In North America, the great public-health challenge of the past century was basic sanitation -- getting clean water and sewage services to the masses. Doing so (in combination with basic childhood immunization) dramatically reduced the sickness and death from infectious disease and reshaped society and health-care delivery in the process.

Now, the challenge is to take on the remaining big killers -- slowly developing chronic illnesses, including cardiovascular disease, cancer and diabetes. What these chronic illnesses have in common is that their roots and evolution depend heavily on lifestyle, from a person's socio-economic status (income, housing, environment) through to his or her food choices and levels of physical activity.

Lifestyle, in turn, is profoundly influenced by media. What we hear on the radio (satellite and otherwise), see on TV, view on the Web, shapes who we are -- what we eat, where we live, how we dress, what we think and what we do. As technology becomes more advanced and communication tools more varied and widely available, we need to recognize that media are a major public issue.

There are now, in Canadian homes, more TVs than toilets, and violent, sexually charged images are as readily accessible in most homes as clean water. For our children -- the text-messaging, BlackBerry-toting, iPod-wearing, video-game-playing, multihundred-TV-channel-inhabiting, multitasking cognoscenti generation -- the topic of media is probably the major public issue of our time.

To date, we have, in Canadian society, viewed media as little more than a series of commercial (and, in some cases, non-commercial) endeavours in need of regulation. This approach is quaint and outdated, and it ignores the profound influence that media have on people -- and children in particular. It also fails to address the reality that media influence virtually every aspect of child health -- basic health (such as immunization choices), risk-taking, views on violence, obesity, tobacco, alcohol and drug use, and sexual behaviour.

Media immersion begins early with Baby Einstein videos and Teletubbies before children can even walk or talk, and then it soars. According to a study by the Kaiser Family Foundation in the United States, children aged eight to 18 have an average media usage of six hours and 21 minutes daily. What that means, practically, is that half of all children's waking hours are spent staring at a TV or computer screen. Two in every three school-age children have TV sets in their bedrooms, and one in three has a computer with Internet access.

Fewer than half of parents have rules limiting the time or type of shows and Net sites viewed, and fewer still enforce them. This steady diet of TV, video and more has repercussions on children's cognitive, social and behavioural development, as evidenced by this week's edition of the Archives of Pediatric & Adolescent Medicine. The studies featured on children and the media include the following observations:

Adolescents who play violent video games have higher blood pressure, and more anti-social behaviours.

The more children watch TV, the fewer friends they have.

And the more kids watch TV, the more calories they consume.

Adolescents who watch a lot of TV tend to engage in sex at a younger age, particularly if viewing is unregulated.

While this is interesting, Dimitri Christakis of the Child Health Institute, in Seattle, notes that much media research involves small groups and there is little follow-up. Almost all research tends to be adversarial (based on the assumption all TV is bad) and outdated (where is the research on Internet usage?).

"Television and other media must be viewed as more than sources of evil or mere idle pleasures; their potential to enrich the lives of our children are, in fact, enormous and that potential needs to be explored," Dr. Christakis writes.

It is impossible to stem the tide of growing media usage. But we can understand the influences of the media, good and bad, and their impact on our health, individually and collectively. A first step is to understand the purchase the media have on our lives. Adults who grew up before the media explosion like to pretend that
they limit their usage, and they wring their hands worriedly when they speak of their perpetually plugged-in children.

Yet, the reality is that adults are themselves addicted to their BlackBerries, laptops, iPods and TiVs. "Is updating one’s to-do list every 15 minutes really better than idly playing Pokémon Emerald?" Dr. Christakis says. "Is checking e-mail at every free moment functionally different from instant messaging one’s adolescent friends?"

The media are an intimate part of our lives -- no matter how young or old we are. We need to understand their effects, and how to make them more positive than negative. And, in the process, we need to make our children media literate.

Doing so is as important to our health as bringing clean water into our homes, and efficiently removing human waste.