Parents’ s Guide
Published by:

Rhein-Erft-Kreis, Der Landrat
Gesundheitsamt
Willy-Brandt-Platz 1, 50126 Bergheim
Tel.: 02271/83-0
info@rhein-erft-kreis.de
www.rhein-erft-kreis.de

Parents’ Guide with Vaccination Calendar

Edited by: Harald Hartlieb
Layout: Susanne Seegebrecth-Keitel
Title page photo: Rhein-Erft-Kreis, Der Landrat
Carmen Steiner, fotolia.de
Gorilla, fotolia.de

2nd edition, Bergheim 2018
Dear readers, dear parents

Today’s children have better teeth than they did only 20 years ago, but they exercise much less and are increasingly showing motoric deficiencies. Six percent of prospective schoolchildren in the Rhine-Erft District are already suffering from obesity, and 18 percent have significant problems with physical coordination.

Even in the matter of oral hygiene there is still work to be done, because 15 percent of our kindergarten children and 27 percent of primary school children still have to visit the dentist with teeth requiring treatment. At any rate, this is what is revealed by the current research findings of our health department.

As numerous fresh cases of measles in Berlin and the Rhine-Erft District have shown, increasing numbers of parents either do not have their children vaccinated at all, or only inadequately vaccinate them. Moreover, not all parents attend the all-important preventative examinations.

We hope that the present brochure will make you aware of the high value of actively promoting health even in early childhood, and would be happy if we could persuade you to be our partner in ensuring your child(ren) grow up healthily.

Below, therefore, you’ll find information on the topics of encouraging exercise, dental care, vaccination protection and preventative checks. We’d also like to draw your attention to a health portal that reflects almost the entire health environment in the Rhine-Erft District.

We would like to thank the AOK in the Rhine-Erft District for the financial support that has made it possible for us to print this brochure at all. We will be very happy if the following information awakens your interest, and makes a contribution towards acting responsibly where your child’s healthy development is concerned.
Preventative examinations for children and young people

To ensure early detection of diseases, our health insurance funds finance a total of 11 preventative examinations for children and young people from babyhood to puberty. While the early preventative examinations are still enthusiastically attended, the number of older children and young people attending them unfortunately declines.

But it is precisely the U9 examination before starting school, and the J1 examination for 12- to 15-year-olds, that are particularly important for checking your child’s vaccination status and their development in relation to their education. The young people’s health examination is offered at a time when young people are also keen to obtain information outside the parental home.

This provides a chance to exert influence regarding health risks, and set them on course for health-conscious behaviour right up to adulthood. An offer that families shouldn’t refuse!

Paediatricians are obligated to report every preventative examination, successful or not, to the North Rhine-Westphalia Regional Healthcare Centre (LZG NRW). The results of the examination are not passed on – only name, address and preventative examination record. The ‘Central Office for Health’ at the LZG NRW compares this information with the data from the residents’ registration offices.

In this way, it is possible to identify children who have no record of attendance. The LZG NRW invites the parents or guardians concerned to make up for the missed preventative examination.

If there is no positive confirmation by the paediatrician even after 3 weeks, the LZG NRW informs the responsible youth welfare offices, who then in turn make contact with the parents/guardians.
<table>
<thead>
<tr>
<th>Time of examination</th>
<th>Main points of examination</th>
<th>Supplementary measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U 1</strong> Birth</td>
<td>Assessment of vitality, reflexes and abnormalities</td>
<td>Screening of hearing and metabolism</td>
</tr>
<tr>
<td><strong>U 2</strong> 3rd–10th day</td>
<td>Metabolic screening, determining abnormalities, nutrition advice</td>
<td>Vaccination advice</td>
</tr>
<tr>
<td><strong>U 3</strong> 4th–6th week</td>
<td>Vitality and development in relation to age, examination of hip joints, accident prevention</td>
<td>Vaccination advice</td>
</tr>
<tr>
<td><strong>U 4</strong> 3rd–4th month</td>
<td>Development and movement in relation to age; nutrition and digestion</td>
<td>Vaccinations</td>
</tr>
<tr>
<td><strong>U 5</strong> 6th–7th month</td>
<td>Development and movement in relation to age; hearing or vision impairment, nutrition advice, dental care</td>
<td>Advice on accident prevention</td>
</tr>
<tr>
<td><strong>U 6</strong> 10th–12th month</td>
<td>Stato/psychomotor development, speech development, hearing and sight, nutrition advice, dental care</td>
<td>Vaccinations</td>
</tr>
<tr>
<td><strong>U 7</strong> 21st–24th month</td>
<td>Development in relation to age; hearing and sight, control of mobility, body control, speech development, behavioural problems</td>
<td>Vaccinations</td>
</tr>
<tr>
<td><strong>U 7a</strong> 34th–36th month</td>
<td>Physical and mental development, hearing and sight, behavioural problems, dental health</td>
<td>Vaccination advice</td>
</tr>
<tr>
<td><strong>U 8</strong> 42nd–48th month</td>
<td>Development in relation to age; hearing and sight, possible noteworthy features of speech development, mobility</td>
<td>Vaccination advice</td>
</tr>
<tr>
<td><strong>U 9</strong> 60th–64th month</td>
<td>Physical and mental development, hearing and sight, possible noteworthy features in speech development, mobility and agility, behavioural problems, dental health</td>
<td>Vaccinations</td>
</tr>
<tr>
<td><strong>J1</strong> 12–15 years</td>
<td>Orientational physical examination, facultative blood tests and examination of sensory organs</td>
<td>Immunisations, offers of advice</td>
</tr>
</tbody>
</table>

