SCIENTIFIC CAREERS

IN

HEALTH CANADA

Dr. Ekaterina Zubkova

Health Canada   Santé Canada

Outline
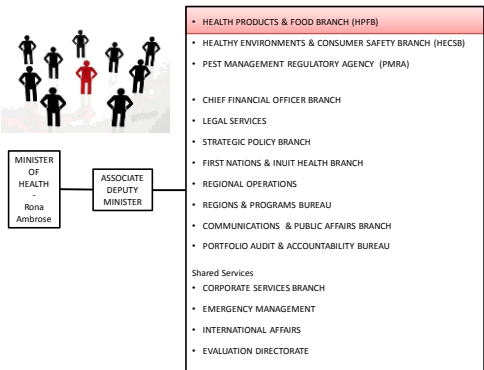
1. Overview of Health Canada:
   - Location
   - Organizational Structure
   - Health Canada Mission Statement

2. What Health Canada does:
   - Pharmaceutical Life Cycle in Canada
   - Health Products and Food Branch
   - How do we Regulate?

3. Jobs at Health Canada:
   - Health Canada as Employer
   - Applying for a Job at Health Canada
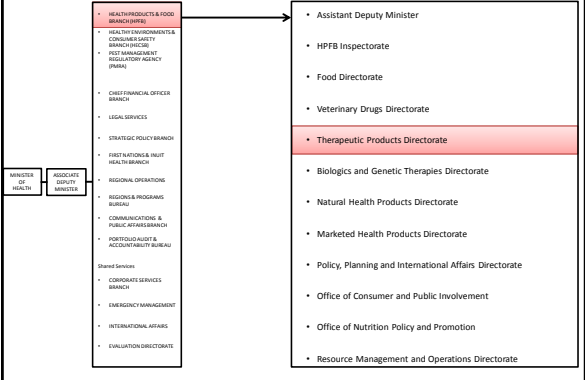   - Candidate Selection Process

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Location

- Central campus in Ottawa
- Multiple other locations in Ottawa
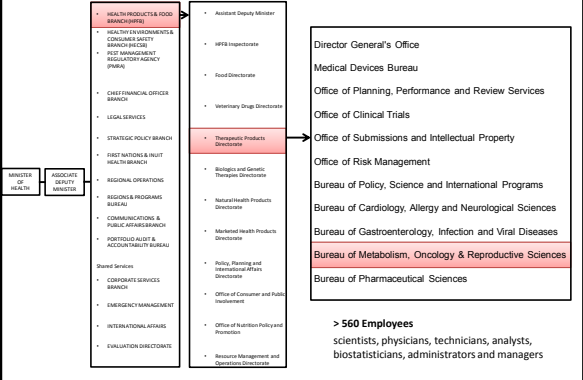- Regional offices throughout Canada

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Organizational Structure

MINISTER OF HEALTH - Rona Ambrose → ASSOCIATE DEPUTY MINISTER

- HEALTH PRODUCTS & FOOD BRANCH (HPFB)
- HEALTHY ENVIRONMENTS & CONSUMER SAFETY BRANCH (HECSB)
- PEST MANAGEMENT REGULATORY AGENCY (PMRA)
- CHIEF FINANCIAL OFFICER BRANCH
- LEGAL SERVICES
- STRATEGIC POLICY BRANCH
- FIRST NATIONS & INUIT HEALTH BRANCH
- REGIONAL OPERATIONS
- REGIONS & PROGRAMS BUREAU
- COMMUNICATIONS & PUBLIC AFFAIRS BRANCH
- PORTFOLIO AUDIT & ACCOUNTABILITY BUREAU

Shared Services
- CORPORATE SERVICES BRANCH
- EMERGENCY MANAGEMENT
- INTERNATIONAL AFFAIRS
- EVALUATION DIRECTORATE

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HPFB →
- Assistant Deputy Minister
- HPFB Inspectorate
- Food Directorate
- Veterinary Drugs Directorate
- Therapeutic Products Directorate
- Biologics and Genetic Therapies Directorate
- Natural Health Products Directorate
- Marketed Health Products Directorate
- Policy, Planning and International Affairs Directorate
- Office of Consumer and Public Involvement
- Office of Nutrition Policy and Promotion
- Resource Management and Operations Directorate

