	2.1	1.6	2.7	2.2	5.9	4.6	4.8
1973	2.2	4.7	2.6	3.7	2.8	2.0	1.8	2.1	1.9	2.1	1.3	2.2	1.9	2.3	2.5	4.4	5.1	
1974	2.3	5.8	3.4	3.5	3.3	1.9	1.7	2.1	1.9	2.4	1.2	2.2	2.1	2.4	2.1	2.7	3.7	
1975	2.4	6.2	4.2	3.7	2.9	1.8	1.7	2.5	1.9	2.4	1.4	2.4	2.3	2.4	2.7	3.0	1.9	
1976	2.4	7.1	4.1	3.7	3.1	1.9	1.7	2.3	1.8	2.2	1.7	2.1	2.5	2.9	4.5	2.1	1.3	
1977	2.5	3.0	3.8	4.0	3.4	2.2	2.0	2.1	2.0	2.1	2.1	2.0	2.3	3.1	2.7	2.9	0.0	
1978	2.7	3.1	4.3	3.5	3.7	2.5	2.7	2.4	2.1	1.8	2.2	1.9	3.0	2.8	3.0	4.0	1.8	6.4
1979	2.8	2.0	4.4	4.2	3.4	2.8	2.7	2.8	1.9	1.7	2.8	2.2	2.3	3.1	2.8	4.4	1.3	3.3
1980	2.9	2.0	4.6	4.1	4.0	3.4	3.1	2.7	2.0	1.9	2.6	2.3	3.0	2.5	1.9	4.2	2.4	4.1
1981	3.0	2.3	5.1	4.2	4.0	3.3	3.2	3.7	1.9	1.8	2.8	2.5	2.6	2.7	1.7	4.0	2.1	2.8
1982	3.2	4.7	4.9	4.3	4.3	3.3	3.4	4.0	2.1	2.4	3.2	2.6	2.8	2.8	2.4	3.4	3.1	3.4
1983	3.3	2.9	3.7	5.9	4.0	3.4	2.8	3.7	2.3	2.8	3.0	3.0	2.5	3.3	3.2	3.4	2.9	7.2
1984	3.5	3.2	3.8	5.5	4.2	4.1	3.4	4.1	3.0	3.3	3.3	2.1	2.4	2.8	4.0	3.4	5.7	15.0
1985	3.4	4.1	3.6	5.7	4.3	4.0	3.2	3.1	3.4	2.9	3.6	2.0	2.1	2.7	5.5	3.5	5.0	9.1
1986	3.7	3.3	3.9	5.7	4.4	4.6	3.2	3.4	3.7	3.1	4.4	2.7	2.5	3.3	6.5	3.3	6.0	6.5
1987	3.6	2.0	5.3	4.9	4.7	5.1	2.9	3.0	3.3	2.9	4.4	3.6	2.6	2.8	3.9	3.0	5.3	6.5
1988	3.4	2.0	6.7	4.4	4.8	5.0	3.0	2.9	2.9	2.7	4.1	3.2	2.0	2.8	3.8	2.3	5.2	2.7
1989	3.4	2.4	6.2	5.4	5.0	5.0	2.7	2.6	3.2	2.3	2.9	3.4	2.3	3.1	2.9	2.8	5.5	3.7
1990	3.4	1.7	5.3	4.2	4.2	5.2	2.9	3.2	2.6	2.9	2.9	3.9	2.2	3.3	3.5	3.2	5.6	3.7
1991	3.6	2.4	5.4	4.5	4.5	4.6	3.2	3.6	3.1	2.7	2.9	2.9	2.3	3.3	4.7	3.8	7.0	5.0
1992	3.7	2.9	4.2	4.3	4.7	4.3	3.4	3.6	3.5	3.0	3.1	2.9	2.5	3.0	7.4	5.6	6.7	3.5
1993	3.8	2.0	3.9	4.3	4.4	4.4	3.8	4.0	3.9	3.2	2.9	2.8	3.2	2.5	8.7	6.0	5.4	12.0
1994	3.9	2.9	3.8	3.9	4.9	4.1	4.8	3.5	3.9	3.3	3.3	3.3	3.5	3.4	7.0	4.6	5.8	8.9
1995	4.1	1.7	3.7	4.6	5.0	4.3	4.8	3.6	4.3	3.8	3.5	3.4	4.3	2.8	5.5	6.9	9.6	5.1
1996	4.0	2.0	3.0	5.5	5.3	4.7	4.4	3.5	3.8	3.8	3.3	3.8	4.4	2.8	4.1	5.4	8.6	6.2
1997	4.0	1.8	3.6	6.4	5.4	5.6	4.6	3.8	3.7	3.8	3.4	3.5	4.5	2.9	3.6	3.4	10.5	3.8
1998	3.7	1.7	2.9	5.8	5.1	5.5	4.1	4.0	3.0	3.0	3.1	3.8	3.1	2.7	3.7	3.2	10.6	3.1
1999	3.6	1.2	2.9	7.2	4.9	5.5	4.1	4.1	2.6	3.1	2.7	3.6	3.3	2.3	4.3	2.8	12.2	2.3
2000	3.3	1.4	3.0	5.7	4.8	4.9	4.0	3.4	2.4	2.6	2.7	3.3	3.4	2.9	3.9	2.0	12.6	6.1
2001	3.2	1.4	3.4	4.8	3.9	4.1	3.7	3.3	2.8	2.7	2.6	2.9	3.7	3.5	3.8	1.9	9.1	4.3
2002				5.5	3.4	3.5	3.5	3.2	2.7	2.7	3.2	2.7	3.9	3.8	3.7	2.9	4.7	3.5
2003																		
2004																		