Preventative examinations according to the guidelines of the Federal Ordinance for Doctors and Health Insurance Funds 1998 (source: BZgA)
Finden Sie Ihren Arzt oder Apotheker

Physiotherapeuten, Augenoptiker, Hörgerätekustiker, Sprachtherapeuten, Ihre Praxis für Naturheilkunde, und viele andere heilende Kräfte im Rhein-Erft-Kreis

netze.rhein-erft-kreis.de/gesundheitslandschaft
Gesundheitsamt Rhein-Erft-Kreis • Tel.: 02271/83-15395
‘Early Help’ teams
in the Rhine-Erft District

The birth of a child is an exciting time full of emotions, and the start of a new phase of life for the whole family. If a new-born child feels safe and protected, they have a good chance of developing healthily and happily.

First it’s important to learn how to feed, clothe, wash and carry a baby correctly. In addition to this, a baby has a great need for reliable, empathetic devotion and security from the people closest to them, one that is vital to their existence. With the multiplicity of tasks involved, or when there are additional burdensome circumstances (e.g. financial problems, child illness) it is not uncommon for parents to feel insecure and overstretched at times. Often it is not until parents are in an absolutely exhausted state that they seek help. However, professional advice and help can and should be provided as early as possible.

The so-called ‘Early Help’ teams are keen to help families in the Rhine-Erft District look after and develop a relationship with their child in the early stages. Whether you have big or small questions, a professional team of children's nurses, (family) midwives and social workers will be happy to give you advice by telephone, at the office or, on request, also at your home. The advice is given voluntarily, and aimed at families from the time of pregnancy and parents with young children (usually up to the 3rd year).

In detailed terms, the ‘Early Help’ staff carry out the following tasks on-site:

- Making contact with all families with newly born children (baby greeting package)
- Advising pregnant women, mothers and fathers with young children
- Giving information about child care offers or family sponsorship schemes that provide relief
- Providing information about offers for family training and recreation
- Cooperating (networking) with the institutions and services of the pregnancy advice service, health service, child and youth aid agencies, etc.
‘Early Help’ teams – contact partners

**Bedburg**
Rani Banerjee  
Lydia Hamacher  
N. Lindner  
Tel.: 0 22 72/40 25 56  
Tel.: 0 22 72/40 25 57  
Tel.: 0 22 72/40 25 30  
r.banerjee@bedburg.de  
l.hamacher@bedburg.de  
n.lindner@bedburg.de

**Bergheim**
‘Early Help’ team  
family office  
Tel.: 0 22 71/49 27 17  
fruehe-hilfen@skf-erftkreis.de

**Brühl**
Katrin Schulz  
Gabriela Jaskulla  
Nevin Apaydin  
Heike Mattarei  
Tel.: 0 22 32/5 04 42 28  
Tel.: 0 22 32/5 04 42 25  
Tel.: 0 22 32/5 04 42 24  
Tel.: 0 22 32/5 04 42 27  
kschulz@bruehl.de  
gjaskulla@bruehl.de  
napaydin@bruehl.de  
hmatterei@bruehl.de

