EXECUTIVE SUMMARY

Androscoggin Valley Hospital, Upper Connecticut Valley Hospital and Weeks Medical Center ("AVH, UCVH, and WMC" or the "Facilities") has performed a Community Health Needs Assessment to determine the health needs of the Greater Northern New Hampshire Region.

Data were gathered from multiple well-respected secondary sources to build an accurate picture of the current community and its health needs. A survey of a select group of Local Experts was performed to review the prior CHNA and provide feedback, and to ascertain whether the previously identified needs are still a priority. Additionally, the group reviewed the data gathered from the secondary sources and determined the Significant Health Needs for the community.

The 2019 Significant Health Needs identified for Coos and Grafton Counties are:

- 1. Drug/Substance Abuse
- 2. Mental health
- 3. Obesity/Overweight
- 4. Accessibility (Transportation, Disability, Access to Care, etc.)
- 5. Alcohol Abuse
- 6. Affordability
- 7. Dental

The facilities have developed their implementation strategies for these seven needs including activities to continue/pursue, community.

IMPLEMENTATION STRATEGY

Significant Health Needs

AVH, UCVH and WMC used the priority ranking of area health needs by Local Expert Advisors to organize the search for locally available resources as well as the response to the needs by AVH, UCVH, and WMC.² The Implementation Strategy includes the following:

- Identifies the rank order of each identified Significant Need
- Presents the factors considered in developing the ranking
- Establishes a Problem Statement to specify the problem indicated by use of the Significant Need term
- Identifies AVH, UCVH and WMC current efforts responding to the need including any written comments received regarding prior AVH, UCVH and WMC implementation actions
- Establishes the Implementation Strategy programs and resources AVH, UCVH and WMC will devote to attempt to achieve improvements
- Documents the Leading Indicators AVH, UCVH and WMC will use to measure progress
- Presents the Lagging Indicators AVH, UCVH and WMC believes the Leading Indicators will influence in a positive fashion, and
- Presents the locally available resources noted during the development of this report as believed to be currently available to respond to this need.

All statistics analyzed to determine significant needs are "Lagging Indicators," measures presenting results after a period of time, characterizing historical performance. Lagging Indicators tell you nothing about how the outcomes were achieved. In contrast, the AVH, UCVH and WMC Implementation Strategy uses "Leading Indicators." Leading Indicators anticipate change in the Lagging Indicator. Leading Indicators focus on short-term performance, and if accurately selected, anticipate the broader achievement of desired change in the Lagging Indicator. In the QHR application, Leading Indicators also must be within the ability of the Facility to influence and measure.

² Response to IRS Schedule H (Form 990) Part V B 3 e

1. DRUG/SUBSTANCE ABUSE

- 72% of local experts ranked drug/substance abuse as a top five health concern in the community
- Coos County's drug overdose death rate is worse than the state average and US median
- Mental and substance use related deaths
 - Coos County:
 - Male rate is worse than the national average and increased 433.2% from 1980-2014
 - Female rate is average but increased 430.3% from 1980-2014
 - Grafton County:
 - Male rate is average but increased 326.0% from 1980-2014
 - Female rate is average but increased 353.3% from 1980-2014

2. MENTAL HEALTH

- 70% of local experts ranked mental health as a top five health concern in the community
- Suicide is the #9 leading cause of death in both Coos and Grafton Counties
- The rate of Coos County residents that reported poor mental health days in the last 30 days is worse than the US median
- Coos County's population to mental health provider ratio is worse than the state average
- Mental and substance use related deaths
 - Coos County:
 - Male rate is worse than the national average and increased 433.2% from 1980-2014
 - Female rate is average but increased 430.3% from 1980-2014
 - Grafton County:
 - Male rate is average but increased 326.0% from 1980-2014
 - Female rate is average but increased 353.3% from 1980-2014

5. ALCOHOL ABUSE

- 35% of local experts ranked alcohol abuse as a top five health concern in the community
- Residents of Coos County are 8.8% more likely to consume 3+ drinks per session compared to the national average, and affects 30.6% of the population
- Liver disease is the #11 leading cause of death in Coos County and then #12 in Grafton County
- Coos County's alcohol-impaired driving deaths is worse than the US median
- Liver disease related deaths
 - Coos County:
 - Male rate is better than the national average and decreased -33.1% from 1980-2014
 - Female rate is worse than the national average and increased 16.2% from 1980-2014
 - Grafton County:
 - Male rate is better than the national average and decreased -28.4% from 1980-2014
 - Female rate is better than the national average and decreased -19.1% from 1980-2014

Due to the similar services, programs, and resources available to respond to these needs, only one implementation strategy is being created.