Appendix B: Alberta

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	3.7		5.0	2.8	5.3	2.1	2.3	2.2	5.0	3.3	3.4	12.6	3.1	5.6	6.2	1.8		
1953	3.5		3.3	2.8	5.5	1.8	1.9	2.3	4.2	4.1	3.0	4.3	9.0	4.9	5.9	1.0		
1954	3.5		1.7	5.3	3.2	2.1	1.7	3.3	4.2	3.7	2.2	4.1	5.3	5.8	8.1	1.8		
1955	3.5		1.9	8.2	2.5	2.2	1.7	4.3	4.0	3.2	2.0	4.1	5.6	5.9	12.6	2.5		
1956	3.6		2.3	3.0	4.1	2.7	1.9	5.8	4.2	3.2	1.9	3.8	4.9	5.1	18.2	2.4		
1957	4.2		4.5	4.8	4.4	4.9	2.8	5.5	4.2	3.4	2.5	3.8	4.9	4.2	16.2	2.0		
1958	4.7		13.2	3.8	3.8	7.8	3.2	5.9	4.9	3.0	3.2	7.2	3.3	4.6	17.5	2.7		
1959	5.6		15.4	5.3	4.6	15.8	4.4	7.2	5.6	3.5	4.4	5.9	4.7	3.2	13.6	5.9		
1960	5.9	4.4	18.8	4.9	6.6	49.3	5.3	5.7	4.4	4.2	4.4	6.1	3.6	4.5	19.2	1.8		
1961	6.0	4.9	8.4	6.6	4.7	17.4	7.8	4.5	4.2	7.1	6.5	5.7	3.5	2.5	8.6	6.9		
1962	5.1	4.7	10.4	4.5	3.2	10.4	4.6	3.7	3.7	8.4	4.3	6.2	4.2	3.3	9.9	4.8		
1963	4.5	2.9	9.9	5.0	3.6	8.8	5.0	3.8	2.4	5.7	3.6	5.9	4.5	1.9	8.6	8.7		
1964	4.2	3.1	25.1	4.8	2.7	6.1	6.0	2.4	2.9	6.0	4.0	4.5	3.9	2.3	8.5	7.6		
1965	4.1	7.3	14.1	5.8	2.4	5.4	4.5	2.5	2.8	4.5	4.4	5.2	3.9	2.0	13.2			
1966	3.6	10.2	18.4	6.4	1.7	4.8	2.5	2.2	2.7	4.2	4.2	3.2	3.8	2.2		10.1		
1967	3.3	3.8	15.5	4.3	2.5	3.6	2.3	2.1	2.9	4.4	4.0	3.2	3.6	1.6		3.8		
1968	3.2	4.5	8.4	4.2	2.2	2.8	1.9	1.9	3.2	4.1	4.1	3.4	4.0	2.9	12.4	4.1	3.1	
1969	3.4	4.0	7.6	4.1	3.6	2.8	1.7	1.9	3.9	4.6	4.2	4.7	6.0	2.3	5.6	3.5	6.5	
1970	3.3	3.2	4.9	4.1	3.5	2.3	1.6	1.8	4.2	4.7	4.1	5.3	11.8	3.7	5.6	3.9	6.5	
1971	3.1	2.8	3.9	3.6	4.5	2.1	2.5	2.0	2.9	3.3	3.5	5.3	8.5	2.5	3.2	3.8	10.8	
1972	2.9	6.3	3.2	4.1	2.9	2.3	2.1	2.0	2.8	2.8	3.1	4.8	4.2	2.8	1.6	7.4	6.2	
1973	2.8		3.3	4.2	3.0	2.3	2.4	2.0	2.3	2.3	2.8	4.4	5.3	2.1	1.4	7.5		
1974	2.8	9.2	3.0	3.6	3.2	2.1	2.3	2.3	2.3	2.1	2.2	4.3	3.7	2.3	2.3	9.7		
1975	2.7	7.0	3.6	3.7	2.8	2.0	2.6	2.4	2.1	2.2	1.8	4.0	3.9	1.8	2.3	4.2	8.0	
1976	2.9	5.8	4.3	3.6	3.5	2.3	2.4	2.1	2.8	2.2	1.6	3.8	3.3	2.1	3.1	4.7	7.0	
1977	3.2	4.5	4.6	4.3	5.2	2.3	3.1	2.0	2.9	2.2	2.1	3.8	4.4	1.7	3.6	3.3	10.5	
1978	3.1	3.2	3.9	3.9	6.5	2.6	2.9	1.9	3.1	2.3	2.2	2.8	2.3	1.9	4.6	3.0	9.4	
1979	3.2	2.6	4.7	5.1	5.8	3.2	2.6	1.7	2.9	2.3	2.3	2.2	1.9	1.6	3.5	2.4	10.6	
1980	3.3	3.5	5.0	5.1	6.3	3.6	2.5	1.7	3.1	2.1	2.5	2.8	2.0	2.2	5.2	3.8		
1981	3.3	3.0	5.0	5.7	5.2	3.4	2.3	1.9	2.5	2.0	3.0	2.6	3.7	2.5	4.2	6.7		1.5
1982	3.2	3.8	5.5	5.5	4.1	3.0	2.0	2.2	2.6	2.4	2.7	2.4	3.9	3.7	3.9	7.3		1.5
1983	3.5	5.3	6.5	6.5	4.3	3.3	2.3	2.2	2.5	2.6	2.9	2.8	3.3	5.1	3.8	11.8		3.0
1984	3.7	3.0	5.6	5.6	4.6	2.9	2.4	2.6	2.9	2.9	3.7	3.8	4.4	6.1	3.2	24.7		4.5
1985	3.7	2.4	5.3	6.4	4.7	3.1	2.3	2.4	2.8	2.9	4.0	4.0	2.3	7.8	2.5	26.9		4.5
1986	3.9	2.9	6.3	5.7	4.1	3.4	2.5	2.5	3.2	3.6	4.6	4.7	1.9	6.9	2.6	26.4		
1987	3.9	1.9	6.2	5.8	3.9	3.6	2.5	2.7	3.4	4.2	4.3	5.6	3.8	4.4	3.1	31.6		
1988	3.8	2.4	5.6	5.0	3.4	3.1	2.6	2.8	3.5	3.6	4.1	5.4	3.2	5.5	3.4	14.3		
1989	3.6	2.5	5.0	5.4	4.0	3.5	2.7	2.4	3.0	3.0	3.5	6.8	3.3	4.2	3.5	9.4		
1990	3.3	2.9	4.2	4.5	3.0	3.0	2.8	2.4	2.8	2.4	3.6	5.1	2.7	3.0	3.6	7.3		
1991	3.6	2.2	3.7	5.5	4.9	3.3	3.3	2.6	2.8	2.2	3.1	4.6	3.1	3.2	6.0	5.6	30.4	
1992	3.6	3.5	3.2	5.6	5.8	3.7	3.2	2.7	3.1	2.3	3.2	4.8	2.9	3.7	3.7	5.4	22.0	
1993	3.7	3.5	3.3	6.1	5.0	4.2	3.7	2.8	2.7	2.3	3.7	4.2	2.8	3.9	3.9	5.0	21.5	16.7
1994	3.6	3.4	4.1	9.4	3.9	3.9	3.6	3.1	3.3	2.4	3.6	3.5	3.1	3.5	3.4	4.7	6.4	26.1
1995	3.8	3.2	4.2	9.0	3.3	4.2	3.4	2.6	2.7	2.8	3.7	3.0	3.4	3.3	4.5	7.0	4.3	25.6
1996	3.7	2.9	4.0	9.0	3.3	3.8	3.5	2.6	3.8	2.9	4.7	3.4	3.5	3.0	3.5	4.4	2.8	14.4
1997	3.7	2.3	4.0	7.6	4.2	4.1	3.4	2.5	3.8	2.5	5.6	3.6	3.7	3.2	5.5	5.7	3.2	8.3
1998	3.4	1.6	3.6	5.5	3.3	3.4	3.0	2.5	3.4	2.2	5.2	3.5	3.8	2.8	5.1	5.7	2.6	8.5
1999	3.5	1.4	3.2	3.9	4.2	3.6	3.3	2.9	3.5	2.3	4.6	3.3	3.8	3.6	4.9	6.2	4.5	9.1
2000	3.4	1.3	3.3	3.7	4.4	3.2	3.6	3.0	3.3	2.5	5.2	3.6	4.6	4.0	7.3	4.8	14.2	
2001	3.4	1.0	3.3	3.5	4.8	3.1	3.6	3.2	3.0	2.3	3.8	3.5	2.7	4.8	10.6	14.9	17.5	6.7
2002	3.3				4.2		2.9	3.6	2.8	2.4	4.0	3.1	2.9	4.7	8.6	9.0	28.2	19.6
2003																		
2004																		