**Elsdorf**
Yvonne Pesch  
Melanie Viehs  
Tel.: 0 22 74/7 03 39 65  
Tel.: 0 22 74/7 03 39 70  
ypesch@elsdorf.de  
mviehs@elsdorf.de

**Erftstadt**
Nicole Dick  
Inge Hubert-Fiehn  
Uta Langner  
Tel.: 0 22 35/40 95 34  
Tel.: 0 22 35/60 92  
Tel.: 0 22 35/40 92 57  
nicole.dick@erftstadt.de  
info@eb-erftstadt.de  
uta.langner@erftstadt.de

**Frechen**
Christel Pakoßnick  
Koschka Michaut  
Tel.: 0 22 34/50 12 58  
Tel.: 0 22 34/18 57 33  
christel.pakossnick@stadt-frechen.de  
info@fruehe-hilfen-frechen.de

**Hürth**
Andrea Pankow  
Tel.: 0 22 33/5 33 85  
apankow@huerth.de

**Kerpen**
Katrin Kaltenberg  
Martina Kruse  
Tel.: 0 22 73/5 82 08  
Tel.: 0 22 37/6 39 01-0  
katrin.kaltenberg@stadt-kerpen.de  
fruehe-hilfen@spz-kerpen.de

**Pulheim**
Iwan Peters  
Tel.: 0 22 38/80 83 16  
iwan.peters@pulheim.de

**City of Wesseling**
Diane Schlosser  
Sibel Kara  
Tel.: 0 22 36/70 13 15  
Tel.: 0 22 36/70 12 98  
dschlosser@wesseling.de  
skara@wesseling.de
Rhine-Erft District Health Department

Pregnancy advice service – Federal Mother and Child Foundation
Nora Kuckelkorn
Tel.: 0 22 71/83-15328, Nora.Kuckelkorn@rhein-erft-kreis.de
Irina Schemp
Tel.: 0 22 71/83-15332, Irina.Schemp@rhein-erft-kreis.de

General advice and help (from babyhood to teenage years)
Simone Ewertz
Tel.: 0 22 71/83-15399, Simone.Ewertz@rhein-erft-kreis.de
Karla Mertes
Tel.: 0 22 71/83-15331, Karla.Mertes@rhein-erft-kreis.de

Health is less a condition than an attitude, and it blossoms along with joy in living!
Thomas Aquinas (1224–1274), Italian theologian and philosopher
Childhood (im)mobility

How lack of exercise in childhood years can affect physical well-being in adulthood

Over the last 25 years, the motor ability of children and young people in Germany has decreased considerably, particularly in the areas of stamina and mobility. The data from school entry examinations in the Rhine-Erft District confirm this tendency.

A good level of physical fitness in childhood, however, is of enormous importance for preserving health until an advanced age. It strengthens the cardio-vascular system, stabilises our body’s support and movement mechanisms, and is an essential factor in preventing obesity and posture or metabolism disorders.

Good motor abilities in childhood form the basis for health and movement behaviours in adult years. But good motor abilities in childhood also have positive effects on speech development, perception, concentration, stamina and social behaviour.

Unfortunately our exercise routines are being lastingly influenced by social changes:

• Decreasing space for movement as a result of increasing urbanisation
• Sedentary consumption of media instead of active play
• Travelling to school by car rather than on foot
• Lifts instead of stairs
• Cars rather than bicycles, etc.
However, lack of exercise and inappropriate eating habits inevitably lead to obesity. Since parents and care facilities have a considerable impact on exercise habits in the early years of life, they should pay more attention to encouraging their children's mobility. There are still too few examples of good practice, such as ‘exercise kindergartens’ or ‘mobile schools’. Moreover, an hour of school sport a day (instead of three times a week) makes a substantial contribution to improving students’ motor capacities, along with their social and working behaviours at the same time.

Parents, kindergartens and schools could encourage children’s and young people’s potential for development by providing more opportunities for motor activity and physical coordination. The right contact people are ready to help – particularly at the numerous sports clubs in the Rhine-Erft District, but also in the Federal Centre for Health Education.

So it’s better to be always on the move as part of a mobile childhood, rather than very probably become sick at some stage as a result of a lack of exercise.

Dr Karin Moos MPH
Head of the Children and Young People’s Health Service
at the Health Department of the Rhine-Erft District.
Nie mehr ohne mein Familien-Komplett-Paket.