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Therapeutic Products Directorate →
- Director General's Office
- Medical Devices Bureau
- Office of Planning, Performance and Review Services
- Office of Clinical Trials
- Office of Submissions and Intellectual Property
- Office of Risk Management
- Bureau of Policy, Science and International Programs
- Bureau of Cardiology, Allergy and Neurological Sciences
- Bureau of Gastroenterology, Infection and Viral Diseases
- Bureau of Metabolism, Oncology & Reproductive Sciences
- Bureau of Pharmaceutical Sciences

> 560 Employees
scientists, physicians, technicians, analysts, biostatisticians, administrators and managers

Mission Statement

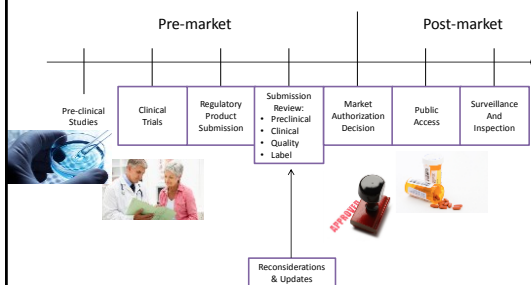"That's our mission statement. If people follow that, everything else seems to fall into place."

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health.

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Pharmaceutical Life Cycle in Canada

Pre-market | Post-market

Pre-clinical Studies | Clinical Trials | Regulatory Product Submission | Submission Review: • Preclinical • Clinical • Quality • Label | Market Authorization Decision | Public Access | Surveillance And Inspection

Reconsiderations & Updates

Data for One New Drug Submission

Review time for a new drug product is about 1 year

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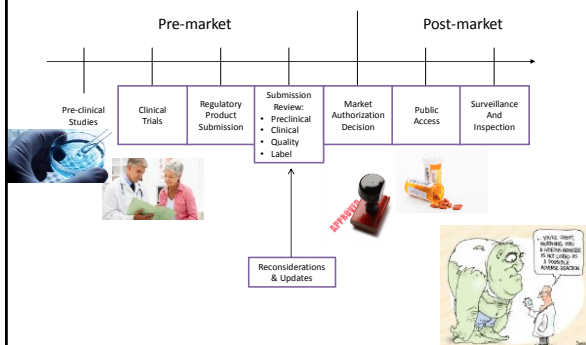
Health Products and Food Branch

- All drugs sold in Canada must be authorized by Health Canada

- As of 2013:
  - About 13,076 marketed human drugs (Rx 9,876, Non-Rx 3,200)
  - About 6,575 human drugs approved, but not marketed
  - About 1,078 marketed disinfectants
  - About 474 disinfectants approved, but not marketed

- All clinical trials conducted in Canada must be approved by Health Canada

- About 1,400 Clinical Trials are submitted to Health Canada for approval every year

How do we Regulate?

Guidelines: Canadian, International

Acts (ex. Food and Drug Act), Policies

Templates, SOPs

Standardized Regulatory Framework

Evaluation and Communication of Risks and Benefits
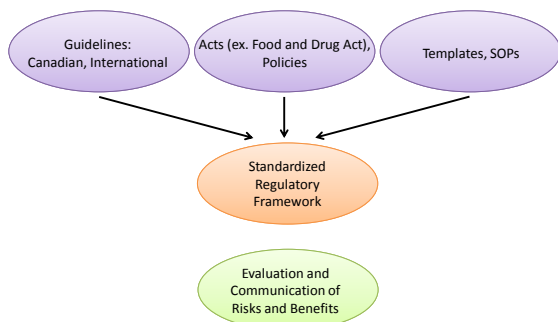
How do we Regulate?

Efficacy: the extent to which a treatment achieves its intended purpose and produces a beneficial result (indications, dosage schedules in adults and special populations)

Safety: the relative risk of harm (Contraindications, Warnings, Precautions, Adverse Reactions, Overdose)

Quality: accepted standards for the manufacturing and testing of drug products (Stability, Impurities, Performance characteristics, Sterility)

- Risk assessment, Risk/benefit assessment, Hazard assessment
- Characterize risks and develop strategies to manage them

Example

- A drug intended for the treatment of cancer may result in severe nausea. In weighing the benefits and risks, HC would consider the benefit (treating cancer) to outweigh the risk (nausea).