Appendix B: Saskatchewan

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	3.8			4.6	1.7	6.2	2.5	3.2	2.2	3.2	21.1	3.9	3.5	5.0	3.9			
1953	3.7		1.9	5.0	1.9	3.1	3.3	4.2	1.8	2.7	12.9	4.4	2.9	7.4	2.9	2.2		
1954	3.6		2.4	10.6	2.3	3.6	5.2	4.0	1.4	2.0	10.1	3.3	2.8	4.5	2.7	4.9		
1955	3.6		2.7	9.0	1.9	2.7	5.3	3.1	1.4	1.8	8.9	5.9	3.1	2.9	4.0	4.0		
1956	3.4		2.4	10.9	2.5	2.3	6.5	3.0	1.9	1.3	6.3	5.0	3.3	2.4	3.5	6.4		
1957	3.5		2.4		2.5	2.0	4.3	2.8	2.7	1.6	5.0	6.7	4.0	2.3	5.0	4.9		
1958	3.9		6.5		3.7	2.0	4.7	3.3	4.1	1.6	5.2	4.5	4.3	2.7	7.2			
1959	4.1		3.6		3.6	2.2	2.3	4.7	2.8	2.5	6.0	7.9	5.1	2.9	10.6			
1960	4.6		5.5	19.6	5.1	2.7	2.3	7.7	3.7	2.9	8.4	8.3	3.4	4.3	6.2			
1961	4.8		3.2	11.0	2.7	2.6	1.6	9.6	4.3	3.7	9.0	8.1	5.8	4.4				
1962	4.7		3.4	11.0	3.7	3.7	2.1	14.2	3.4	3.5	5.3	11.1	4.7	4.3				
1963	4.0		4.0	9.2	4.6	4.3	2.0	4.6	2.7	3.1	3.9	3.8	6.7	3.5	7.6	9.3		
1964	4.0	6.4	3.3	6.3	7.5	5.3	2.3	4.2	5.4	3.0	2.7	2.2	6.1	3.2	7.6	6.5		
1965	3.8	3.1	3.1	9.6	6.3	4.4	2.5	2.6	3.9	3.3	2.6	2.0	11.9	3.1	9.1	5.5		
1966	3.5	3.5	4.9	9.2	7.7	6.0	2.7	1.6	3.1	3.3	1.9	1.6	8.0	8.3	8.5	4.7		
1967	3.4	3.5	6.2	4.6	6.8	9.5	4.0	1.5	3.7	2.7	2.3	1.5	8.1	6.2	10.1	4.6		
1968	3.7	3.1	4.6	4.3	6.9	5.8	4.3	1.7	3.0	2.8	2.2	1.9	8.8					
1969	3.6	1.4	6.2	4.0	5.0	4.7	3.7	2.0	2.6	3.5	2.9	2.0	6.5					
1970	3.7	1.2	5.2	6.1	5.9	3.4	3.7	3.4	3.1	3.1	2.3	2.3	3.7		14.9			
1971	3.6	0.6	4.6	3.2	8.3	3.2	3.9	4.6	3.9	3.3	2.9	2.3	2.3	7.4	12.7	5.2		
1972	3.8	0.5	4.9	5.4	5.1	2.8	2.9	7.8	4.1	4.3	2.8	1.8	2.5	8.6	11.4	3.5		
1973	3.3	0.3	4.4	3.7	5.3	2.9	2.6	5.5	3.0	3.9	2.9	2.5	1.6	8.6	11.1	1.8		
1974	2.9	2.0	2.7	3.5	4.4	2.6	2.6	5.2	3.3	2.7	2.1	2.7	1.3	3.2	13.0	1.3		
1975	3.0	4.3	3.0	3.1	5.7	2.4	2.3	4.6	3.2	2.4	2.9	3.1	1.3	2.7	16.6	1.5		
1976	3.0	12.7	3.2	3.5	5.5	2.2	1.6	2.7	3.0	2.6	2.5	3.0	2.0	3.6	6.2	1.6		
1977	3.3	11.7	3.8	3.5	5.4	2.1	1.9	2.8	2.9	2.6	2.6	5.0	2.1	4.1	5.7	2.6		
1978	3.5	3.4	4.8	3.9	3.4	2.5	2.8	3.9	4.4	2.5	2.4	3.3	2.1	4.6	6.4	2.5		
1979	3.5	2.8	5.3	3.6	3.4	2.1	3.3	4.1	4.5	2.8	3.3	2.7	2.4	9.0	3.1	3.8		
1980	3.7	2.1	5.2	3.4	3.3	2.7	3.8	3.9	3.6	3.7	3.7	2.8	2.3	15.8	4.4	7.4	6.6	
1981	4.0	1.9	5.3	3.9	3.0	3.0	6.8	5.6	2.9	2.9	4.1	2.3	2.6	11.8	8.7	9.2	5.4	
1982	4.3	1.6	5.7	5.1	3.3	3.2	7.1	3.9	2.8	3.3	4.4	2.6	5.2	6.5	8.0	11.9	4.0	
1983	4.2	3.9	4.3	5.5	3.8	3.2	4.4	3.9	2.2	4.0	5.9	3.9	6.9	4.5	5.6		3.5	
1984	4.5	4.0	6.2	8.4	3.4	3.0	3.5	3.9	2.4	4.2	5.0	5.8	12.9	3.1	7.7		1.7	
1985	4.2	7.2	5.3	5.0	3.2	3.1	2.7	3.7	2.4	4.2	6.3	6.4	10.9	2.2	8.6		6.8	
1986	4.1	8.0	5.7	4.8	3.1	4.0	2.5	3.9	2.8	4.5	5.3	5.0	9.5	1.8	7.3			
1987	4.1		4.5	5.3	3.3	4.6	1.9	3.5	2.7	3.2	5.9	6.3	11.2	2.3	5.8			
1988	4.0		4.7	4.3	3.3	4.0	2.6	3.2	3.7	3.4	7.8	4.7	9.0	2.7	13.5			
1989	4.2	6.4	4.4	3.7	3.5	4.0	3.6	3.2	3.4	3.7	6.0	4.6	17.6	3.8	12.3			
1990	4.3	0.8	5.0	3.0	3.3	3.6	3.7	3.4	2.8	3.1	5.0	2.0	39.4	9.0	13.1			
1991	4.5	1.3	6.0	5.0	2.7	5.0	2.6	3.9	4.7	3.8	5.0	2.8	12.4	17.1	6.5		8.9	
1992	4.1	1.1	7.4	3.9	2.6	3.0	2.9	2.9	4.4	3.3	6.1	4.7	10.9	16.9	12.7		4.5	
1993	4.2	1.6	7.6	4.6	2.5	3.6	3.0	3.3	5.2	3.5	5.2	5.4	6.9	7.9	10.4	10.8	2.9	
1994	4.1	2.8	6.6	4.4	2.4	7.0	2.6	3.6	5.4	2.5	6.2	5.5	7.3	9.8	27.6	5.3	3.3	
1995	4.4	5.5	5.4	4.8	3.1	5.8	3.1	3.5	6.0	2.5	6.3	6.9	5.2	7.1	7.5	4.7	2.5	
1996	4.3	8.7	3.9	6.7	4.7	7.3	3.5	3.3	5.3	2.9	4.5	8.0	21.5	9.1	10.7	7.1	3.3	1.9
1997	4.9	7.2	3.0	5.7	5.1	8.5	4.4	4.3	4.3	3.1	2.9	5.4	13.5	9.1	7.3	7.9	4.2	5.5
1998	4.8	4.8	2.5	6.0	4.6	5.2	3.9	4.1	3.3	3.9	2.0	4.8	14.5	12.1	6.6	12.6	8.6	5.4
1999	4.4	1.8	2.1	5.9	5.8	5.1	5.2	4.2	3.8	6.6	1.1	6.0	4.3	21.4	4.3	16.5	3.7	7.1
2000	4.4	2.3	1.9	5.6	4.1	4.3	7.7	4.7	4.4	13.5	1.5	9.4	5.3		13.7	14.6	6.5	5.3
2001	4.8	1.0	2.2	4.8	3.3	3.2	5.6	4.4	3.8	8.6	2.3	9.4	2.9	20.4	15.8	6.6	6.2	
2002	4.4		2.1	4.7	2.8	2.3	6.3	4.5	5.9	16.8	3.7	12.8	1.8	22.4	14.7	7.8	4.6	
2003	4.3																	
2004																		

Appendix B: Manitoba

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	5.0		4.5	7.2	3.3	6.6	3.9	2.3	5.0	6.2	5.8	5.0	5.4	6.2	3.1			
1953	4.5		4.5	4.6	2.5	8.3	4.4	2.8	3.1	4.9	6.0	7.6	3.5	12.4	2.9	3.7		
1954	3.8		3.4	3.5	2.0	8.2	2.5	2.9	2.9	4.5	8.6	7.3	2.7	2.4	3.8	3.4		
1955	4.0		4.2	3.2	2.1	10.5	4.7	3.2	3.3	4.1	10.9	7.9	1.7	3.2	4.5	2.4		
1956	3.7		3.9	2.7	2.8	4.5	12.2	3.7	2.8	4.8	7.8	5.8	2.0	2.2	3.6	3.1		
1957	3.8		5.5	2.7	5.5	5.8	7.7	3.4	2.8	4.2	10.2	4.7	1.9	2.2	5.0	2.3		
1958	4.3		9.8	3.1	5.4	4.6	11.0	4.7	4.3	3.7	16.3	2.9	3.0	1.5	9.3	2.7		
1959	4.4			4.4	5.4	4.0	5.6	4.0	5.5	3.1	7.7	3.4	3.8	2.4	8.2	2.5		
1960	4.3		11.3	5.4	3.3	2.8	3.6	4.4	5.3	4.2	6.9	3.4	4.1	2.9	10.2	3.8		
1961	4.0		1.4	9.7	3.1	4.6	2.4	5.8	6.1	2.9	8.6	2.5	4.1	3.1	9.9	3.8		
1962	3.6		1.3	7.6	2.1	4.5	1.7	6.2	6.0	3.0	6.7	2.6	3.6	3.4	7.3	4.5		
1963	3.3		1.0	27.2	2.2	3.1	1.5	4.3	5.9	3.1	3.3	4.1	2.1	10.6	7.2			
1964	3.3		1.6	28.2	1.3	3.3	1.6	6.6	5.5	4.1	3.2	3.2	2.0	12.5	2.5			
1965	3.4		1.7	16.1	2.1	3.0	1.6	6.5	6.3	3.2	2.6	2.9	2.9	14.5	7.7			
1966	3.3		2.5	6.1	2.5	3.3	1.6	4.7	6.4	3.3	2.3	2.8	3.4	16.5	4.4			
1967	3.3		2.6	5.0	3.6	3.6	1.4	3.5	4.8	2.6	2.0	2.9	4.1	18.5	3.9			
1968	3.3	3.2	2.3	4.0	4.7	6.4	1.8	3.5	2.2	2.5	2.8	3.1	5.6	10.3	4.6	7.0		
1969	3.0	6.5	2.0	3.2	7.8	4.3	1.9	2.6	2.2	1.7	2.8	3.6	3.6	19.7	8.1	7.0		
1970	3.1	4.8	2.5	3.0	4.5	4.7	2.4	2.3	2.0	2.5	3.1	4.9	3.1	19.8	9.7	4.0		
1971	2.9	3.6	2.2	4.1	3.7	3.3	3.0	2.0	2.1	2.1	2.6	3.4	3.3	3.9	17.9	3.0		
1972	2.9	1.1	2.7	4.5	2.7	3.1	3.1	1.8	2.3	2.4	3.1	3.8	2.8	3.2	17.9	1.0		
1973	2.8	1.3	3.2	4.0	2.6	2.5	2.6	1.5	3.3	2.5	2.3	3.2	2.9	3.7	5.9	0.5		
1974	2.7	1.1	3.6	5.7	2.3	1.9	1.8	1.8	3.0	3.2	2.9	2.0	2.9	4.7	4.9	0.4	3.7	
1975	2.8	1.0	4.3	5.7	3.3	1.4	2.3	2.1	2.1	2.9	3.0	1.6	3.3	3.3	1.8	0.0	3.7	
1976	3.0	1.9	6.5	5.9	3.0	1.5	2.2	2.3	2.4	2.9	3.6	1.9	2.2	4.3	2.5	0.0	4.5	
1977	3.4	2.5	9.2	5.4	4.0	1.8	3.0	1.9	2.8	4.1	3.8	2.1	2.6	3.9	1.4	0.0	2.2	
1978	3.1	3.2	9.7	6.9	3.4	2.0	2.5	1.9	2.6	2.9	2.8	2.3	2.4	2.0	4.2	0.8	3.1	
1979	3.6	3.0	13.8	5.4	4.4	2.9	4.1	2.0	3.7	2.3	3.5	2.7	2.7	2.1	3.4	1.3	2.7	
1980	3.4	1.6	12.2	5.2	3.3	3.8	3.8	2.0	4.7	1.8	2.7	2.8	2.1	1.8	9.0	2.9	2.7	
1981	3.8	2.6	14.0	6.1	3.8	3.0	4.3	2.0	3.5	2.3	2.6	4.6	2.5	2.1	12.0	6.1	4.2	
1982	3.7	2.4	11.0	6.6	3.5	3.3	4.6	1.9	2.7	1.8	2.9	3.2	2.5	2.7	29.1	16.0		
1983	4.4	3.6	14.5	8.4	4.5	3.2	5.5	2.5	3.0	2.3	3.9	5.4	2.4	3.4	14.7	9.6		
1984	3.9	5.6	5.9	11.3	3.9	3.2	3.5	2.6	1.8	2.5	3.6	3.9	2.1	3.0	16.1	9.6		
1985	3.5	1.8	5.2	10.7	4.4	2.5	3.2	2.4	1.7	2.1	3.1	4.9	3.2	2.4	4.6	8.7	6.9	
1986	3.5	1.3	3.1	7.3	4.8	2.7	2.3	2.7	2.0	2.9	2.3	5.2	3.8	3.4	6.3	5.3	8.6	
1987	3.5	1.0	3.4	6.5	4.7	2.5	2.3	3.7	2.8	4.4	1.7	6.0	4.7	2.4	4.9	6.4	6.8	
1988	3.5	1.0	3.3	5.8	3.5	3.2	2.2	3.5	2.6	4.5	1.3	11.6	4.6	2.2	6.8	7.5	8.6	
1989	3.7	1.0	3.9	5.8	2.9	3.4	2.9	3.3	3.2	5.7	1.6	15.0	6.1	2.8	4.9	6.9	6.8	
1990	4.2	3.2	3.8	4.8	2.9	5.5	2.9	4.4	3.3	7.9	2.9	6.4	4.6	4.4	9.5	6.1		
1991	4.1	0.8	3.2	6.2	2.6	4.7	3.1	4.6	3.6	8.0	3.0	6.2	4.6	5.6	6.2	5.5		
1992	4.3	1.6	2.2	4.6	2.8	5.1	3.7	6.0	4.8	6.0	6.9	5.0	3.9	7.6	10.5	3.9		
1993	4.8	2.3	2.4	4.0	3.1	6.9	4.4	7.2	4.8	6.2	7.7	4.8	5.0	13.6	8.2	5.7		
1994	4.7	4.6	3.1	3.5	3.4	6.8	3.8	14.3	5.2	3.5	5.3	4.4	4.2	8.3	10.6	12.5		2.2
1995	4.4	3.9	3.0	3.6	3.3	4.2	3.5	22.0	4.3	2.6	6.2	16.5	3.8	6.6	10.3	12.9		4.4
1996	4.6	8.7	3.3	3.7	2.6	3.6	5.9	16.3	4.8	2.7	6.5	4.1	5.9	8.1	12.5	10.1		8.7
1997	4.2	3.2	4.3	4.0	2.5	3.0	4.5	6.4	5.0	3.1	6.4	3.4	9.3	4.8	5.4	6.4		8.7
1998	3.7	1.6	3.3	4.1	2.6	2.2	3.3	5.4	4.8	2.7	6.5	4.0	7.4	5.4	4.8	2.7		
1999	3.2	1.3	3.4	2.8	2.0	2.1	2.3	4.5	4.3	3.4	6.2	2.6	13.9	5.9	4.0	3.0	19.5	
2000	3.0	1.2	2.9	3.0	2.9	1.8	2.0	3.7	3.8	4.6	7.8	1.4	9.7	6.5	3.3	3.0	15.9	
2001	2.9	1.3	2.7	2.2	3.0	2.0	2.1	3.5	4.1	3.3	10.6	2.1	3.8	5.0	2.5	3.9	17.2	12.1
2002	2.8	1.5	2.5	2.2	2.8	2.2	1.8	3.8	3.1	3.1	4.9	2.3	3.6	7.1	3.2	6.4	11.8	14.6
2003																		
2004																		