Vom Babytelefon über die Haushaltshilfe bis zu Vorsorgeangeboten für die ganze Familie – immer bestens aufgehoben.

Jetzt informieren!

www.familie.rh.aok.de
Stark für Familien – die AOK Rheinland/Hamburg

Mit unserem Familien-Komplett-Paket bieten wir Ihnen und Ihrer Familie den Schutz und die Sicherheit, die Sie brauchen. Wir begleiten Sie schon vor der Geburt Ihres Kindes und bleiben mit vielen Angeboten für die einzelnen Lebensphasen Ihrer Familie an Ihrer Seite. Einige Angebote haben wir Ihnen einmal aufgelistet. Überzeugen Sie sich selbst.

- **Kostenfreie Familienversicherung**
  Bei der AOK Rheinland/Hamburg können Sie Ihre ganze Familie beitragsfrei mitversichern.

- **Baby- und Familientelefon**
  Ärzte und medizinische Fachkräfte geben telefonische Auskünfte, egal, ob Sie Fragen zu Kinderkrankheiten haben oder beim Kinder- und Jugendarzt Fragen offengeblieben sind – täglich 24 Stunden, 365 Tage im Jahr. **0800 0 326 326**

- **Arzneimittelberatung**
  Die AOK gibt Ihnen Sicherheit im Umgang mit Medikamenten, auch während der Schwangerschaft. **0800 8 265 265**

- **Geburtsvorbereitungskurse**
  Die AOK übernimmt die Kosten – auch für den AOK-versicherten Vater.

- **Haushaltshilfe**
  Wenn ein Elternteil krank wird, greift Ihnen im Notfall die AOK mit einer Haushaltshilfe unter die Arme.

- **Erinnerungen an U-Untersuchungen**
  Früherkennungsuntersuchungen sichern die gesunde, altersgemäße Entwicklung Ihres Kindes. Und damit Sie die Termine nicht versäumen, erinnern wir Sie rechtzeitig daran.

- **Besondere Versorgungsangebote**
  Bei Erkrankungen wie Neurodermitis oder ADS/ADHS bieten wir ein besonderes Versorgungsangebot für Kinder und Jugendliche.


Weitere Informationen zu Leistungen, Mitgliedschaft und Services der AOK erhalten Sie unter (02233) 56 – 0.

www.familie.rh.aok.de
The Children and Young People’s Health Service (KJGD) at the Rhine-Erft District Health Department

Aims of the KJGD:
• Identifying development disorders
• Preventing diseases

Responsibilities:
• School entry examinations for all children of school age
• Implementing projects to promote health
• Advising parents, teachers and childcare workers
• Preparing surveys and reports
• Surveys at kindergartens, etc.

Consultation hours:
• **Team Bergheim**  
  Thursday, 8am–12 noon  
  Tel.: 0 22 71/83-15357 or -15346

• **Team Bedburg, Elsdorf**  
  Monday, 8am–12 noon  
  Tel.: 0 22 71/83-15336 or -15341

• **Team Kerpen**  
  Tuesday, 8am–12 noon  
  Tel.: 0 22 71/83-15338 or -15342

• **Team Pulheim**  
  Wednesday, 8am–12 noon  
  Tel.: 0 22 71/83-15356 or -15355

• **Team Wesseling, Brühl**  
  Thursday, 8am–12 noon  
  Tel.: 0 22 71/83-15346 or -15357

• **Team Hürth**  
  Wednesday, 8am–12 noon  
  Tel.: 0 22 71/83-15339 or -15345

• **Team Erftstadt**  
  Tuesday, 8am–12 noon  
  Tel.: 0 22 71/83-15348 or -15358

• **Team Frechen**  
  Monday, 8am–12 noon  
  Tel.: 0 22 71/83-15347
Dental health right from the start

With most children, their first milk teeth already break through in the oral cavity during the course of the first year. Even if the milk teeth don’t remain in their mouths permanently, they’re still very important – e.g. for children’s speech development, oral motor activity and, last but not least, for adequate grinding of food. It is important to know that the enamel of milk teeth is very sensitive towards acidic foods and drinks, and those containing sugar. Therefore, particularly where the milk teeth are concerned, dental health rests on the following three very important foundations:

1. *A clean tooth never gets sick* – so, teeth should be cleaned regularly with fluoride toothpaste from the first tooth onwards.
2. *A balanced diet, with lots of raw fruit and vegetables, and water as the main thirst quencher.*
3. *Regular dental examinations from as early as the first year.*

With the aid of these three, teeth remain healthy until advanced age. Moreover, it is scientifically proven that children with healthy milk teeth have a very high chance of enjoying better dental health in the later years of life. Since milk teeth already start to develop in the first months of life, during pregnancy, besides children’s general health, their later dental health is also to a great extent dependent on their mothers’ dietary and oral hygiene habits. Moreover, children imitate their parents’ behaviour patterns.