- However, for a drug treating a common cold, HC would be unlikely to consider severe nausea an acceptable risk.

- Lastly, for something like chronic pain management, the risk tolerance may be left up to the physician/patient through product labeling.

Additional Resources

Where to find Product Monographs:
Health Product Database
http://www.hc-sc.gc.ca/dhp-mps/prodpharma/databasdon/index-eng.php

How to do a basic toxicology risk assessment:
http://sis.nlm.nih.gov/enviro/toxtutor.html

Internationally accepted guidelines for drug safety, efficacy and quality:
http://www.ich.org/products/guidelines.html

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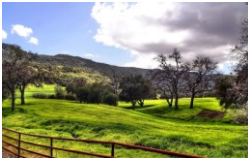   - Candidate Selection Process

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Health Canada as Employer

- "National Capital Region's Top Employer"

- "Canada's Best Diversity Employer"

- Competitive pay

- Benefits (medical, employment insurance)

- Pension

- Interesting and meaningful work

- Work/life balance

- Unionized

- Some dependence on political climate

Applying for a job at Health Canada

Current hiring landscape

- Jobs.gc.ca
- All current job openings in the Federal public service
- Special programs for students and graduate students
- Tips and suggestions on applying
- How to get ready for the job interview

Candidate Selection Process

1. Application
   Note closing date, keep a copy for reference

2. Screening
   Candidate must meet statement of merit criteria

3. Assessment

4. Development of Pool

5. Selection of Candidate from Pool

6. Right Fit Interview

Statement of Merit Criteria

Essential qualifications
- Refer to attributes the person must have to perform the work.
- Ex. Education, experience, official language proficiency, knowledge, abilities, occupational certification

Asset qualifications
- Refer to personal attributes that are beneficial to the work and not essential.
- Ex. A master's degree or speak Spanish.

Organizational needs
- Refer to the needs of the organization more than of the position, that are required to help achieve its mandate.
- Ex. The need to meet objectives for youth recruitment.

Operational requirements
- Refer to the needs of the position, rather than qualities of the person.
- Ex. Shift work or the need to travel.

You need to demonstrate that you meet all of essential and as many of asset qualifications as you can.

Meeting the Merit Criteria

Take note of the **key words** that appear in the job posting
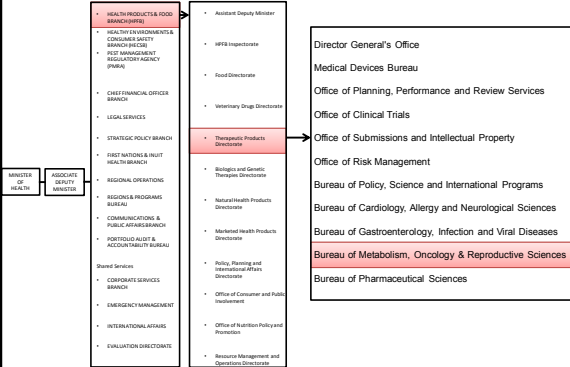
Use concrete examples:

5 Ws and H
- What you did
- Where you did it
- Who you did it for
- When (frequency/duration)
- Why (results/success)
- How (tools/processes used)

STAR Framework
- What was the Situation?
- What was your TASK?
- What Action did you take?
- What was the Result?

This will provide the screening board with enough **scope** to assess your experience and will best present any **transferable experience**

If you were successfully screened in, you'll be **assessed** against all of the Essential qualifications & some or all of the Asset qualifications

Candidate Selection Process

1. Application
   Note closing date, keep a copy for reference

2. Screening
   Candidate must meet statement of merit criteria

3. Assessment
   Standardized tests, written exams, interviews, reference checks

4. Development of Pool
   Candidate pool may stay 'valid' for several years

5. Selection of Candidate from Pool

6. Right Fit Interview

Organizational Structure

GEDS

Government Electronic Directory Service

http://sage-geds.tpsgc-pwgsc.gc.ca/

Bureau Director

Bureau Associate Director

Manager

Friend

Conclusion

Health Canada is employer to thousands of scientists

Wide spectrum of scientific jobs to ensure that Canadians can maintain and improve their health

Risk characterization and risk management is common to many positions

Health Canada is a very attractive employer

Use jobs.gc.ca to apply

See you in Ottawa!