Appendix B: Ontario

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	3.2	4.4	3.3	2.5	2.2	3.3	3.1	4.1	2.0	3.5	3.2	3.9	2.7	4.4	6.4	9.3	13.1	
1953	3.0	5.0	3.7	2.1	2.3	3.7	2.8	3.4	2.1	3.2	2.7	3.2	3.2	4.2	4.6	11.7	7.3	
1954	3.2	8.3	3.6	2.2	2.4	3.4	2.8	3.8	2.2	3.4	3.2	3.2	3.8	4.6	4.2	9.1	7.5	
1955	3.3		3.0	2.8	2.3	2.8	3.1	3.3	2.8	3.4	3.4	2.8	4.3	5.1	4.7	7.1	15.2	
1956	3.5		3.8	3.4	2.9	2.7	3.1	2.8	3.4	3.4	4.3	3.1	5.1	4.6	6.2	6.8	14.6	
1957	3.5		4.0	4.1	3.7	2.7	3.2	2.7	3.3	3.2	4.0	2.9	4.9	4.7	7.5	6.6	13.3	
1958	3.7		4.5	4.4	4.5	2.8	3.5	3.2	3.3	3.2	4.0	3.2	4.0	5.0	8.8	4.7		
1959	3.8		4.0	4.1	4.6	2.6	3.8	3.4	3.4	3.3	3.9	4.0	3.8	5.7	11.7	3.6		
1960	3.5		3.9	3.5	4.0	2.3	3.3	3.3	3.3	3.4	3.8	3.9	3.4	5.5	11.6	5.4	10.8	8.1
1961	3.4	25.8	3.8	3.5	3.3	2.4	3.3	3.6	2.8	3.1	3.5	4.6	3.1	4.9	8.4	5.8	13.2	4.6
1962	3.1	28.6	3.3	2.9	2.6	2.0	2.9	3.3	2.8	3.1	3.0	4.9	2.7	3.8	7.9	6.7	7.7	2.5
1963	2.9	16.0	2.7	3.2	2.6	1.9	2.7	3.0	2.3	2.6	3.3	5.0	2.9	4.4	5.5	10.4	3.1	2.2
1964	2.6	9.9	2.6	3.3	2.2	2.0	2.1	2.5	2.2	2.3	2.6	4.3	3.3	3.5	4.7	25.2	2.6	2.2
1965	2.6	6.1	2.8	3.3	2.6	1.9	2.0	2.4	2.0	2.3	2.8	4.1	3.4	3.6	3.6	10.7	5.9	6.2
1966	2.5	5.4	3.3	3.0	2.7	1.9	1.8	2.0	2.1	2.1	2.9	3.7	3.0	3.6	3.6	14.2	6.9	4.6
1967	2.5	4.3	3.6	3.2	2.7	2.0	2.0	2.1	1.8	2.2	3.1	2.9	3.4	3.8	3.8	14.1	7.7	
1968	2.4	2.3	3.2	3.3	2.4	1.9	1.9	1.9	1.8	2.0	2.6	2.8	2.9	3.5	3.8	8.1	14.8	
1969	2.3	3.2	3.6	3.3	2.6	1.7	2.2	2.0	1.7	1.9	2.6	2.6	2.5	3.5	4.3	5.5	18.6	
1970	2.2	3.2	3.4	3.6	2.3	1.8	2.0	1.9	1.7	1.7	2.2	2.5	2.6	3.3	3.3	4.8	17.9	
1971	2.2	3.0	3.7	3.9	2.0	1.7	2.1	2.0	1.7	2.0	2.0	2.3	2.4	3.1	4.4	3.0	9.7	2.2
1972	2.2	3.3	4.1	4.1	2.1	1.6	1.9	2.0	1.7	1.7	1.8	2.2	2.3	3.1	4.5	3.1	12.1	2.8
1973	2.2	3.6	4.2	4.0	2.0	1.7	1.9	2.0	1.8	1.7	2.1	2.2	2.1	3.8	4.8	3.9	9.7	1.8
1974	2.2	3.4	4.3	4.0	2.1	1.9	1.8	2.0	1.7	1.9	2.0	2.0	2.0	3.7	4.1	4.3	10.2	3.1
1975	2.3	2.4	4.0	4.4	2.4	2.1	2.0	2.1	1.6	2.0	2.0	1.8	1.6	3.3	4.8	5.2	6.5	4.0
1976	2.4	2.0	3.9	4.1	2.9	2.4	2.1	2.1	1.8	2.0	2.0	1.7	1.9	3.7	3.9	4.9	13.4	17.6
1977	2.5	2.0	3.5	4.2	2.9	2.9	2.3	2.1	2.0	2.1	2.0	2.0	1.9	3.6	3.6	4.0	12.7	21.2
1978	2.6	1.3	3.4	3.9	3.4	3.2	2.2	2.2	2.2	2.2	2.0	1.8	1.9	3.2	3.4	3.9	10.5	9.5
1979	2.6	1.5	3.6	4.3	3.2	3.4	2.3	2.1	2.2	2.0	2.1	2.2	2.0	3.7	3.9	4.1	5.0	23.0
1980	2.7	2.3	4.3	3.8	3.5	3.2	2.2	2.0	2.5	2.3	2.1	2.3	2.2	3.9	4.3	5.0	7.0	22.7
1981	2.8	2.5	4.6	4.2	3.3	3.6	2.0	2.1	2.3	2.2	2.1	2.3	2.0	4.3	4.3	4.9	7.1	14.5
1982	2.8	3.1	5.2	4.4	3.8	3.4	2.1	2.0	2.3	2.3	2.3	2.2	2.0	3.8	4.7	4.5	6.3	13.3
1983	2.9	3.0	6.2	4.9	3.7	3.5	2.4	2.3	2.3	2.3	2.2	2.4	2.2	3.9	4.7	4.4	5.2	12.4
1984	3.0	4.0	5.6	4.5	4.1	3.6	2.6	2.6	2.2	2.4	2.3	2.2	2.2	3.8	4.0	4.1	8.6	8.1
1985	3.0	3.1	4.9	4.9	3.9	3.9	2.6	2.9	2.3	2.4	2.1	2.1	2.3	3.9	3.4	4.0	3.9	4.5
1986	3.0	4.2	4.6	4.2	4.0	3.8	3.0	2.7	2.2	2.3	2.2	2.5	2.4	3.8	3.6	5.2	4.0	3.4
1987	3.1	7.8	4.6	4.1	3.9	3.5	3.1	2.8	2.1	2.4	2.3	2.6	2.7	4.2	3.0	6.5	4.3	2.0
1988	3.0	4.8	4.0	4.2	3.9	3.6	2.8	2.6	1.9	2.2	2.7	2.8	2.7	4.3	3.6	7.1	5.9	2.6
1989	3.1	3.3	4.3	4.5	3.6	3.4	2.9	2.6	2.2	2.6	2.9	3.1	2.8	4.0	3.6	7.6	6.7	3.0
1990	3.2	2.7	4.1	4.1	4.0	3.5	3.0	2.5	2.3	2.4	3.2	3.4	2.7	3.5	4.3	8.3	7.0	4.8
1991	3.3	2.0	3.6	4.2	4.6	4.1	3.1	2.9	2.6	2.7	3.3	3.3	3.2	3.5	3.6	6.0	5.7	9.3
1992	3.4	1.8	3.5	4.6	4.8	3.9	3.3	3.3	3.1	2.7	2.9	3.1	3.1	3.3	4.2	5.4	5.4	18.6
1993	3.5	1.9	3.6	4.5	5.0	4.2	3.5	3.7	3.3	2.5	2.8	2.9	3.0	3.0	3.9	5.2	4.8	20.9
1994	3.4	1.8	3.5	4.4	4.8	4.0	3.4	3.5	3.1	2.4	2.8	2.7	2.7	3.9	4.6	6.2	5.2	16.5
1995	3.4	1.7	3.6	4.8	4.6	4.1	3.3	3.4	2.8	2.6	2.7	2.8	2.9	3.9	4.0	5.1	7.0	21.4
1996	3.5	1.9	3.7	5.4	4.1	4.1	3.5	3.4	2.5	3.1	2.7	2.8	2.8	4.5	3.9	7.5	11.5	27.3
1997	3.4	2.1	3.8	5.2	3.9	3.9	3.3	3.1	2.5	3.2	3.1	3.2	3.2	4.5	3.7	7.4	8.7	14.6
1998	3.5	2.2	3.3	4.9	3.3	4.3	3.8	3.2	2.4	3.2	3.1	3.7	3.6	5.9	3.5	8.7	9.6	9.1
1999	3.5	1.8	3.0	4.5	3.1	4.3	4.1	3.3	2.5	3.4	3.1	3.4	3.6	4.9	3.3	5.9	11.7	10.7
2000	3.4	1.5	3.0	4.0	3.3	3.9	3.7	3.8	2.7	3.4	2.9	3.1	3.4	4.6	3.5	6.1	8.7	13.0
2001	3.3	1.3	2.9	3.7	3.4	3.7	3.6	3.2	2.8	3.2	2.7	3.0	3.4	4.3	4.6	6.1	6.6	13.7
2002	3.2	1.3	2.9	3.1	3.2	3.8	3.4	3.5	2.8	3.0	2.7	2.8	2.9	3.7	5.1	5.9	8.7	
2003																		
2004																		