You should therefore view this as a chance to train your children to take care of their teeth from very early on by means of your own health behaviour. However, since children are often not able to clean their teeth properly alone until they start school, it is recommended that parents clean their children’s teeth once again afterwards. In this way, regular teeth cleaning is gradually established as a key hygienic measure, and very rapidly becomes a daily routine for children.

Dr Pantelis Petrakakis
Head of Dental Service at the Rhine-Erft District Health Department
The Dental Service
at the Rhine-Erft District
Health Department

Aims:
• Improving and maintaining oral hygiene of children and young people in the Rhine-Erft District

Responsibilities:
• Surveys at kindergartens and schools
• Preventative measures at kindergartens and schools (brushing teeth, presentations)
• Fluoridisation measures at schools
• Advising parents, teachers and childcare workers
• Preparing surveys and reports
• Carrying out projects to improve oral hygiene etc.

Consultation hours by appointment:
• Team Brühl, Erftstadt, Wesseling
  Tel.: 0 22 71/83-15359 or -15366
• Team Bedburg, Elsdorf
  Tel.: 0 22 71/83-15364 or -15362
• Team Pulheim
  Tel.: 0 22 71/83-15361 or -15362
• Team Bergheim, Frechen
  Tel.: 0 22 71/83-15365 or -15363
• Team Hürth
  Tel.: 0 22 71/83-15361 or -15321
• Team Kerpen
  Tel.: 0 22 71/83-15364 or -15321
Protective vaccinations according to the recommendations of the German Standing Vaccine Commission (STIKO 2015)

Protective vaccinations protect against infective diseases, and are one of the most effective and economical preventative measures of modern medicine.

The immediate aims of vaccinations for an individual are to activate the immune system against specific intruding pathogens and prevent a disease occurring. In particular, vaccinations offer protection against:

- serious infectious diseases where there are only limited or no therapeutic options against the pathogen (e.g. hepatitis B, poliomyelitis, rabies, diphtheria, tetanus, hepatitis A in adults)
- possible severe complications in cases of infectious diseases (e.g. post-measles encephalitis (brain inflammation) with a 20–30% mortality rate)
- infectious diseases that can lead to severe damage to the child during pregnancy (e.g. rubella) or birth (chicken pox).

Besides protecting the individual against pathogens that are carried from person to person, many vaccinations have an additional effect: they result in collective protection for the population, so-called ‘herd immunity’. In this way, outbreaks of epidemics can be prevented. In particular, persons who cannot be vaccinated for medical reasons are also protected.

Severe side-effects or complications caused by vaccines are extremely rare. They are mostly due to hypersensitivity reactions that are triggered by additional substances accompanying the vaccine. Before vaccination, the doctor carrying it out must talk to the person receiving the vaccination or their legal guardian, explaining the vaccine and the disease to be prevented. The vaccination is recorded on the vaccination card (§ 22 IfSG).
Measles
Measles is a highly contagious disease: initially with fever and eye inflammation, then on the 3rd–7th day measles exanthema (brownish-pink, conflating skin blotches), at first on face and behind the ears. Complications: inflammation of middle ear, pneumonia, in 0.1% of cases inflammation of the brain (consciousness disorders up to and including coma, residual damage to central nervous system).

Mumps
30 to 40 per cent of all mumps virus infections run their course without symptoms. Inflammation of the salivary glands and fever are typical features. Complications: Meningitis resulting in lasting impaired hearing, more rarely testicular inflammation (mumps orchitis), in some cases leading to sterility.

Rubella
Only 50% of patients infected with the rubella virus have a speckled skin rash that begins on the face and spreads over the body, and which is accompanied by subfebrile (heightened) temperatures. In 90% of cases, infection during pregnancy (particularly during the first 8 weeks) leads to damage to the embryo (deafness, blindness, heart defects) or miscarriage.