AVH, UCVH, and WMC services, programs, and resources available to respond to this need include:³

- The Doorway Program available at **AVH**; Connects patients with the appropriate addiction support and services
- Telepsych services available through Emergency Department 24/7
 - For those who are in need of voluntary placement for mental health issues, emergency department utilizes DHMC Telepsych services 24/7
 - For those who need involuntary placement, the Northern Human Services Tele psych services are used and available 24/7
- Education regarding Naloxone (Narcan) given during CPR/BLS/First Aid Community Trainings
- 24/7 emergency medical treatment and referral services through the emergency department
- Narcan kits are distributed to patients who are at high risk (history of overdose or high dosage of prescribed narcotic/opioid) who are seen in the emergency department
- Medication/drug deactivation disposal kits are distributed to patients in the emergency department who are prescribed narcotics for use when they have unused medications to be disposed
- Patient education is provided on opioid use and misuse to those who are prescribed narcotics/opioids in the emergency department
- A multi-disciplinary team including community mental health resources at AVH
- Mental health inpatient accommodations available
- Participating in the Behavioral Health Clinical Learning Collaborative that meets monthly to discuss the needs of the behavioral health patients in the emergency department. One of the current areas of focus are evaluating the tools utilized in the emergency department to screen the patient such as depression and suicidal screenings. The other current area of focus in evaluating how behavioral health patients are treated in the emergency department ensuring fair and equal treatment.
- Alcohol abuse education provided in emergency department
- WMC has two NCRC (North Country Recovery Center) clinics and provide staffing for AVH and Littleton Regional Healthcare hubs
- WMC support staff work with community health workers employed by NCHC, local public health agency
- WMC partnered with NCHC to develop a 24-7 call center for mental health and substance abuse
- WMC has a formal outpatient detox program and support for the inpatient program
- WMC has two master level LADC, one LADC, and two in process of being developed
- Refer patients to Alcoholics Anonymous and Narcotics Anonymous when necessary; **WMC** and **AVH** provide space for Alcoholics Anonymous

³ This section in each need for which the hospital/facility plans an implementation strategy responds to Schedule H (Form 990) Part V Section B 3 c

Additionally, AVH, UCVH, AND WMC plan to take the following steps to address this need:

- Initiation of the MAT (Medication Assisted Program) as part of the HUB program through AVH. Participants will see a Provider at UCVH who will do the required drug testing and prescribing of methadone. Counseling (both individual and group) will be offered weekly to the participants of the program.
- Installation of a medication drop box at UCVH in collaboration with the Colebrook Police Department where community members can drop off/dispose of unwanted/unused medications both prescription and over-thecounter medications
- Continue to expand the pain management program at **UCVH** which incorporates a behavioral health component and close monitoring of patients for potential opioid and substance misuse, while offering alternative pain management resources and behavior modification strategies
- Adoption of a common EHR in 2021 including a local FQHC
- Continue Behavioral Health Task Force internally and with multiple external partners
- WMC is planning to open a clinic in Colebrook and transition the Littleton Doorway to a stand-alone clinic in January 2020
- WMC is working on developing funding to work on a mobile van outreach clinic

AVH, UCVH, AND WMC evaluation of impact of actions taken since the immediately preceding CHNA:

- Implementation of the Doorway per recognition of problem but also state government mandate
- Increased use of Tele psych services now available in the emergency department for those needing voluntary/involuntary placement for mental health issues including medication adjustment and crisis counseling
- Increased collaboration with state facilities, as a whole, to focus on mental health, including substance misuse
- Creation and regular meetings of Behavioral Health Task Force at AVH; reduction in number of days of IEA inpatient boarding prior to transfer to NH Hospital
- WMC started a MAT (Medicated Assisted Treatment Program) in 2017, and expanded the program in 2018
- WMC grew mental health program from three providers to eight providers, increasing access in mental health and substance abuse disorder
- WMC added four case managers, four recovery coaches, and others in the queue for recovery coach training

Anticipated results from AVH, UCVH, AND WMC Implementation Strategy

Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1. Available to public and serves low income consumers	Х	

	Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
2.	Reduces barriers to access services (or, if ceased, would result in access problems)	Х	
3.	Addresses disparities in health status among different populations	Х	
4.	Enhances public health activities	Х	
5.	Improves ability to withstand public health emergency		х
6.	Otherwise would become responsibility of government or another tax-exempt organization	Х	
7.	Increases knowledge; then benefits the public	Х	

The strategy to evaluate AVH, UCVH, AND WMC intended actions is to monitor change in the following Leading Indicator:

- Reduction in number of patients from the Doorway Program referred from UCVH/Number of patients successfully receiving services with a goal of reduction in the number of patients who drop from the program
- Number of pain management prescriptions written per active patient
- Work with Drug Awareness Warning Network (DAWN) Look into potential measures

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Number of substance abuse related visits to the emergency department
- Number of substance abuse related diagnosis
- Number of substance abuse admits
- Decrease in number of patients admitted to the emergency department with behavioral health as a primary diagnosis
- **AVH** to look into potential measures related to behavioral health.
- IEA Patient Days
- Number of behavioral health admits and readmits

AVH, UCVH, AND WMC anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Weeks Medical Center	Christine Fortin	Christine.Fortin@weeksmedical.org
Coos County Family Health Services	Bridget Laflamme	blaflamme@ccfhs.org
American Heart Association	Laurie Daley	ldaley@ucvh.org
Weeks Medical Center	Christine Fortin	< <u>Christine.Fortin@weeksmedical.org</u> >
Indian Stream Health Center	Referral Coordinator – Krista Cotnoir	(603) 388-2484
Colebrook Police Department	Steve Cass	scass@colebrooknh.org
Northern Human Services	Rhonda Edwards	redwards@northernhs.org
Dartmouth Hitchcock Medical Center (DHMC)		(603) 650-5000 https://www.dartmouth-hitchcock.org/
Friendship House	Kristy Letendre	(603) 869-2210

Other local resources identified during the CHNA process that are believed available to respond to this need:⁴

Organization	Contact Name	Contact Information
Friendship House		(603) 869-2210
Tri-County Cap		(603) 752-7001
Berlin Police Dept.	Chief Peter Morency	(603) 752-3131
New England Security	Luc Poulin	(603) 449-2165
Alcoholics Anonymous		www.nhaa.net; (603) 622-6967
AL-ANON		www.nhal-anon.org; (603) 369-6930
Narcotics Anonymous		www.gsana.org; (888) 624-3578

⁴ This section in each need for which the hospital/facility plans an implementation strategy responds to Schedule H (form 990) Part V Section B 3 c and Schedule H (Form 990) Part V Section B 11

3. OBESITY/OVERWEIGHT

- 51% of local experts ranked obesity/overweight as a top five health concern in the community
- Residents of Coos County are 16.9% more likely to have a BMI of morbid/obese compared to the national average, and affects 35.7% of the population
- Diabetes is the #7 leading cause of death in Coos and Grafton Counties
- Coos County's adult obesity rate is worse than the state average
- Diabetes, urogenital, blood, and endocrine disease deaths
 - Coos County:
 - Male rate is average but increased 22.7% from 1980-2014
 - Female rate is worse than the national average and increased 39.6% from 1980-2014
 - Grafton County:
 - Male rate is better than the US average and decreased -7.1% from 1980-2014
 - Female rate is better than the US average but increased 5.4% from 1980-2014

AVH, UCVH, AND WMC services, programs, and resources available to respond to this need include:

- Bariatric Information Sessions are held every three months at AVH
- Pre-and Post-Op Bariatric Surgery Support Groups available at AVH
- Nutritionist available on-staff for Inpatients and Outpatients at AVH; Medical Nutrition Counseling offered at UCVH
- Healthy eating options cafeterias
- Prescription Food Program available at UCVH
- Diabetes Self-Management Program available at UCVH
- Community health wellness fairs/activities that provide nutrition information to the public, glucose screenings, cholesterol screenings and Bike Blender
 - The Bike Blender utilizes a bike that creates healthy smoothies by having the participants pedal as the blender makes the health fruit smoothies
- UCVH works in partnership with the UNH Cooperative Extension, SAU#7, and the Farm School Beacon Project, providing cooking nutrition classes to low income community members, and focusing on the improvement of health of our area school's children and their families
- WMC checks BMIs through RHC (Rural Health Clinic) Primary Practices and refers patients to counseling and other available resources
- WMC has an ongoing employee wellness program for employees and spouses

Additionally, AVH, UCVH, AND WMC plans to take the following steps to address this need:

• Possible presence at area Farmers Market

- Nutritionist presenting within community
- Initiation of the New England Weight Management Institute at **UCVH** which includes a medical weight loss component leveraging the resources of this nationally accredited bariatric surgery program
- WMC is exploring partnerships for a Bariatric Program
- **North Country** Healthcare is identifying a shared Diabetic Nurse Practitioner position.

AVH, UCVH, AND WMC evaluation of impact of actions taken since the immediately preceding CHNA:

- The Bike Blender was purchased and has been in use at many community health fairs and community events. The Bike Blender created an intriguing and motivational foundation to share healthy lifestyle messages, provide a sample of a healthy food option and opportunity to participate in an exciting form of physical activity. The Bike Blender has appeared in over 16 events while also being used by the local schools and recreational centers. As a result, over 800 children and 400 adults have been reached and received information encouraging healthy behaviors.
- Purchased equipment to conduct community cholesterol screenings
- WMC recruited a new dietician to continue IBT (Intensive Behavioral Therapy Weight Management Program)

	Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1.	Available to public and serves low income consumers	х	
2.	Reduces barriers to access services (or, if ceased, would result in access problems)	Х	
3.	Addresses disparities in health status among different populations	Х	
4.	Enhances public health activities	Х	
5.	Improves ability to withstand public health emergency		х
6.	Otherwise would become responsibility of government or another tax-exempt organization	Х	
7.	Increases knowledge; then benefits the public	Х	

The strategy to evaluate AVH, UCVH, AND WMC intended actions is to monitor change in the following Leading Indicator:

- Number of attendees at bariatric information sessions at AVH
- Number of participants in the Prescription Food Program distribution at UCVH
- Launch of the Weight Management Institute at UCVH

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

• Number of patients requiring bariatric surgery and obesity health issues

AVH, UCVH, AND WMC anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
New England Weight Management Institute	Lynn Mancuso-Leung	(603) 663-8724
Coos County Family Health Services	Patty Couture	(603) 752-2741
Androscoggin Valley Food Co-Op	Pam Laflamme	plaflamme@berlinnh.gov

Other local resources identified during the CHNA process that are believed available to respond to this need:

Organization	Contact Name	Contact Information
North Country Community Recreation Center	Lori Morann	(603) 237-4019
Area Personal Trainers	Fran Bigney, Jacob Kennett, Jacoby Gould, Carol Couture	(603) 237-8173
Spoke 'N Wheel		(603) 237-1613

4. ACCESSIBILITY (TRANSPORTATION, DISABILITY, ACCESS TO CARE, ETC.)

- 43% of local experts ranked accessibility as a top five health concern in the community
- Areas of both Coos and Grafton Counites have a higher vulnerability relating to housing and transportation
- Coos County's population to mental health provider ratio is worse than the state average

AVH, UCVH, AND WMC services, programs, and resources available to respond to this need include:

- Community Health Fund established by CCFHS, AVH to address social determinants of health
- Outpatient specialty services available throughout the NCH service area include but not limited to: ENT, Neurology, OB/GYN, Orthopedic, General Surgery, Rehab including Cardiac Rehab, Speech Therapy, Occupational Therapy, Urology, Sleep Medicine, Pulmonary, Audiology, Pain Clinic, and Podiatry
- UCVH Care Management works with available local resources to assist with transportation needs of our patients
- Rehab services for area schools and the local nursing home is available through UCVH
- Cardiac rehab is available UCVH to those patients who qualify
- Ambulatory nursing services available throughout the NCH service area include but not limited to: bladder treatments, blood product transfusions, cardiac monitoring placement, electrocardiograms, injections and IV therapies (antibiotics, immunosuppressive, hydration), spirometry, stress tests, therapeutic phlebotomy, vascular device irrigation & lab draws, and wound treatments
- Education classes available throughout the NCH service area include but not limited to: CPR, first aid, nutrition health, advanced care planning
- Community Health/Outreach programs/collaboration: Annual Health Walk, participation in planning of halfmarathon and other associated races, free community meals quarterly
- Prescription Food Program available at UCVH
- Promotion of programs offered by North Woods Action Committee with focus on mental health and drug misuse
- Collaboration with area entities to work on best options/process for providing support and appropriate transitions to best place for patients who have limited to no financial/family support
- Participation in ACO
- WMC expanded acute care clinic to weekends in 2018 open access and scheduling for patients
- WMC's four rural health clinics have open access scheduling with same day appointments and evening hours
- WMC's case management facilities transportation for patients that need support
- WMC has seven providers that do home visits
- All sites are handicap accessible and case management works with community support to ensure the delivery of care

Additionally, AVH, UCVH, AND WMC plans to take the following steps to address this need:

- **UCVH** is currently researching the option of offering outpatient rheumatology clinic
- Initiation of the MAT (Medication Assisted Program) as part of the HUB program through AVH. Participants will see a Provider here at UCVH who will do the required drug testing and prescribing of methadone. Counseling (both individual and group) will be offered weekly to the participants of the program.
- NCH Medical Staff Development Plan to ensure access to a broad range of specialties in the community
- **AVH** is exploring potential partnership with transit organization to provide a transportation program to help patients get to appointments

Anticipated results from AVH, UCVH, AND WMC Implementation Strategy

	Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1.	Available to public and serves low income consumers	х	
2.	Reduces barriers to access services (or, if ceased, would result in access problems)	Х	
3.	Addresses disparities in health status among different populations	Х	
4.	Enhances public health activities	Х	
5.	Improves ability to withstand public health emergency	х	
6.	Otherwise would become responsibility of government or another tax-exempt organization		х
7.	Increases knowledge; then benefits the public	Х	

The strategy to evaluate AVH, UCVH, AND WMC intended actions is to monitor change in the following Leading Indicator:

Number of outpatient visits

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- 30 day inpatient readmissions rate
- Transfer rate from emergency department to other facility
- Population to Primary Care ratio
- Population-based net physician

AVH, UCVH, AND WMC anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Coos County Family Health Services	Bridget Laflamme	blaflamme@ccfhs.org
Tri County CAP	Jeanne Robillard	jrobillard@tccap.org

Other local resources identified during the CHNA process that are believed available to respond to this need:⁵

Organization	Contact Name	Contact Information
North Country Transit		

⁵ This section in each need for which the hospital plans an implementation strategy responds to Schedule H (form 990) Part V Section B 3 c and Schedule H (Form 990) Part V Section B 11

5. AFFORDABILITY

- 29% of local experts ranked affordability as a top five health concern in the community
- Regions of both Coos and Grafton Counites have a higher vulnerability relating to socioeconomic status
- Coos and Grafton County's uninsured rate is worse than the state average
- Coos County's unemployment rate is worse state average
- Coos and Grafton County's children in poverty rate is worse than the state average

AVH, UCVH, AND WMC services, programs, and resources available to respond to this need include:

- Community Health Fund available at AVH to address cost of social determinants of health solutions
- Patient Financial Services are available to assist patients in payment options and plans
 - o WMC has a self-pay discount in compliance with IRS 501 guidelines
- Care Management at **UCVH** and **WMC** works with inpatients who have no insurance to assist in Medicaid applications when applicable
- **AVH** offers a sliding scale fee

Additionally, AVH, UCVH, AND WMC plans to take the following steps to address this need:

- Will continue to look for quality and cost efficiencies through ACO activities
- Common electronic health record will assist in reduction of duplication of tests and provide a platform for more efficient care delivery

Anticipated results from AVH, UCVH, AND WMC Implementation Strategy

	Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1.	Available to public and serves low income consumers	х	
2.	Reduces barriers to access services (or, if ceased, would result in access problems)	Х	
3.	Addresses disparities in health status among different populations	Х	
4.	Enhances public health activities	Х	
5.	Improves ability to withstand public health emergency		x
6.	Otherwise would become responsibility of government or another tax-exempt organization	Х	

Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
7. Increases knowledge; then benefits the public	Х	

The strategy to evaluate AVH, UCVH, AND WMC intended actions is to monitor change in the following Leading Indicator:

• Charity care contribution

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Monitor bad debt
- Monitor beneficiary mix of patients

AVH, UCVH, AND WMC anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Great North Woods Community Fund	Karen Smith	karen.smith@avhnh.org
United Way of Northern NH	Laura Boucher	Laura.boucher@graniteuw.org

Other local resources identified during the CHNA process that are believed available to respond to this need:

Organization	Contact Name	Contact Information
Indian Stream Health Center	Outreach	(603) 237-8336

6. DENTAL

- 18% of local experts ranked dental as a top five health concern in the community
- Coos County's population to dentist ratio is worse than the state average

AVH, UCVH, AND WMC services, programs, and resources available to respond to this need include:

- Emergency department responds to dental services and refers patient out to receive appropriate dental care
- WMC care coordination team assists patients obtain dental care with sliding fee scales
- WMC offers a dental varnish program for children through sponsorship from the state
- WMC has a dental practice in one of the rural health clinics and have several community dental providers that accept Medicaid

Additionally, AVH, UCVH, AND WMC plans to take the following steps to address this need:

- Inform providers of AVH of the available resources of Coos County Family Health Services Dental Program
- Work with area primary care practices on steps to address this need
- Explore grant options to provide mobile unit for pediatric dental care

Anticipated results from AVH, UCVH, AND WMC Implementation Strategy

	Community Benefit Attribute Element	Yes, Implementation Strategy Addresses	Implementation Strategy Does Not Address
1.	Available to public and serves low income consumers	x	
2.	Reduces barriers to access services (or, if ceased, would result in access problems)		
3.	Addresses disparities in health status among different populations		
4.	Enhances public health activities	Х	
5.	Improves ability to withstand public health emergency		
6.	Otherwise would become responsibility of government or another tax-exempt organization		
7.	Increases knowledge; then benefits the public		

The strategy to evaluate AVH, UCVH, AND WMC intended actions is to monitor change in the following Leading Indicator:

- Number of patients who receive dental care at Coos County Family Health Services
- Number of pediatric mobile unit visits (Potential)

The change in the Leading Indicator anticipates appropriate change in the following Lagging Indicator:

- Number of emergency department visits related to dental care
- Population to dentist ratio

AVH, UCVH, AND WMC anticipates collaborating with the following other facilities and organizations to address this Significant Need:

Organization	Contact Name	Contact Information
Coos County Family Health Services	Bridget Laflamme	blaflamme@ccfhs.org

Other Needs Identified During CHNA Process

- 7. Education/Prevention
- 8. Diabetes
- 9. Smoke/Tobacco Use
- 10. Cancer
- 11. Chronic Pain Management
- 12. Physical Inactivity
- 13. Heart Disease
- 14. Alzheimer's
- 15. Women's Health
- 16. Hypertension
- 17. Suicide
- 18. Stroke
- 19. Accidents
- 20. Respiratory Infections
- 21. Women recovery housing with and without children
- 22. Lung disease
- 23. Birth