Appendix B: Quebec

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	2.5	0.8	5.8	1.9	1.9	2.6	2.5	1.7	1.8	2.6	3.6	2.3	7.6	6.5	4.8		1.1	
1953	2.7	0.8	7.5	2.1	2.7	2.8	2.2	2.0	2.1	3.2	2.7	2.8	6.0	6.8	6.2		1.1	
1954	2.9	1.7	10.2	1.9	2.6	2.8	2.5	1.8	2.6	3.0	2.9	3.3	6.3	12.0	8.0	16.2		
1955	2.7	0.8	9.2	2.0	2.7	2.5	2.3	1.9	2.1	2.5	2.7	3.9	3.4	8.2	12.3	11.8		
1956	2.8		7.7	1.9	2.9	2.2	2.1	2.2	2.5	2.5	3.0	3.7	4.9	6.6	21.2	16.3		
1957	3.1		5.6	3.2	3.4	2.4	2.0	3.7	2.7	2.6	3.4	4.9	3.6	5.6	11.3	5.9		
1958	3.2	2.5	5.6	3.9	3.4	2.3	2.4	3.3	2.4	2.6	4.0	4.9	4.1	5.6	12.2	5.0		
1959	3.1	2.5	4.2	3.7	3.9	2.5	2.4	3.0	2.2	2.7	3.9	4.0	4.2	5.6	13.3	3.2		
1960	3.6	2.3	2.6	4.2	5.7	2.7	3.0	3.2	3.2	3.2	4.6	3.6	8.0	5.6	9.8	3.7		
1961	3.3	2.1	2.3	3.5	3.5	2.6	3.5	2.7	2.5	3.1	4.0	5.7	7.3	6.6	9.6	1.5		
1962	3.1	4.0	2.7	2.9	3.4	2.6	2.9	2.5	2.3	3.2	4.4	5.0	7.8	4.8	8.4	3.9		
1963	2.7	8.9	2.9	2.7	2.3	1.9	2.2	2.4	2.3	3.2	2.9	4.9	6.1	4.9	6.0	3.4		
1964	2.9	10.8	3.2	2.9	2.3	2.0	2.1	3.5	2.4	3.2	3.1	5.0	6.6	5.3	4.7	12.9		
1965	2.6	13.3	5.2	3.3	2.0	1.8	2.1	2.6	2.3	2.8	2.4	4.5	6.0	5.5	6.2	4.2		
1966	2.8	8.9	6.0	3.3	2.4	2.0	2.1	2.9	3.0	2.6	2.7	3.7	5.1	5.5	4.7	6.4		
1967	2.6	11.1	6.1	3.9	2.3	2.0	2.1	2.5	2.9	2.3	2.1	3.1	4.1	5.3	6.3	4.2		
1968	2.8		5.5	3.3	2.4	2.2	2.5	2.6	3.1	2.4	2.3	3.5	3.6	6.6	13.4	5.3		
1969	2.8	7.5	5.6	3.7	2.8	2.2	2.6	2.2	3.0	2.5	2.6	3.6	3.0	3.9	9.8	4.6		
1970	2.8	5.6	4.5	3.7	2.6	2.4	2.6	2.2	2.9	2.7	2.8	3.5	2.5	3.6	11.5	3.9		
1971	2.7	6.4	3.7	4.1	2.4	2.2	2.4	2.4	2.3	2.7	2.8	3.7	2.3	3.6	14.0	2.7		
1972	2.9	5.8	4.0	4.9	2.5	2.4	2.4	2.2	2.3	3.0	2.9	3.5	2.4	3.7	10.0	2.5		
1973	2.9	4.4	4.0	4.9	2.6	2.3	2.2	2.1	2.2	2.9	3.0	3.6	2.7	3.2	8.0	1.4		
1974	2.8	7.1	4.6	4.8	2.6	2.1	2.2	2.2	2.2	2.7	2.5	3.2	2.9	5.0	7.3	1.8		
1975	2.7	8.5	4.2	4.3	2.4	2.2	2.2	2.3	2.2	2.3	2.2	2.7	3.1	4.5	7.0	2.4	17.5	
1976	2.9	4.8	5.4	4.8	2.6	2.7	2.3	2.2	2.6	2.3	1.9	2.4	3.4	3.3	13.3	3.7	12.7	
1977	2.9	4.3	4.6	4.5	2.5	2.9	2.2	2.5	2.6	2.2	2.0	2.8	3.1	3.1	11.8	3.8	12.2	
1978	3.0	5.8	5.1	5.3	2.7	3.0	2.4	2.8	2.4	1.9	2.2	3.0	3.2	3.3	10.9	10.0	10.3	5.7
1979	3.1	4.2	5.3	5.3	2.8	3.3	2.4	3.0	2.6	2.0	2.3	2.8	3.5	2.9	10.2	5.3	7.2	5.4
1980	3.1	4.9	6.0	5.6	3.1	3.2	2.4	2.6	2.4	2.0	2.3	3.2	3.9	3.1	8.8	6.4	7.4	3.6
1981	3.2	8.6	6.2	5.3	3.5	3.0	2.2	2.5	2.4	2.2	2.7	3.4	3.6	3.2	6.5	6.6	5.4	5.4
1982	3.4	7.9	7.8	6.0	4.0	3.2	2.7	2.4	2.3	2.4	2.6	3.1	3.8	3.6	6.2	5.5	5.7	1.3
1983	3.5	5.6	7.7	6.4	4.5	3.4	2.5	2.3	2.5	2.7	2.8	3.2	3.3	3.9	6.3	8.1	7.8	4.2
1984	3.5	8.0	6.4	6.6	4.4	3.3	2.5	2.3	2.3	2.6	3.1	3.1	3.3	4.1	6.3	8.5	10.1	4.1
1985	3.6	8.8	5.5	6.5	5.2	4.1	2.9	2.8	2.3	2.9	3.6	3.3	4.4	5.6	7.3	7.1	18.1	7.9
1986	3.7	7.6	5.5	6.7	5.2	4.3	3.1	2.8	2.2	2.8	3.6	3.3	4.9	9.0	4.8	6.1	32.9	6.8
1987	3.7	11.9	5.9	6.2	4.7	3.5	2.9	2.7	2.2	2.9	3.9	3.3	3.6	8.9	4.7	7.4	34.8	
1988	3.8	27.9	5.8	6.8	5.2	3.4	3.1	2.6	2.4	2.7	3.8	4.0	4.2	6.2	5.1	5.5	13.6	
1989	4.0	5.8	7.3	7.3	5.0	3.9	3.2	2.7	2.5	3.3	3.9	4.2	4.1	6.9	5.2	6.4	19.3	
1990	4.0	3.9	6.6	7.4	5.0	4.1	3.6	2.7	2.6	3.1	3.9	3.8	4.5	4.5	5.9	7.7	8.4	14.3
1991	4.1	2.5	6.6	7.4	5.2	4.3	3.6	2.8	2.9	2.9	4.0	3.9	4.4	4.2	8.8	6.1	11.4	17.3
1992	4.1	2.3	5.5	7.5	5.5	4.8	3.9	2.8	3.0	3.1	3.9	4.0	4.9	4.1	8.5	6.2	11.3	16.6
1993	4.1	1.4	5.4	6.8	5.2	4.7	3.9	2.7	3.1	3.1	3.6	3.6	5.0	4.9	8.1	6.7	15.1	15.2
1994	3.8	1.6	4.8	6.4	5.4	5.3	3.7	2.5	2.6	2.9	3.0	3.9	4.9	4.6	7.0	7.4	15.4	11.3
1995	3.9	1.4	4.9	6.2	5.2	4.8	3.6	2.8	2.8	3.1	3.0	4.0	5.0	5.0	6.3	5.6	14.3	24.2
1996	3.8	1.5	3.9	5.7	4.8	4.8	3.6	3.0	2.7	3.2	2.9	4.0	4.9	4.6	6.1	8.1	8.7	15.5
1997	3.7	1.6	3.8	6.0	4.6	4.7	3.6	2.9	2.9	3.2	3.1	3.5	3.6	4.9	6.6	6.7	6.3	12.1
1998	3.7	2.5	3.8	5.6	5.1	5.0	3.4	3.0	2.8	3.3	3.2	3.6	3.2	4.8	6.5	7.3	7.2	28.9
1999	3.9	2.1	3.5	5.4	5.3	4.4	3.6	3.5	3.2	3.4	3.7	3.4	3.0	5.2	6.9	7.8	7.3	18.4
2000	3.8	1.9	3.1	5.4	5.4	4.6	3.4	3.2	3.2	3.3	3.1	3.9	2.7	5.4	7.9	9.2	5.9	11.8
2001	3.8	1.8	3.1	5.1	5.5	4.7	3.5	3.2	3.1	3.2	3.6	4.0	2.6	6.7	8.4	9.1	9.2	8.0
2002	3.6	1.9	2.7	4.6	5.1		3.2	3.4	3.0	2.8	3.3	3.9	2.7	5.7	8.8	10.1		8.0
2003																		
2004																		