<table>
<thead>
<tr>
<th>MMR vaccination age in</th>
<th>weeks</th>
<th>complete months</th>
<th>complete years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>2 3 4 11–14 15–23</td>
<td>2–4 5–6 9–14 15–17 18 and above 60 and above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G1 G2</td>
<td>N</td>
</tr>
</tbody>
</table>

measles only

Key:
- **G** = Basic immunisation (in up to 4 partial vaccinations)
- **A** = Booster vaccination
- **S** = Standard vaccination
- **N** = Catch-up vaccination (basic immunisation for all those not yet vaccinated, or completion of incomplete series of vaccinations)
- **a** = If a single vaccine is used, this dose can be dispensed with
- **b** = The first vaccination should already take place from the age of 6 weeks upwards; depending on the vaccine used, 2 to 3 doses at intervals of at least 4 weeks are necessary
- **c** = one-off vaccination with polysaccharide vaccine
- **d** = one-off vaccination for all persons born after 1970 ≥ 18 years old with uncertain vaccination history, without vaccination, or with vaccination in childhood with MMR vaccine only
- **e** = standard vaccination for girls and young women aged 9–13 or 9–14 (depending on vaccine used) with 2 doses at intervals of 6 months; in cases of catch-up vaccinations and completion of vaccination series at the age of > 13 or > 14 years, or with an interval < 6 months between 1st and 2nd doses a third dose is required (refer to specialist information).
- **f** = Td booster every 10 years. The next scheduled Td vaccination is a one-off Tdap vaccination or, if the corresponding indication is present, Tsap-IPV combination vaccination.
- **g** = Premature babies receive an additional vaccine does at the age of 3 months, i.e. 4 doses in total.
Tetanus (T)
A wound infection (even following trivial wounds) caused through penetration of the ever-present Clostridium tetani bacterium. The nerve cells controlling the muscles are damaged, resulting in paralysis and muscular cramps.

Diphtheria (D/d)
Highly infectious and occasionally fatal infection of the upper respiratory tracts by Corynebacterium diphtheriae. Difficulties in swallowing and lack of breath as a result of severe swelling of the mucous membrane; fever, nausea. From the age of 5 or 6 upwards, a vaccine with reduced diphtheria toxoid content (d) is used for boosters and basic immunisation.

Whooping cough (Pertussis – aP/ap)
Contagious and long-lasting infectious disease, triggered by the Bordetella pertussis bacterium. Initial symptoms resemble influenza, with coughing and a slight fever. This develops into violent coughing fits (also staccato coughing accompanied by intake of breath). Course in babyhood is severe (respiratory distress symptoms) – basic immunisation as early as possible. Before the child is born, the vaccination status of the members of its household should be checked.

<table>
<thead>
<tr>
<th>Age in</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>weeks</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>11–14</td>
<td>15–23</td>
<td>2–4</td>
<td>5–6</td>
</tr>
<tr>
<td></td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
<td>G4</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combination vaccination (T; D/d; aP/ap)

Haemophilus influenza type b (Hib)
caused by highly severe bacterial infections: sinusitis, acute bronchitis, pneumonia. Complications: laryngitis with risk of suffocation, purulent meningitis (fatal cases are possible), post-healing defects with permanent damage (damaged hearing, problems with vision or mental disorders). Vaccination is recommended for all babies or children up to 4 years old.

<table>
<thead>
<tr>
<th>Age in</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>weeks</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>11–14</td>
<td>15–23</td>
<td>2–4</td>
<td>5–6</td>
</tr>
<tr>
<td></td>
<td>G1</td>
<td>G2a</td>
<td>G3</td>
<td>G4</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Poliomyelitis

Highly contagious infection usually accompanied by scarcely perceptible symptoms (slight flu infection with diarrhoea). In 2% of cases the polio viruses infect the central nervous system, resulting in meningitis and paralysis. Permanent muscular paralysis appears on one side of body and often affects the leg, arm, abdominal or eye muscles.

<table>
<thead>
<tr>
<th>Age in</th>
</tr>
</thead>
<tbody>
<tr>
<td>weeks</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>G1</td>
</tr>
</tbody>
</table>

Hepatitis B (HB)

Inflammation of the liver resulting from infection by the hepatitis B virus (90% of cases cured within 6 months). Highly contagious when transmitted by body fluids. By contrast, in early childhood years the course of infection is chronic in 90% of cases, and in 30–90% of cases involving people with weakened immunity. Complications of chronic hepatitis B: cirrhosis of the liver, hepatocellular carcinoma.