Appendix B: New Brunswick

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	4.1			3.6	3.6	2.5	2.4	4.7	4.3	3.5	9.4	3.3	3.5	1.6		4.5		
1953	4.1			6.3	2.2	5.1	2.4	3.2	1.7	2.8		5.4	3.5	1.6		0.9		
1954	4.2				4.0	2.5	1.7	3.2	0.8	2.5	11.6	10.9	3.9	1.6				
1955	5.6				3.6	4.2	2.5	3.5	1.8	1.6	14.0		7.0	2.4				
1956	4.7				11.4		2.5	1.4	1.3	2.3	14.7	10.6	5.4			0.0		
1957	4.8				8.7	4.2	5.0	1.8	3.7	2.8	7.0	13.0	4.2		7.2	0.0		
1958	4.9				13.5	8.6	5.8	1.2	5.6	2.6	5.7	13.0	3.3		7.0	0.0		
1959	4.6				10.1	3.1	7.8	1.8	5.8	3.2	5.3	15.5	2.5	3.5	6.9	0.0		
1960	3.9					3.8	4.3	1.4	3.6	2.5	3.6	6.3	4.9	2.6	7.6	0.0		
1961	4.4		6.6		7.6	2.8	2.6	4.5	4.8	2.3	2.7	13.8	4.9	0.9	6.7			
1962	4.2		4.1	15.0	6.3	4.0	3.4	4.6	2.8	1.9	2.0	11.9		0.0				
1963	4.2		4.5	12.4	8.4	3.2	2.9	11.8	2.8	2.9	2.1	6.9	8.1	0.0				
1964	4.5		3.6	6.3	7.1	7.8	3.2	3.9	5.2	3.9	2.6	7.6	9.0	0.0				
1965	4.5		2.6	5.1	7.6		3.2	1.8	7.9	5.9	2.5	12.8	4.5	1.4				
1966	3.7		3.5	5.2	11.7		3.4	1.7	9.9	2.1	3.0	5.7	4.1	1.8	3.0			
1967	3.3		9.8	7.6	4.3	12.6	2.6	1.2	9.3	1.8	2.6	2.8	3.6	6.5	2.0			
1968	2.8		7.3	6.9	2.5	3.4	2.6	1.2	11.8	1.1	2.5	3.1	2.2	5.6	3.0			
1969	3.2		6.5	8.6	2.5	4.2	5.0	1.3	6.2	1.5	2.6	3.3	2.9	5.9	2.9			
1970	2.9		5.9	8.3	3.3	4.3	4.2	2.9	4.4	1.2	1.8	2.3	4.4	4.0	2.9			
1971	3.3		7.4	6.5	1.7	3.6	7.4	3.6	3.5	2.0	2.0	2.2	2.9	4.0				
1972	4.4		15.3	10.2	2.6	6.2	10.5	7.8	3.4	2.9	2.4	2.9	1.8	3.9	5.5			
1973	4.5		6.4	6.8	2.1	23.7	10.6	4.3	2.0	5.0	2.5	3.1	2.3	2.5	3.3			
1974	4.8	5.4	6.0	8.6	2.5	10.6	4.6	3.6	6.9	4.3	2.6	4.6	1.4	5.0	1.7			
1975	4.5	4.6	7.2	6.1	3.3	10.4	2.2	3.9	5.9	3.4	2.3	5.7	1.2	8.7	2.7			
1976	4.9	3.9	4.9	7.9	5.8	8.6	2.1	3.3	7.1	3.7	2.9	7.1	2.0	9.4	2.7			
1977	4.7	2.4	4.8	8.3	7.8	5.8	1.9	3.6	5.3	3.1	4.8	5.4	2.8	6.8				
1978	5.8	2.4	8.4	10.7	12.2	4.1	2.4	7.0	5.5	4.3	6.6	4.3	5.6	6.6	9.8			
1979	6.1		6.8	13.9	12.4	4.0	2.5	9.1	5.2	3.9	6.9	3.9	14.5	6.5	4.0			
1980	6.5		5.3	20.5	12.9	3.8	5.2	8.8	4.8	3.0	6.6	4.6	8.7	3.0	10.5			
1981	6.5		6.4	20.8	18.9	5.5	3.3	13.1	5.4	4.1	5.2	4.5	6.5	3.1	7.8			
1982	6.6		5.0	23.5	13.5	5.1	3.5	8.4	6.3	4.7	4.5	3.2	11.2	4.8	8.7			
1983	6.4		4.7	15.9	10.4	5.1	4.1	4.8	10.6	5.4	4.9	4.4	12.1	8.6	12.3			
1984	5.8		7.3	16.0	5.3	5.4	2.3	5.1	8.1	3.9	5.9	3.0	10.7	7.5				
1985	5.4		6.3	14.5	4.5	4.1	2.3	3.8	9.2	4.2	4.8	2.6	21.4		18.3			
1986	5.3		7.8	12.3	3.9	3.4	2.2	3.8	7.4	3.8	3.3	2.7	17.6		14.5			
1987	4.7		8.6	11.7	6.1	3.4	2.2	3.9	6.5	3.2	3.2	2.0	9.7		9.3			
1988	5.0		7.3	10.8	4.6	4.1	1.8	5.9	6.7	3.3	2.3	2.4	9.4	12.1	6.6			
1989	4.9		4.7	7.6	8.4	4.7	2.3	5.4	5.5	5.5	3.4	4.3	5.6	7.0	7.5			
1990	5.6		5.6	9.5	7.1	5.6	2.4	6.3	7.2	13.3	4.2	6.9	2.9	8.4				
1991	6.1		4.1	10.7	7.8	6.0	3.4	5.7	10.5		6.0	7.8	2.3	4.4				
1992	6.0		4.0	13.4	6.8	5.7	3.6	4.7	7.2	20.1	4.7	19.4	3.4	3.9			12.7	
1993	6.8		4.3	16.3	7.1	6.6	6.4	4.9	5.6	12.2	5.3	8.2	3.9	6.7			12.5	
1994	6.7		3.6	12.2	7.4	7.3	10.6	6.4	3.8	6.0	4.3	9.0	4.6	10.5			12.4	
1995	6.7		2.9	9.8	6.9	6.3	12.2	7.9	4.6	3.9	2.9	9.1	9.1	12.6			8.6	
1996	6.0		2.4	6.8	8.5	5.9	15.0	11.3	3.0	2.2	4.5	7.6	18.7	10.4		15.6	6.5	
1997	6.2		2.5	8.0	6.2	6.2	8.1	17.1	2.7	2.6	9.3	10.1	15.7	14.7		13.8		
1998	6.0		2.5	8.4	7.6	5.6	9.7	13.6	2.4	3.1	6.9		16.5	4.5		4.9		
1999	5.5		3.1	17.0	7.2	4.3	7.1	8.9	2.7	2.3	6.9	19.1		4.4		6.9		
2000	5.4		4.1	16.7	6.9	4.2	5.4	7.3	3.1	2.0	7.9	19.4		3.9		6.1		
2001	5.2		2.4	13.6	7.4	5.9	4.8	6.2	3.2	2.1	6.1	17.8		4.8		13.7		
2002	4.9		3.9	11.7	11.3	3.6	8.0	3.7	3.3	2.0	5.4	9.9		3.5		13.1		
2003					11.1													
2004																		

Appendix B: Nova Scotia

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 +
1950																		
1951																		
1952	3.2			1.2	7.3	2.9	3.4	3.4	2.9	4.2	2.9	0.9	3.7		1.9			
1953	3.3			0.5	9.8	8.5	3.1	3.7	3.0	3.6	2.3	0.9	5.7		1.7	7.3		
1954	3.2	0.0		0.8	9.1	6.0	1.9	4.1	4.3	2.9	1.9	1.3	5.7		5.3			
1955	4.0	0.0	5.9	1.7	10.8	5.1	1.8	4.2		1.7	3.0	3.0	5.6		3.4			
1956	3.8	0.8	4.0	1.9	10.1	2.8	1.3	2.2		1.5	5.7	13.9	4.8		3.4			
1957	5.6	0.8	4.8	3.6		4.4	2.1	3.2		1.7	15.4	17.0	4.6					
1958	4.3	1.5	1.8	3.9		2.3	2.0	2.7		1.6	17.2	17.8	2.3	7.0				
1959	4.4		1.7	7.0		2.2	2.2	3.2	18.7	2.4	16.2	8.4	2.8	6.9				
1960	4.6		3.9	6.9		2.2	3.1	3.3	6.8	4.0	13.6	5.0	2.3	3.9				
1961	4.3		2.1			2.7	2.7	5.8	4.7	4.6	10.9	4.2	2.4	3.9				
1962	4.0		2.3		8.7	2.5	3.1	8.4	3.9	3.4	2.6	4.1	2.4	3.3				
1963	4.7	2.4	3.3		11.0	2.5	3.1	9.0	4.4	7.9	5.3	3.9	2.6	5.4				
1964	5.0	4.0	2.4	8.8	7.1	2.9	6.2	9.4	4.7	5.6	6.8	5.3	1.8	5.8	3.8			
1965	5.6	4.0	2.6	12.8	3.4	4.1	6.7	7.0	12.0	7.7	6.5	4.3	2.3	11.8	4.7			
1966	5.4	5.6	4.4	14.9	2.7	4.6	14.1	4.8	9.3	7.1	4.0	5.2	2.2	5.2	4.7			
1967	5.7	3.2	5.9	7.1	4.7	8.2	14.1	5.3	6.2	11.2	6.0	4.6	1.9	9.7	3.5			
1968	5.8		4.8	8.1	3.3	7.3	13.6	4.9	4.5	9.3	4.0	4.8	4.2	11.7	3.0		1.2	
1969	6.4		8.4	15.3	3.0	22.4	12.7	3.9	5.8	9.5	3.3	5.9	4.4	5.4	8.2		2.3	
1970	5.2		10.6	11.4	4.5	7.4	5.5	3.7	3.9	9.1	4.1	6.9	2.5	6.9	2.7		1.2	
1971	5.3		10.1	7.7	3.8	10.2	4.3	4.4	3.8	8.8	4.7	4.4	2.3	5.0	1.8		1.2	
1972	5.1		11.8	5.9	4.7	6.0	4.2	4.1	7.6	8.5	4.0	3.8	2.5	5.9	1.1		0.0	
1973	5.1		22.6	5.6	4.2	6.6	5.7	3.9	4.6	10.0	5.1	5.1	2.2	3.3	0.7			
1974	4.7		13.6	5.6	3.4	6.6	6.3	4.2	3.0	12.4	3.0	4.3	2.0	6.4	0.4			0.0
1975	4.8		14.1	5.4	4.4	5.0	9.9	3.7	2.7	5.5	3.1	4.4	4.4	4.5	1.1			0.0
1976	4.4		7.1	6.0	2.9	5.0	9.7	3.4	2.7	3.1	3.1	5.9	4.5	6.9	2.3			0.0
1977	4.4		5.3	7.3	3.8	5.2	9.0	2.7	2.8	1.9	3.2	8.6	7.3	7.5	5.5			0.0
1978	4.8		5.7	7.4	4.7	3.9	6.4	3.1	4.8	1.6	4.5	7.0	10.1	7.3	8.3			0.0
1979	4.8		3.8	9.3	5.6	4.5	4.9	4.2	4.7	1.6	4.0	4.9	10.4	6.4	10.7			0.0
1980	4.7	3.7	2.9	11.4	5.7	5.1	5.2	5.9	3.8	2.0	3.3	7.6	5.1	7.1	4.0			0.0
1981	5.3	5.4	3.2	8.5	9.6	6.2	5.8	7.8	3.8	3.4	3.2	9.1	4.6	8.2	2.4			0.0
1982	5.7	3.9	4.4	6.6	14.0	7.1	4.9	9.0	3.7	5.8	4.7	6.1	3.5	8.3	2.3	7.5		
1983	5.4	5.5	3.9	5.9	9.8	6.6	4.7	12.1	2.6	5.8	4.8	12.4	3.2	8.3	2.2	8.9		
1984	5.2	4.0	9.4	5.0	6.2	5.1	5.0	5.9	2.8	3.7	7.0	29.3	2.2	11.7	2.9	4.3		
1985	6.1		20.1	5.5	6.9	3.0	4.6	5.5	3.8	3.7	17.8	16.7	5.3	8.7	4.8	6.8		
1986	5.5		20.9	5.3	5.1	3.0	4.5	4.4	4.3	3.2	7.2	10.2	7.1	8.3	8.3	5.1		
1987	5.6		13.6	8.0	5.7	3.8	3.9	2.9	3.6	4.0	6.1	13.8	7.6	6.7	8.6			
1988	5.3	8.4	11.6	5.7	5.5	3.7	3.7	2.9	4.4	3.3	6.3	9.6	5.7	6.8	20.4		1.9	
1989	5.4	6.2	10.8	6.1	8.7	3.2	3.4	3.4	3.2	5.9	4.7	4.3	6.2	6.8	23.9		3.8	
1990	5.2	4.6	9.4	5.6	6.6	5.7	4.1	3.3	3.1	5.2	3.8	5.9	3.1	12.5			6.9	
1991	5.1	1.2	7.0	6.7	9.7	7.1	4.8	3.7	2.9	5.0	4.9	3.9	3.2	5.8	9.7		8.5	
1992	4.9	1.2	8.9	4.8	7.3	6.8	4.8	4.5	3.1	4.5	5.0	4.0	2.8	6.1	7.2		13.1	
1993	4.7	3.2	8.3	8.7	6.0	5.8	3.9	3.9	3.9	6.6	3.0	2.5	3.2	10.3	3.6			
1994	4.5	4.0	7.4	6.2	5.6	4.0	4.1	2.9	4.6	7.9	5.1	5.0	2.9	7.5	2.6			
1995	5.4	4.8	4.8	7.6	6.0	5.1	5.4	3.7	4.9	8.2	6.7	4.3	4.8	10.3	2.4			
1996	5.6		9.2	5.5	6.2	3.3	4.4	3.2	8.0	8.4	6.6	10.7	4.0		5.6			
1997	5.3		6.4	5.7	4.9	3.2	4.0	3.0	12.1	9.1	5.6	11.8	3.9		3.9			
1998	6.0	5.5	8.9	5.4	5.4	2.2	6.3	3.8	16.7	5.6	6.9	28.1	5.6		8.5			
1999	6.1	3.9	5.3	5.9	4.1	2.7	6.8	5.5	15.0	3.9	10.1	14.6	6.4		9.0		4.0	
2000	5.0	4.7	3.5	5.4	2.6	2.1	5.5	4.6	10.9	3.7	6.3	5.1	6.0		7.8		5.4	
2001	4.9	3.2	2.6	7.5	3.2	2.7	4.8	4.9	4.9	4.3	6.3	4.9	8.4		6.6	10.7	7.2	
2002	4.9	3.2	3.2	5.7	2.4	4.1	4.8	3.8	4.5	5.3	4.9	5.0		22.9	9.3	11.8	10.5	
2003																		
2004																		