<table>
<thead>
<tr>
<th>Age in</th>
</tr>
</thead>
<tbody>
<tr>
<td>weeks</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>G1</td>
</tr>
</tbody>
</table>

Key:

G= Basic immunisation (in up to 4 partial vaccinations)
A= Booster vaccination
S= Standard vaccination
N= Catch-up vaccination (basic immunisation for all those not yet vaccinated, or completion of incomplete series of vaccinations)
a= If a single vaccine is used, this dose can be dispensed with
b= The first vaccination should already be carried out from the age of 6 weeks upwards; depending on the vaccine used, 2 to 3 doses at intervals of at least 4 weeks are necessary
c= one-off vaccination with polysaccharide vaccine
d= one-off vaccination for all persons born after 1970 ≥ 18 years old with uncertain vaccination history, without vaccination, or with vaccination in childhood with MMR vaccine only
e= standard vaccination for girls and young women aged 9–13 or 9–14 (depending on vaccine used) with 2 doses at intervals of 6 months; in cases of catch-up vaccinations and completion of vaccination series at the age of > 13 or > 14 years; or with an interval < 6 months between 1st and 2nd doses a third dose is required (refer to specialist information).
f= Td booster every 10 years. The next scheduled Td vaccination is a one-off Tdap vaccination or, if the corresponding indication is present, Tsap-IPV combination vaccination.
g= Premature babies receive an additional vaccine dose at the age of 3 months, i.e. 4 doses in total.
Chickenpox (varicella)

Viral infection in pre-school years with high contagion rate, accompanied by itchy skin lesions (‘starry skies’ with papules, blisters, scabs at various stages of development) and fever (rarely above 39°C). Meningitis and hepatitis may occur in adults, and pneumonia or in rare cases even miscarriages in the case of pregnant women.

<table>
<thead>
<tr>
<th>Age in</th>
<th>6 weeks</th>
<th>2 complete months</th>
<th>3 complete months</th>
<th>4 complete months</th>
<th>11–14 complete months</th>
<th>15–23 complete months</th>
<th>18 and above complete months</th>
<th>60 and above complete months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1</td>
<td>G2</td>
<td>N</td>
<td>S</td>
<td>annually</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘Genuine’ flu (‘viral flu’, influenza)

Influenza viruses cause acute infection of the respiratory tract (sudden, distinct feelings of illness, high fever, headaches and pains in limbs); weak immunity leads to secondary infections (pneumonia, heart muscle inflammation). Particularly in the case of older people, the infection can be fatal. Vaccination recommended for persons over 60, pregnant women (from the 4th month), members of specific professions and for all age groups if there is an increased risk owing to previous illness.

<table>
<thead>
<tr>
<th>Age in</th>
<th>6 weeks</th>
<th>2 complete months</th>
<th>3 complete months</th>
<th>4 complete months</th>
<th>11–14 complete months</th>
<th>15–23 complete months</th>
<th>18 and above complete months</th>
<th>60 and above complete months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1e</td>
<td>G2e</td>
<td>Ne</td>
<td>S</td>
<td>annually</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Human papillomavirus (HPV)

Papillomaviruses cause a particular risk of suffering from cervical cancer in young women under 30. Infection is caused by unprotected sexual intercourse or via skin contact. Since vaccination gives protection against the HPV 16 and HPV 18 types, but not against all onco-genic HPV types, procedures for early detection of cervical cancer should continue to be used unchanged.
Pneumococci

Pneumococci bacteria are pathogens triggering severe infections such as pneumonia and meningitis or inflammation of the middle ear, particularly in babies, small children and older people. In 2 to 10 percent of cases the course of the disease is fatal; in around 15 percent, lasting consequential damage occurs.