Appendix B: Prince Edward Island

	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951	23.8																	
1952	8.3																	
1953	8.8													0.0				
1954	8.1								2.2					0.0				
1955	6.3								2.8		1.5			0.0				
1956	4.3		0.0						2.1		1.5			0.0				
1957	8.5		0.0				1.7		2.1		0.0			0.8				
1958	8.1		0.8				3.3		0.7		0.0			1.7				
1959	9.2		0.8				4.2				0.0							
1960	8.6		1.6	0.8			4.2			2.3								
1961	7.4			1.6			4.1			3.8		0.0						
1962	5.7			2.4				1.6		4.4		0.8						
1963	5.4		0.9	2.4				1.6		4.4		0.8						
1964	3.0		1.7	1.6				0.4		4.4		0.8						
1965	3.8		0.9					0.3	3.3	2.3		1.6		3.7	2.0			
1966	2.9		1.6					0.8	2.4	4.1		2.3		2.8	1.0			
1967	4.0		1.5			2.4		1.2	2.5	2.9			1.6	0.9	1.0			
1968	4.5					4.8	3.2	1.6	1.7	2.9			2.4	0.0	0.0			
1969	9.5					3.2	3.2	2.5	1.7	3.8			0.8	2.8	0.0			
1970	8.2					4.0	3.9			6.0			0.8					
1971	11.7					4.0	3.9			5.1			0.4					
1972	8.6			0.8		6.3	4.6			4.3			0.8					
1973	7.4			1.2		4.6				2.6			3.2					
1974	7.1		4.3	3.6					0.8	4.3		2.2	3.1					
1975	6.0		7.6	4.4					2.5	3.4	8.0	1.8	5.4					
1976	5.0		3.3	3.8					1.6	3.4	3.6	2.2						
1977	5.6		4.5	3.7					4.8	3.0	2.7	2.2						
1978	6.5		3.2	6.9					1.6	3.4	1.8	2.2	2.0					
1979	6.4		7.3	4.2					4.3	2.9	1.3		1.0					
1980	6.2		4.7	3.3					3.5	2.5	2.7		0.0					
1981	7.1			5.0	3.5		5.7	3.4	3.9	5.7			0.0					
1982	5.6			5.8	1.7		4.4	2.5	1.3		1.7		0.0					
1983	4.0			6.0	0.9	6.0	2.5	3.2	4.1		1.7							
1984	3.0		2.9	4.7	0.6	7.7	2.4	2.2	1.6		0.8							
1985	3.9		2.2	7.1	1.0	5.9	1.6	3.0		4.1	0.8							
1986	4.0		1.6		1.7	6.6	2.9		1.6	1.6	1.6		1.0					
1987	6.0		0.8		1.3	4.8	1.2			1.6	4.7		1.0					
1988	7.7		4.1		1.4		1.7			3.2	7.8		1.9					
1989	10.1				1.4		1.6			5.6	7.0		1.4					
1990	10.7		5.9		1.7		5.7			7.1			2.8					
1991	8.2		5.2	2.0	2.0	3.5	8.9		11.5			2.6	4.7					
1992	5.4		4.5		3.0	2.2	3.1		6.8	7.2		4.2	1.9					
1993	5.4		5.3		2.2	2.6	2.7		4.4	5.2		0.8	2.3					
1994	4.9		3.0			2.6	3.8		4.4	5.6		1.1	2.8					
1995	4.9					1.7	2.9	8.8	4.7	5.2		0.6	2.7					
1996	5.1			0.8	6.3	1.7	10.9	9.5	2.1	5.2		1.3		0.0				
1997	5.0			0.8	6.1	1.2		5.9	2.6	7.0		0.8		1.0				
1998	5.6			0.8	6.1	0.8		3.4	6.8			1.7		2.0				
1999	4.5			2.5	5.2	3.1		2.1	2.9	5.4				1.5	5.7			
2000	4.5			3.4	3.5	2.4	5.5	3.9	3.5	6.1				1.5	5.7			
2001	3.8					2.8	1.5	3.4	2.3	3.4	8.1			3.8	4.5			
2002								4.7						3.7	3.4			
2003																		
2004																		

Year	all ages	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90+
1950																		
1951																		
1952	6.0				1.2	3.3			4.0	4.0								
1953	5.0				1.2	1.7			6.1	3.2		1.9		0.0				
1954	4.4				4.9	0.8	4.7		3.0	1.6		1.9		0.0				
1955	4.4				4.8		1.2		4.3	1.5		3.8						
1956	5.8						1.1		1.3	1.1		2.8						
1957	12.1					5.5	0.7			4.1		2.4						
1958	19.6					7.0	1.5			2.6		1.9						
1959	16.7						4.5			6.2		0.9			4.1			
1960	19.2					7.1				2.9		0.0			5.7			
1961	7.3			10.2		3.5			3.9	2.3	2.8	0.4			3.3			
1962	7.0			9.9		3.1			3.8	1.4	3.1	0.8			2.4			
1963	8.0					3.6			6.7	1.3	3.0	2.4			0.0			
1964	13.5			10.9		3.6			9.6	2.3	2.5							
1965	13.9			10.7	10.4	4.0			11.1	1.9	2.3		5.1					
1966				8.2	14.8	6.8				4.2			4.1					
1967					8.9	5.1				1.7		4.4	3.1					
1968					14.0							3.0						
1969	13.0			1.9	9.2		7.0	3.9		8.7	1.2	4.9	1.0					
1970	8.6			2.2	10.8		9.4	1.8		3.5	1.5	3.8	1.8					
1971	6.2			3.1	5.6		6.9	1.8		3.1	1.7	5.4				1.8		
1972	6.2			3.1	3.7		6.9	2.3		2.7	1.7					1.8		
1973	6.5			8.5	2.9		5.9	1.8		2.4	2.3					3.5		
1974	6.4			3.8	2.7		5.6	2.6		7.9	3.9	3.3				1.8		
1975	11.9			4.6	9.5		7.1				3.0	3.3				1.8		
1976	11.0			2.9	4.0		2.4	6.1		8.4	5.9	4.0						
1977	12.6			3.8	5.7		2.4	6.9		3.3	9.1	4.7						
1978	11.7			6.2	3.5		1.5	6.1		5.0	8.2	6.3						
1979	11.9			16.8	2.9	11.2	3.0	2.7		4.5	2.4							
1980	12.6			18.5	2.3	15.7	2.2	3.0		5.3	6.4	5.4						
1981	11.8		8.4	21.1	4.8	8.3	5.2	7.6	10.7	4.4	4.0	3.8						
1982	9.7		5.2	21.7	4.8	11.5	2.9	8.3	4.1	7.9	7.2	3.8						
1983	9.9		4.4	20.7	5.2	9.8	4.8	10.1	3.3	7.0	6.4	6.3						
1984	8.8		4.3	19.7	9.9	10.5	4.0	11.4	1.8	5.5		5.9	2.7	2.1				
1985	6.2		2.5	14.8		5.9	4.3	13.5	1.9	5.4		3.6	3.1	0.9				
1986	7.7		5.4			7.3	8.3	13.3	1.6	4.0		3.3	2.3	0.9			1.5	
1987	8.1					8.1		13.7	3.2			1.4	2.3	2.8			3.1	
1988	5.6		5.1	18.3		3.8	18.8	4.4	1.9	2.0		2.2	3.2	4.6			1.5	
1989	6.2		4.4	21.6		4.5	9.8	5.4	3.3	2.8		2.2	8.8	6.8			3.1	
1990	7.1		4.6	12.8		4.9	7.9	6.5	3.9	2.7		5.8	9.7	8.6			1.5	
1991	5.3		4.9	5.5	18.9	3.9	4.9	4.0	3.1	5.2	9.7	2.3		8.5				
1992	5.4		4.6	5.2	5.5	4.0	5.3	5.1	1.8	11.6	5.3	3.9		4.7				
1993	6.5		10.8	5.5	5.0	4.2	5.3	18.9	2.0		3.3	2.5		4.2				
1994	7.0		14.5	5.2	4.8	4.4	7.5	25.3	2.1	23.2	3.2	3.3		7.6				
1995	5.4			6.6	4.3	5.4	5.7	7.2	1.5	7.6	1.8	2.3		6.7				
1996	6.2				2.6	7.1	4.2	12.2	2.3	4.7	2.9	5.0		4.8				
1997	6.0		5.7	19.8	3.8	11.4	4.5	5.3	6.4	4.0	4.2	4.1						
1998	5.8	2.3	3.3	26.1	2.9	21.4	5.0	5.4	3.6	5.4	11.5	3.7						
1999	5.6	3.1	3.4	19.9	2.4		5.0	5.4	2.7	5.1	6.5	2.4	5.3					
2000	7.0	2.4	3.8	7.8	2.7		3.8	4.6		4.0	7.8		7.0					
2001	5.4	0.8	2.8	5.6	9.1	17.6	3.8	17.2		4.8	7.7		7.7					
2002	4.7	0.4	3.6	6.4	14.3	9.8	2.1	6.2			4.3		6.9	4.7				
2003								4.8										
2004																		