<table>
<thead>
<tr>
<th>Age in</th>
<th>weeks</th>
<th>complete months</th>
<th>complete years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>2 3 4 11–14 15–23</td>
<td>2–4 5–6 9–14 15–17 18 and above 60 and above</td>
</tr>
<tr>
<td></td>
<td>G1</td>
<td>G2 G3 N</td>
<td></td>
</tr>
</tbody>
</table>

Meningococci (serogroup B)

Meningococci also cause serious clinical pictures: meningitis with high fever, acute headaches, stiff neck (fatal in 3% of cases) or blood poisoning. They often affect children and young people. Complications: deafness, development disorders, mental disabilities. Presently available vaccines do not offer protection against every meningococcus type. The serotype B often occurs in Germany, and unfortunately there is at present no vaccine against this.

<table>
<thead>
<tr>
<th>Age in</th>
<th>weeks</th>
<th>complete months</th>
<th>complete years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>2 3 4 11–14 15–23</td>
<td>2–4 5–6 9–14 15–17 18 and above 60 and above</td>
</tr>
<tr>
<td></td>
<td>G1 from 12th month</td>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

Oral rotavirus vaccination for all babies (RV vaccination)

Rotavirus infections are the most frequent cause of stomach and gut infections in children under 5, and the course of infection is often more severe than in diarrhoeas caused by other pathogens. Initial infections predominantly occur at the age of between 6 months and 2 years, although they also occur in newborns and babies under 6 months. The clinical picture ranges from slight diarrhoea to acute diseases. There is no causal therapy. If not treated in time, the lack of fluid can result in death.

<table>
<thead>
<tr>
<th>Age in</th>
<th>weeks</th>
<th>complete months</th>
<th>complete years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>2 3 4 11–14 15–23</td>
<td>2–4 5–6 9–14 15–17 18 and above 60 and above</td>
</tr>
<tr>
<td></td>
<td>G1b</td>
<td>G2 G3</td>
<td></td>
</tr>
</tbody>
</table>
# Vaccination Calendar (according to the recommendations of STIKO 2018)

<table>
<thead>
<tr>
<th>Vaccination</th>
<th>Age in years</th>
<th>Vaccination</th>
<th>weeks</th>
<th>months</th>
<th>years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Tetanus</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
<td>G4</td>
</tr>
<tr>
<td>Diphtheria</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
<td>G4</td>
</tr>
<tr>
<td>Pertusis</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
<td>G4</td>
</tr>
<tr>
<td>Hib H. influenza type b</td>
<td></td>
<td>G1</td>
<td>G2²</td>
<td>G3</td>
<td>G4</td>
</tr>
<tr>
<td>Poliomyelitis</td>
<td></td>
<td>G1</td>
<td>G2³</td>
<td>G3</td>
<td>G4</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td></td>
<td>G1</td>
<td>G2³</td>
<td>G3</td>
<td>G4</td>
</tr>
<tr>
<td>Pneumococci</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
<td></td>
</tr>
<tr>
<td>Rotaviruses</td>
<td></td>
<td>G1ᵇ</td>
<td>G2</td>
<td>G3 (G3)</td>
<td></td>
</tr>
<tr>
<td>Meningococci C</td>
<td></td>
<td></td>
<td>G1 (12 months and above)</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Measles</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Mumps, rubella</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Varicella</td>
<td></td>
<td>G1</td>
<td>G2</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Influenza</td>
<td></td>
<td></td>
<td></td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>HPV H. papilloviruses</td>
<td></td>
<td></td>
<td></td>
<td>G 1–2ᵉ</td>
<td>Ne</td>
</tr>
</tbody>
</table>

**Key:**

- **G** = Basic immunisation (in up to 4 partial vaccinations)
- **A** = Booster vaccination
- **S** = Standard vaccination
- **N** = Catch-up vaccination (Basic immunisation of all those not yet vaccinated or to complete an incomplete series of vaccinations)

- **a** = If a single vaccine is used, this dose can be dispensed with
- **b** = The first vaccination should already be carried out from the age of 6 weeks upwards; depending on the vaccine used, 2 to 3 doses at intervals of at least 4 weeks are necessary
- **c** = one-off vaccination with polysaccharide vaccine
- **d** = one-off vaccination for all persons born after 1970 ≥ 18 years old with uncertain vaccination history, without vaccination, or with vaccination in childhood, preferably with an MMR vaccine
- **e** = standard vaccination for girls and young women
- **f** = Td booster every 10 years. The next scheduled Td vaccination is a one-off Tdap vaccination or, if the corresponding indication is present, Tsap-IPV combination vaccination.
- **g** = Premature babies receive an additional vaccine dose at the age of 3 months, i.e. 4 doses in total.